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**Officer Production Challenges:
Understanding and Managing the Human Resource Forces of Change**

By

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Abstract

Recruiting, developing and retaining officers are the realm of the officer production process.

The success of this process is important to the readiness of Canada's Army. Today, officer production is challenged by human resource (HR) forces of change that threaten the CF's ability to ensure that the officer corps is able to respond to the needs of the nation. These HR forces that impact upon officer production originate from both internal and external sources. Internal forces are generally represented by CF/DND actions to either reduce or increase the personnel strength of the Army. Such forces introduce irregularities in the tempo of officer production, resulting in severe and long-lasting challenges to the process. External forces flow from societal changes that impact upon the CF's ability to attract, develop and retain officers, placing increased demands on the system. Failure to understand and adapt to the singular or combined application of these forces gravely threatens the health of the officer corps. Accordingly, it is the aim of this paper is to examine how the HR forces of change require the CF to adapt its management of the officer production process.

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Introduction

“The first and most basic component of the army’s operational readiness and effectiveness is a solid human foundation”¹

This quote from *Canada’s Army* speaks to the fundamental belief that people are the foundation² upon which an army is built. Their physical, mental, emotional and interpersonal skills provide capabilities that technology and tools may enhance, but not replace.³ From amongst its personnel, it is the officer who is responsible for an army’s effective operation, accountable to the nation for the judicious application of military power⁴. In the execution of this duty, officers are expected to selflessly place themselves, and others, in harm’s way to defend Canada and Canadian interests. Maintaining the readiness of this vital profession is largely dependent upon the effective management of the officer production process.

In Canada, officer production is described as a human resource (HR) process that encompasses the tasks of recruiting, developing and retaining officers to effectively lead the Canadian Forces (CF) in all operations it is asked to perform.⁵ The production process is designed to gradually advance officers along a career path⁶, where progression in rank and responsibility requires a similar advancement in capability. Initially, officer production focuses on giving new officers the skills they need to successfully operate at the tactical level. Later, as the officer advances in rank, the focus shifts towards developing capabilities required at the operational and ultimately strategic or national level. As such, development is continual and

¹ Department of National Defence, B-GL-300-000/FP-000, *Canada’s Army: We Stand on Guard for Thee*, (Ottawa: DND Canada, 1998), p 91.

² Department of National Defence, *Chief of Defence Staff: Annual Report 2001-2002* (Ottawa: DND Canada, Spring 2002, available on-line at <http://www.cds.forces.ca/pubs/anrpt2002/priority1.asp>), p1. Putting People First: “Our people are our foundation.”

³ Department of National Defence, *The Development of Human Capability*, Concept Paper for Director Defence Analysis, (Ottawa: DND, Winter 2000, available on-line at http://www.vcds.forces.gc.ca/dgsp/dda/symp/cde/chap5_e.asp).

⁴ Department of National Defence, *Canadian Officership in the 21st Century, OPD 2020, Statement of Operational Requirement*, Fall 1999, p 1.

⁵ Department of National Defence, *Military HR Strategy 2020: Facing the People Challenges of the Future*, published under the auspices of the Chief of Staff ADM (HR-Mil), November 2002, p 3.

⁶ Donald W. Jarrell, *Human Resource Planning* (Englewood NJ, Prentice-Hall, 1993) p 140-41. Jarrell defines a career path as “a series of jobs and positions within a single organization that leads to one or more target positions to which the employee aspires”.

spans an officer's career, building upon the successive contributions of training and experience, while seeking to balance capability with responsibility and authority.

To ensure that development prepares officers for the evolving problems of today and in the future, great care has been made to anticipate the demands of tomorrow's *operating environment*. It is with this vision that today's officer development has been designed to provide the abilities and skills for "mission success in the diverse and complex environment of conflict resolution of the 21st century."⁷ Ironically, the same cannot be said for understanding tomorrow's *human resources environment*. Today, as the Army officer corps faces a severe manning crisis, it is clear that the production process has not been well managed. This stems from a failure to understand the HR forces that challenge officer production, overwhelming a management system that has, at best, been able to respond in a "reactive and piecemeal manner."⁸ The HR forces of change expose the health of the officer profession to great risk, one that threatens the Army's ability to defend the interests of the nation.

The HR forces that impact upon officer production originate from both internal and external sources. Internal forces are generally represented by CF/DND actions to either reduce or increase the personnel strength of the Army. Such forces introduce irregularities in the tempo of officer production, resulting in severe and long-lasting challenges to the process. External forces flow from societal changes that impact the CF's ability to attract, develop and retain officers, placing increased demands on the system. Failure to understand and adapt to the singular or combined application of these forces gravely threatens the health of the officer corps. Accordingly, it is the aim of this paper is to examine how the HR forces of change require the CF to adapt its management of the officer production process.

In order to sharpen the focus of this thesis, examination and discussion will concentrate upon managing officer production from an Army combat arms perspective. Given this constraint, the paper will begin by establishing a general understanding of how officers are

⁷ DND, *Canadian Officership in the 21st Century...*, p 1.

⁸ DND, *The Development of Human Capability...*, The author describes a "lack of solid conceptual underpinning for HR policy and strategy, stemming partly from a lack of research.... [causing it to] operate largely in a reactive and piecemeal mode."

developed within the construct of a “healthy” Army officer corps. This will permit the subsequent appreciation for the impact that certain forces have upon this process. The first series of forces to be explored are internal in nature, driven by Government of Canada decisions and initiatives to either downsize or increase establishments. This will demonstrate that such forces produce predictable outcomes, and if ill applied, can have devastating long-term impacts upon the health of occupations. Subsequently, a review of the less predictable external forces from Canadian society will be examined. These forces include shifts in generational attitudes towards commitment, changes in the Canadian demographic, and rapid changes to the conduct of military affairs driven by technology. The impact of such external societal forces is far more difficult to assess. However, as with internal forces, it will become clear that every effort must be made to understand these forces so that the management of the officer production process can adapt to mitigate the threats. This paper will conclude with recommendations to improve the management of officer production in the CF/Army in the 21st century.

The Officer Production Process

Health Defined

The officer production process is the key mechanism through which healthy Army occupations are established and maintained. However, before examining how HR forces of change can impact and threaten the health of occupations, it is important to first define a healthy officer corps. Unfortunately, despite the common usage of “health” in describing the state of affairs within officer production, what actually constitutes healthy officer production is not defined. This lack of a common vision of a healthy (or for that matter an unhealthy) officer corps says a lot about the level of understanding for officer production issues. If one does not have a clear understanding of the desired state of affairs, it is hard to assess the significance of forces of change and to determine the requirement to act. As a re-occurring theme within this paper, the lack of a clearly defined healthy officer production profile has lead the CF and the Army to unwittingly inflict damage on itself.

Logic would suggest that the central criteria for defining the health of Canada’s Army officer corps should rest upon its ability to fulfil its primary purpose: “to defend the nation and, when called upon, to fight and win in war”.⁹ This purpose is derived from the direction and tasks provided to the CF from the Government of Canada. Noting that the government also limits the funding and size of the military in accordance with that which it believes essential to achieve this purpose, it falls upon the CF and the Army to ensure that the personnel within its charge are developed, to the extent possible, to ensure their readiness to win wars. Therefore, the basis of a healthy officer corps, and the purpose of officer production, must be squarely focussed upon developing the best capability, within the constraints of personnel strength, to fight and win.

From a HR management perspective, military readiness must not only represent the ability to successfully fight and win today’s wars, but an ability to sustain such capability to fight the wars of tomorrow. Thus, this paper will consider health to encompass both *establishing* and *sustaining* an HR operational capability. Within this context, health is established and sustained through the development and succession mechanisms within the officer production process.

⁹ DND, B-GL-300-000/FP-000, *Canada’s Army...*, p 2.

Development ensures officers, at all levels of rank, have the capability to fight and win today, while succession ensures the sustainment of this capability for the needs of tomorrow.¹⁰ Thus, a healthy occupation will be defined by its ability to continuously provide capable officers to meet the operational demands of the specified and evolving force structure.

Force Structure – A Closed Hierarchical System

The structure of the officer rank system dictates how the officer production process must operate. Its pyramidal rank hierarchy requires large numbers of junior officers that gradually diminish to relatively small numbers at senior levels. While the required numbers vary between occupations, about one third of the amount of officers is typically required at successive levels in rank.¹¹ Advancement from one rank to the next is done within a closed-system, in which officers may only advance after having successfully passed through the preceding level of rank. For example, it is not possible to recruit a senior officer; he or she must be grown from within the existing structure. Within such a structure, the long-term health of occupations depends on retention of sufficient individuals who have the potential for development at higher levels and gradual attrition of others who have reached the limit of their potential¹². Such a system is optimally suited for young volunteers who are able to make a long-term commitment to continuous development in order to meet the demands of the most senior appointments.

Thus, the key to a healthy officer occupation lies in development and succession. Development prepares officers to perform duties at a certain rank level, while succession governs the flow between the rank levels. It is important to have a general understanding of how these elements work together to maintain a healthy occupation. Later, it will be possible to better understand how forces of change may influence the overall production process.

¹⁰ DND, *Record of Decisions of the Annual Military Occupation Review (AMOR) MOC 24A – Engineer Officer* (NDHQ, Ottawa: 5000-8 (D Mil C 3 Engr), 26 March 2002). Theme reflected in the Army 2002 AMORs. Two components of the AMOR's examination of "health" are: (a) achieving development standards (education, bilingualism, MOC training, etc...) and current force manning capability, to man appointments, and (b) long-term production requirements and concerns to include a review of MOC models.

¹¹ Department of National Defence, *Army Long Range Planning Model 2003* (Ottawa: DND, Director Land Personnel, 20 March 2003). Document provides Permitted Manning Levels (PML) by rank (i.e., force structure) for Army combat arms officers.

¹² Department of National Defence, *Background Reading – Terms of Service (TOS) Review Project*, (Ottawa: DND, Armed Forces Council, DMEP, November 2000), p 4.

The Development System – Training and Experience

The development process has been designed to prepare officers to perform duties at the various rank levels. Development is a continuous and progressive process that builds incrementally upon previous training and experience as it prepares an officer for increases in rank and responsibility. The current framework for officer development is contained within *Canadian Officership in the 21st Century*. This document establishes four distinct developmental periods (DPs) corresponding to major points within the officer rank hierarchy. Within each DP new individual skills and capabilities are developed through a combination of formal education or training and practical employment experience (i.e., both pedagogical and experiential).¹³ Upon this common CF developmental framework, army and occupation specific developmental requirements are superimposed. The result is the current structure for developing combat arms officer described below:

DP1 refers to the period from recruitment until qualified within a military occupation (MOC). The initial focus is upon the *socialization* of the officer candidate in order to develop identity, ethics and a military ethos. This DP is pedagogical in nature as it includes the completion of an undergraduate degree for “all officer aspirants” and MOC training.¹⁴ Upon completion, the individual will be commissioned as an officer and posted to an operational unit, ready to assume command of a troop or platoon of soldiers.¹⁵

DP2 is the phase that spans the period between MOC qualification and promotion to major. It emphasizes the experiential development of *tactical* level capabilities. It is expected that the majority of development will occur through employment in junior line and staff appointments.¹⁶ The primary pedagogical event that must be accomplished during this phase is the Army Operations Course (AOC), which teaches senior captains to perform more advanced duties within a unit or brigade headquarters.¹⁷

¹³ DND, *Canadian Officership...*, p 39.

¹⁴ *Ibid*, pp 40-41.

¹⁵ Department of National Defence, *Training Directive – Implementation of the Army Professional Development Plan*, Directorate Army Training (LFDTS Kingston: 4500-1 (DAT), 1 February 2002), pp 6-7.

¹⁶ DND, *Canadian Officership...*, p 41.

¹⁷ DND, *Training Directive...*, p 7.

DP3 is commonly subdivided into sub-categories to address the development of majors (DP3A) and Lieutenant-colonels (DP3B).¹⁸ It progresses from army-focused tactical level development to include knowledge, skills and abilities required at the *operational* level of joint and combined operations. For majors, experiential development centers upon command of a company, squadron or battery and staff appointments, and formal training is provided in the Army Staff Course (ASC). Later, operational level capabilities are formally developed through Canadian Forces Command and Staff Course (CFCSC). Upon promotion to Lieutenant-Colonel, experiential development ideally focuses upon unit command and staff appointments at the operational level.¹⁹

DP4 prepares Colonels to operate at the *strategic* level. This DP relies upon continued experiential training, complemented by formal, strategic-level education within a “war college” type of institution²⁰.

Overall, the officer development process represents an impressive investment in human capital. For example, an average of 8 to 12 years experience is required for a captain to complete DP2. This period includes almost 800 days of formal training at a cost of half-a-million dollars.²¹ While costly, this development process represents “an investment aimed at providing effective and credible leadership that is capable of responding to the security concerns of Canadians.”²²

In considering the cost of officer development both in terms of tangible resources and in time, it is important to note that “people become much more valuable over time”.²³ This must be remembered during future discussion of issues associated with attrition. The desire to retain trained and experienced officers in order to “amortize” the investment is often challenged by the

¹⁸ *Ibid*, p 8. Army specific sub-division of DP3.

¹⁹ DND, *Canadian Officership...*, p 42 and DAT, Training Directive..., pp 8-9.

²⁰ DND, *Canadian Officership...*, pp 42-43.

²¹ DND, *Background Reading – Terms of Service (TOS) Review...*, Executive Summary, Training Investment Cost.

²² General Maurice Baril, Chief of the Defence Staff, *Presentation to the Senate Finance Committee* (Ottawa: DND Speaking Notes, 29 Oct 1998). Defending the cost of the investment in security.

²³ LGen Couture, ADM HR(Mil), Presentation to CFCSC 29, 25 Oct 02 (quoted with permission).

succession process that will be discussed next. Sometimes, in order to ensure steady succession, there is a requirement to release capable officers in whom much has been invested.

The Succession Process – Retention, Attrition and Selection

Succession controls the flow of officers between the DPs; in so doing, it determines the degree to which the Army will continue to invest in an officer's development.²⁴ Not only does it influence who should be promoted and further developed, it also regulates the release of personnel to make room for such promotions. Thus, healthy succession is dependant upon the effective management of *retention* and *attrition* mechanisms.

Given that an officer would normally require 20 years of development to reach the rank of Colonel, and about 30 years to become the commander of the Army, it is obvious that a certain number of officers must be retained for long-term careers.²⁵ Sustained attrition from across the entire officer corps is also important because there are few places in the Army for 50-year-old lieutenants. While attrition represents a complex management issue, it also produces opportunities for officers to be developed and promoted into the ever-decreasing number of senior appointments. Together, retention and attrition ensure a steady flow of personnel such that when a General retires there is a Colonel in DP4 ready to take his place with a Lieutenant-Colonel in DP3B ready to succeed him, and so on.

Selection is the HR tool used to manage succession. It represents a deliberate process to determine who will be promoted and who should be offered continued service, deciding who will be further developed and who will be let go. Such decisions are based upon a relative comparison amongst officers of the same rank. Generally speaking, this allows the highest rated officers within a DP to be selected for promotion while the lowest are not offered continued service. While the actual criteria used in the selection process varies across rank levels, the selection is based upon assessments of an officer's performance in current rank and potential to

²⁴ Department of National Defence, *LFCO 11-79 Army Succession Planning* (Ottawa: DND Canada, 2002).

²⁵ General Baril, *Presentation to the Senate Finance Committee...*, pp1-4.

perform at the next rank level. For promotion, an increased emphasis is placed upon potential for advancement, while the terms of service selection relies heavily on current performance.²⁶

Balance

It should now be clear that development and succession are two closely linked processes of officer production. Together, they permit career progression that is “based upon CF needs and individual members’ merit, potential and objectives”.²⁷ This balance between the military’s needs and members’ potential is not just desirable, it is essential. Rates of promotion must be closely balanced with those of capability development. This idea is reflected in the writings of Pigeau and McCann of Defence Research and Development Canada who argue that throughout the continuous development of a commander (officer) there needs to be a balance maintained among *competency, authority and responsibility*. Competency is established through training and experience (development) while authority and responsibility are provided through increased rank and accountability (succession).²⁸ Although this theoretical model, known as the Balanced Command Envelope (BCE), was developed primarily for commanders and may be less applicable to staff appointments, it underscores the link between development and succession. If the process is rushed, an officer may miss out on experiential development and/or receive pedagogical training too late. Developing too slowly will risk the value of investment in capability development. Either circumstance will lead to the misemployment of the officer, creating problems that will be raised later in this paper. Maintaining this balance between development and succession is critical, as Pigeau and McCann have argued:

“Militaries must ensure that their commanders – throughout their missions and indeed throughout their careers – stay within the BCE.”²⁹

²⁶ Department of National Defence, A-PD-229-001/AG-001, *Canadian Forces Selection Board Guidance Manual*, (Ottawa: DND Canada, August 2002), pp 7-12. Directorate Land Personnel, 2003 Terms of Service and Promotion Selection Criteria.

²⁷ DND, *Military HR Strategy 2020 ...*, p 24.

²⁸ Ross Pigeau and Carol McCann, “What is a Commander?” in *Generalship and the Art of the Admiral*, ed by Berd Horn and Stephen Harris (St Catherines: Vanwell Publishing Ltd, 2001), pp 83-91.

²⁹ *Ibid*, p 101.

A Healthy Occupation – Balanced and Sustainable

To conclude the overview of officer production, it is worthwhile summarize the key issues and draw out some key observations. To begin, it has been presented that officer production is the mechanism through which MOCs maintain their health, continuously providing sufficient numbers of officers who are capable of performing the appointed duties within the force structure. The development process prepares officers through a series of progressive pedagogical and experiential phases. Each phase is specifically designed to provide officers the capability to work at tactical, operational and strategic levels within the structure of the CF. Succession protects the long-term capability aspects of an occupation's health; within the closed production system it relies upon retention of sufficient numbers of officers for development. Additionally, succession requires a degree of attrition to make room for advancement according to demonstrated potential. This is controlled through the selection process that promotes those with greater potential and releases those who have reached their limit.

However, a problem area, that will be further developed within this paper, rises from the fact that the CF does not clearly define a “healthy officer corps” to include establishing the point at which an officer has reached the limits of potential and should be released. Unlike other militaries,³⁰ there is an implicit provision within the CF that so long as an officer is able to perform his or her duties they should be able to continue to serve – not what might be expected of an organization whose purpose is winning wars, not employing citizens. Moreover, the lack of clarity in this regard will prove problematic when considering the impact of allowing an Army to grow older without forcing attrition to enable the insertion of youth into the officer corps.

As will be seen, officer production requires a close interrelationship between development and succession. Internal and external forces that impact structure, recruiting, attrition and retention directly impact upon the rate at which the succession process must operate. If not properly synchronized, this can compromise development, lead to capability imbalances with surpluses and shortages of officers at certain rank levels.

³⁰ RAND Corporation, *Future Career Management Systems for U.S. Military Officers*, (Washington DC: RAND Publishing, 1994) p 106. The report describes the US Army “Up or Out” career management system.

Internal Forces of Change

Self-inflicted Injuries

Over the last 10 years, the Army's officer occupations have been greatly damaged by its own mishandling of internal forces related to adjustments in personnel establishments. These changes in the personnel strength must not in themselves be considered as changes in health, given that the government determines the healthy size of force it requires to fight and win wars. Instead, it is how the officer production process manages the changes in establishment that has damaged the health of the officer corps. This segment of this paper will examine the internal forces of change to provide a better understanding of how managing downsizing and growth impact upon officer production. Additionally, the concepts herein will also establish a framework from which to examine the impact of external societal forces.

Force Reduction – Succession Challenged

On several occasions the CF has been directed to dramatically reduce personnel to accommodate a reduction in the force structure.³¹ The most recent downsizing occurred in the 1990s, where over a six-year period the strength of the CF was reduced by over 30 %.³² Reductions of this magnitude have the potential to dramatically impact the officer production process. If not properly managed they can create irregularities in rates of succession and personnel shortages that severely impact upon the Army's ability to operate. Using examples from the most recent downsizing, this portion of the paper will endeavour to explain the impact that reduction has upon the officer production process and suggest areas where adaptation is required.

³¹ Department of National Defence, *Trend in DND Military and Regular Force and Civilian Personnel Strength*, (Ottawa: DND Finance and Corporate Services, 1996). Also: Art Global, *Canadian Military Heritage – Volume III* (Ottawa: DND Directorate of History and Heritage, 2000), pp 198 to 200. In 1967 the CF was reduced from 120,871 to 110,000; 1971 to 84,486, 1977 to 78,033; followed by an increase to 87,016 by 1989 and subsequently reduced to approximately 60,000 by 2000.

³² Department of National Defence, "Audit of Force Reduction Program", Chief Review Services, Director General Audit, January 1997, p 1. During the period of 1992 to 1998 the CF was to downsize its force from 88,000 to 60,000 personnel.

For force reduction to have the least impact upon officer production, it is essential that the entire officer population (i.e., across all rank levels) be reduced in a uniform manner. This assertion, which will soon become evident, is derived from the most basic observations relating downsizing to force structure. Reducing proportional numbers of officers within each rank level leaves the manning of force structure in tact, subsequently requiring no readjustment of personnel between the DPs. Examination of the CF's attrition mechanisms indicates that the capability, albeit crude, exists to proportionally downsize the officer population.

Within the existing Officer Terms of Service (TOS), reduction can be most easily achieved through simply not renewing completed service contracts. Thus, attrition is most practicably achieved amongst: (a) untrained officers in DP1 yet to begin a Short Service Engagement (SSE), (b) officers, normally captains in DP2, completing the nine-year SSE, (c) officers completing the 20-year Intermediate Engagement (IE), normally majors in DP3, and (d) the most developed officers of DP3 and 4 serving on an Indefinite Period of Service (IPS) with over 27 years of service³³. Providing reductions can be prolonged over a five to six year period, it is possible to target the entire development range of officers. However, given the investment made in developing officers, it could be argued that it is more economical to retain those officers in whom the Army has invested much and achieve downsizing amongst the less developed officers. While a disproportional approach such as this might make greater sense from a short-term, economic perspective, over the long run it will create a major personnel gap that is likely to lead to serious succession problems.

As a means to illustrate the perils of a disproportional force reduction, imagine an occupation that chose to downsize by removing a large number of captains at end of their SSE. Such an approach would leave the occupation with an excess of senior officers and a large personnel gap at the senior captain level. Clearly, this would protect the developmental investment represented in the more senior personnel, but it would also require young lieutenants and captains to accelerate their development in order to replace the loss of the more senior captains. Additionally, for the remaining older captains and majors, there would be no opportunity for promotion until there was significant attrition of senior officers. This change in

³³ DND, *Background Reading – Terms of Service (TOS) Review ...*

the rates of succession would also impact upon the delivery of training. It would increase the need to deliver courses (AOC) to the younger captains while the limited promotions would reduce the demand for senior courses (ASC and CFCSC). More importantly, from an employment perspective, this situation upsets the important balance between competence/capability and level of employment that Pigeau and McCann described. Certain young officers might not be ready for a senior captain appointment while the older captains with experience and training are unable to advance in rank to realize their potential.

Like the example above, the officer reductions of the 1990s created a massive gap in the production process. With a “lack of long-term focus in managing military personnel”³⁴ reductions were largely achieved through dramatically reducing the intake of new officers into the production system³⁵. Over a six-year period, this approach enabled the total strength of the officer corps to be reduced. Furthermore, it required only a limited increase in the release of the more developed officers at the breaks in the TOS (i.e., at 9 years, 20 years and 27 years of service)³⁶. As a result, the officer profile became one that was dramatically skewed towards an older generation with only a small number of young officers being developed to succeed them. Managing downsizing in this manner achieved the immediate objective of reducing sheer numbers of personnel; however it damaged long-term officer succession and the health of the Army.

The impact upon succession was most visible amongst Artillery captains. In the simplest of terms, attrition at the senior ranks was insufficient to make room for promotions to major. As a result, promotions to major virtually ceased, dropping from a historical average of 12-15 per year to 1-2 per year during the period from 1994 to 1999³⁷. The frustrations amongst the officers unable to advance to their potential were compounded by the lack of new officers from DP1.

³⁴ Office of the Auditor General of Canada, *April 2002 Report of the Auditor General of Canada*, (Ottawa: Office of the Auditor General, April 2002), Chapter 5 - Recruitment and Retention of Military Personnel, paras 5.8. and 5.11.

³⁵ LCdr Cottingham, Directorate of Military Human Resources Research, correspondence by e-mail, 12 Feb 03. During downsizing officer intake was reduced from slightly over 1000/yr to about 500/yr.

³⁶ DND, *Army Long Range Planning Model ...*, Annexes A, B, C and D (TOS Conversion Tables).

³⁷ Maj D. Cook, Directorate Military Careers 3-5, correspondence by e-mail, 3 Feb 03.

Furthermore, many well-developed senior captains were required to remain in, or even return to, junior appointments that they had successfully completed three or four years earlier³⁸.

While the short-term effects of this reduction were arguably quite painful for the officers denied the opportunity for advancement, the longer-term impacts upon operational capability are far more serious. The reductions have left the Army far older today than it had been in the past³⁹. Even though this represents a general increase in experience and retention of investment in development, allowing a force to age without producing a replacement pool is a recipe for disaster. As the large number of older officers, predominantly in DP3 and 4, begin to retire, within a short time a large percentage of the officer corps will leave the service⁴⁰. This translates into a dramatic increase in the demand for replacements from the previously stagnated DP2 and the virtually non-existent DP1. Captains whose careers had stalled will be required to make up developmental time that has been lost. New recruits will not only be required in large numbers, they will have to be developed quickly until the vacancies left by the large number of retirements have been filled.

Today the predictable effects of sacrificing DP1 and 2 to force reduction are beginning to show. Rates of attrition and promotions are on the rise. Moreover, the small number of new officers from DP1 has been unable to replace the promoted captains. This has had a profound impact upon the health of Army's combat arms MOCs. Currently, these MOCs are collectively short almost 20% of the required number of trained lieutenants and captains.⁴¹

Before examining the longer-term challenges associated with the creation of such a gap in the production process, it is important to summarize some of the key observations about reduction. To begin, it is clear that the reductions of the 1990s were managed without a clear understanding how disproportional downsizing damages the officer production process. Although it may have been desirable to retain officers in whom the Army had greatly invested,

³⁸ *Ibid.*

³⁹ DND, *Background Reading – Terms of Service (TOS) Review...* Demonstrates how officer population from 13 to 35 years of service are far greater in numbers that would be expected from a historical perspective.

⁴⁰ P. Bender and I Collin, *Assessment of the Potential Volume of Releases at the 20 Years of Service Point*, (Briefing Note prepared for Directorate of Strategy (Human Resources), 18 Apr 02). Releases at 20 YOS projected to increase by 36% from 2007 to 2011.

⁴¹ DND, *Army Long Range Planning Model ...*, Annexes A, B, C and D, Personnel Production Tables.

the future impact upon force succession was not understood. This error, as will soon be seen, will haunt the Army for decades, serving to highlight the requirement for improved means to model and understand the implications of downsizing initiatives. Intuitively, improvements in the fidelity and use of TOS reduction mechanisms may represent a means to avoid the future creation of production gaps. Additionally, it must be remembered that issues such as career stagnation or acceleration impact upon job satisfaction. This must be kept in mind when this paper examines the importance of fostering commitment within the profession of arms. The balance between capability and employment must be respected throughout downsizing if the health of the officer corps is to be protected.

Force Growth – Development Challenged

Unlike reduction, increasing the strength of the officer corps is a simpler concept to understand, as the range of growth mechanisms is relatively limited. In fact, growth can only be achieved through increasing the number of new recruits entering the production process⁴². Of course, there is some scope to “laterally” insert trained reserve officers into each of the DPs; however, unless faced with issues of mobilization, it would only be expected that such entrants would account for a very small fraction of any real growth⁴³. Additionally, given that between six and seven percent of the force annually retire from the Army, increased or even forced retention might represent an additional means to augment growth. Nevertheless, because the military enrolls people largely at the bottom of the rank hierarchy, it is virtually impossible to rapidly increase the strength of the army in a manner that would not challenge both development and succession.

For the purposes of this paper, only the impact that limited growth has upon officer production will be examined. Issues related to mobilization in response to a major crisis or war are expansive and beyond the intended scope of this paper. However, this segment will demonstrate how seemingly minor adjustments to the force structure can dramatically impact the front-end of the officer production process, disrupting development and succession for many years to follow. Moreover, through understanding the challenge of managing growth it will become easier to also explain the challenges associated with dramatic fluctuations in officer production intake.

As a means to explain the impacts of force growth, consider a scenario where the officer corps is required to increase in size by only 10% over a three to four year period.⁴⁴ Although this might not seem like a major increase to the force structure, the sheer volume of new officers

⁴² Office of the Auditor General of Canada, *April 2002 Report...*, para 5.9.

⁴³ LCdr Cottingham, DMHRR ..., . Component Transfers (CT) from the Primary Reserve have historically been neither significant nor steady. No planning quotas exist. See also: DND, *Army Long Range Planning Model...*

⁴⁴ This was the case from 1982 to 1986 where combat arms officer production was almost doubled to meet expansion of certain occupations.

would demand that the DP1 intake almost double over a four-year period.⁴⁵ This spike at the entry point of the production process produces what shall be referred to as a double-cohort (i.e., twice the normal intake). The impact of introducing a double-cohort to the production process presents a serious problem. It requires not only an increase in numbers being recruited and developed, but also an acceleration of succession flow as more promotions are required throughout the larger establishment to achieve the 10% expansion. The net effect is increased developmental demands in a decreased amount of time.

In the double-cohort growth scenario, the immediate pressure would be upon the DP1 recruiting and training institutions. Additionally, but to a lesser extent, training within the other DPs would also be required to prepare for larger numbers of promotions. As such, significant developmental resources would need to be added to the training institutions. This is difficult to achieve, as the dramatic increase in throughput requires both personnel and infrastructure support that may be beyond the capabilities of training institutions. This increased training burden is inevitably borne by operational units who must provide staff and instructors to the schools. Remember also that the training surge represents a temporary measure only while the double-cohort passes through DP1. Consideration must also be made for such requirements at a later date when the same cohort is required to complete operations and staff courses (AOC, ASC, CSC) in DP2 and 3.

While it is conceivable to overcome the challenges of ensuring sufficient resources to deliver pedagogical development, the key challenge of growth is the ability to deliver appropriate experiential development. Using the 10% growth example, the expected number of graduates from MOC training would double, while the number of platoon or troop commander appointments would only increase by a small fraction. Compounded with the requirement to spend even less time in each development phase, this would mean that either only a very short time could be allotted to the first experience of command, or it might even be missed completely. Officers of a double-cohort are thus exposed to the risk of missing key elements of their

⁴⁵ Volumetric calculation that assumes no changes to the natural/historical rates of attrition. Steady-state production requirements for a officer strength of approx 11,000 officers is about 800 (LCdr Cottingham DMHRR), a 10% increase over three years, where only 60% of OCdts would be expected to succeed (Army 2002 AMOR planning figure), represents 600 more entrants per year - almost double.

capability development. This is dangerous as the potential for officers being employed in appointments beyond their capability is dramatically increased.

The institutional forces associated with growth must be well understood if serious problems are to be avoided. Introducing large cohorts creates a burden upon the development process that must be shared amongst operational units. However, it is perhaps more important to recognize the stress that this places upon successful experiential development. Managing growth in a manner that does not compromise both pedagogical and experiential development represents a major challenge.

Production Cycles – The Succession and Development Roller Coaster

Until now, this paper has examined the impact of internal forces of growth and reduction in relative isolation. In so doing, it has established that poorly managed reduction can create personnel gaps to challenge succession, while growth can create large personnel cohorts that are difficult to professionally develop. However, as will be explained, these two forces can also coexist within the production process. Together their impact upon officer production compounds problems, creating a long-term and predictable cycles of difficulty.

This coexistence of internal forces of change is found today within the production process. As explained, the downsizing of the 1990s was largely borne by virtually eliminating the intake and production of new officers. As one should have expected, in the years that followed, the rate of retirement amongst the older and senior officer population far exceeded that which the cohort of younger junior officers could replace. Unfortunately, the production managers did not react in time to prevent resulting shortages. When it was determined that downsizing numbers had been achieved and that production could return to the “steady-state” rate,⁴⁶ the CF found itself unable to find the “ON switch” for the recruiting/intake process⁴⁷. As a result, numbers in the officer corps dropped well below the preferred manning levels (PML). By the time officer intake had started again it was unable to handle increased requirements, a critical shortage ensued, requiring a massive infusion of recruits representing almost 10% of the establishment.⁴⁸

In 2002 the Army doubled (and in some cases tripled) the officer intake targets for the combat arms for a three to four-year period,⁴⁹ thus beginning the production of the previously described double-cohort. Once this growth has been completed, the profile of tomorrow’s

⁴⁶ LCdr Cottingham, DMHRR ..., Steady-state production for the CF officer corps requires an intake of about 800 personnel per year. See also: DND, *Army Long Range Planning Model...*, Intake Summary.

⁴⁷ Brian Barry, “The Retention Machine,” Digital Systems International Corporation (Charleston SC: 1999). Available on-line at <http://customerexpressions.com/custex/ncsdig.nsf>. The author explains that before turning off the retention and production process it is important to firstly know how one turns it back on.

⁴⁸ Office of the Auditor General of Canada, *April 2002 Report...*, para 5.19. Trained effective strength of CF normally about 92%. By 2004 this could drop below 80%. Represents about 9% drop that needs to be corrected.

⁴⁹ Department of National Defence, *Briefing to Commanding Officers on the Voluntary Occupation Transfer Program* (Ottawa: Directorate Land Personnel DLP 7-2, Maj Carriere, Spring 2002). Recruiting targets for 2002 to 2005. See also: DND, *Army Long Range Planning Model...*, Intake Summary.

officer population will have a large concentration of older officers who were retained during downsizing, a gap of middle-aged officers from the period when production virtually ceased, and massive young cohort – two peaks with a valley in between. Such features in the officer profile will create production problems for the next 25 years. This section will support such an assertion, demonstrating that the cycles of reduction and growth create long-term problems that the Army must learn to manage.

As these peaks and valleys in the officer profile advance in time, the rates at which officers are developed and promoted accelerate and decline like a ride on a roller coaster. As earlier explained, officers whose promotions were slowed while waiting for the senior cohort to retire will soon be required to develop at an accelerated pace. However, as is the case for the Artillery Corps, there may simply not be enough time for many of these officers to realize their potential. The period of stagnation saw the average age of a new major rise from 30 in 1988 to almost 40 in 1998⁵⁰, leaving less time for further development and promotion before retirement. This generation faces the prospect of being overtaken by those in the rapidly advancing double-cohort who will arguably have greater potential for higher rank, given the large amount of time they have left to serve.

Support for the argument that developmental stagnation will be followed by a period of acceleration can also be found in the Army today. Attrition amongst older Engineers in DP3 and 4⁵¹ has recently been so significant that the average time spent as a Captain before promotion has reduced from 9.5 years to 5.5 years over a four-year period.⁵² This phenomenon is beginning to appear in other MOCs. Within the Artillery, the much-awaited attrition amongst the majors has come so quickly that the occupation is now promoting majors faster than any other combat arm, dramatically reducing the average promotion age.⁵³

⁵⁰ Mr. Berthume, Director General Military Careers Secretariat, correspondence by e-mail Feb 03. Combat Arms Promotion Statistics 1983 to 2002, Feb 03.

⁵¹ With over 20 years service and eligible for a pension.

⁵² Maj E. Lefrancois, Director Land Personnel 6-2, correspondence by e-mail 6 Feb 03. Officer development statistics provided.

⁵³ Mr. Berthume, DGMC ..., See also: DND, *Army Long Range Planning Model...*, Annexes A, B, C and D.

Predictably, the requirement for the increased promotion of majors has completely overwhelmed the ability for DP1 to produce junior officers to replace the captains being promoted. This has led to critical shortages of junior officers throughout the combat arms⁵⁴. Not surprisingly, given the degree of severity in the peaks and valleys within the Artillery officer profile, this MOC has been the most adversely affected. Today, as it awaits the production of new officers, it is unable to man nearly a quarter of its appointments at the rank of captain⁵⁵.

As the double-cohort continues to be recruited and developed, the immediate challenges associated with introducing large numbers to DP1 have been explored; however, it is also interesting to examine longer-term impacts. For example, it is probable that in about 10 years time the situation will have stabilized. The bulk of the older cohort of officers will have left the Army and been replaced by the mass of new officers. At this time, only a small cohort of officers, created when production declined during downsizing, would occupy the older end of the profile. As a result, the army overall profile will have gone from being skewed towards older officers to reflecting one that is relatively young. In such a situation, the decrease in the numbers of officers at the older end of the profile would be expected to translate into a decrease in retirements. In turn, decreased attrition reduces the opportunities for advancement throughout the Army, slowing succession, and causing promotion stagnation. This would be most evident amongst the officers who entered the army behind the double-cohort. These individuals would find themselves in a similar situation to those junior officers caught out by the 1990's downsizing, denied promotion until the large concentration of the double-cohort begins to retire. As a result, it is likely that the intake of new officers would need to be reduced.

If one extends this scenario another 10 years or so, when the double-cohort has completed over 20 years of service, the profile would again become skewed towards being older. Such a scenario would inevitably need to be followed by a massive recruiting push, as the double-cohort begins to retire. Altogether, the Army would find itself in a perpetual 25 to 30 year cycle of production problems, continually challenging development and succession.

⁵⁴ DND, *Record of Decisions of the Annual Military Occupation Review ...*, In 2000, the Engr MOC was short as much as 24% of its officers for DP2 appointments.

⁵⁵ Maj D. Cook ..., correspondence 3 Feb 03.

The preceding example probably represents an oversimplified projection towards the future and does not consider the introduction of any other forces of change or attempts to control the development of new peaks and valleys. However, it serves to demonstrate that shortsighted solutions can start a cycle of compounding production challenges. Within this scenario, a balance between developing officer capabilities and succession is difficult. Moreover, it is possible that it will create new periods of officer shortages and further threaten the health of officer occupations. Clearly, it is vital that the Army be able to not only understand the potential of the future problems, but also have the means to manage them.

It is also important to understand how peaks and valleys in the production process directly impact training establishments. At the beginning of the production process, recruiting and entry-level training establishments are challenged by wild fluctuations in intake requirements. For example, during the 1990's downsizing, these organizations were decimated, bearing the brunt of both establishment reductions and manning shortfalls⁵⁶. This meant that when it was recently realized that recruiting and production needed to dramatically increase, the system was unable to respond. Recruiting centres failed miserably in their attempts to double officer intake. Without adequate staff, less than half of the desired numbers of recruits were enrolled, further delaying recovery from the junior officer shortage.⁵⁷ The situation was only improved through a major personnel reallocation to beef-up the recruiting centres. Again, this was achieved by stripping away personnel from operational units through the provision of both full and part-time augmentation.⁵⁸

The leadership institutions that must receive the influx of new recruits are to be similarly challenged. However, in addition to being short of staff and instructors, now being augmented by the field force, training is hampered by physical limitations such as classroom and bed space

⁵⁶ Captain Peter Mason, "Canadian Forces Recruitment," *Financial Management Institute of Canada Journal*, (Winter 2002, Volume 14, No 1), p 12. Captain Mason is a member of the CF Recruiting Project. He explains why the recruiting system was slow to react when it was required to increase intake.

⁵⁷ DND, *Briefing to Commanding Officers...*, . Fewer than 50% of Army officer recruiting gargets were met in 2002.

⁵⁸ Office of the Auditor General of Canada, *April 2002 Report...*, para 5.2. See also: Department of National Defence, *Defence Plan On-Line* (Ottawa: DND, VCDS, FY 03-04) Military Personnel Priorities, Recruiting centers and training institutions are a higher priority and must be manned to 96 -98%, field units are permitted to drop to 85-92% manning.

capacities. The overcrowding of institutions like those at the army's Combat Training Centre in Gagetown has been compounded by increased production of non-commissioned members. This has impacted upon the Army's overall ability to produce both soldiers and officers, leading directly to production delays.⁵⁹

The predictable problems associated with the intake of a double-cohort are now having an impact. As the Army reacts to the immediate training challenges, it is concerning to note that it does not appear to be giving any consideration to future training requirements of the double-cohort. Specifically, there should be concern about the ability to deliver staff training when this group becomes young captains in five to 10 years time. Today, the Land Forces Command and Staff College is already well behind in delivery of the Army Operations Course to today's captains. Even with recent staff augmentation, it is not expected to catch-up until 2007.⁶⁰ However, the Army has not appreciated that in following years, the leading edge of the double-cohort will be made up of captains with three years in rank and in need of this training. Given that the college is currently struggling to train the small cohort from the personnel gap, it is hard to imagine how it could possibly cope with a doubled production requirement.⁶¹ Unfortunately, long-term planning continues to be based upon a fixed and stable annual production, with no peaks or valleys in the output requirement. Again, this represents a failure in the Army's ability to understand how officer production must adapt to deal with ebbs and flows in production cycles.

⁵⁹Maj J. Stewart, HQ Land Forces Doctrine and Training, telephone conversation, October 2003. Combined with concurrent increases in NCM production, CTC Gagetown is now working at full capacity. NCM training has been delayed in many instances while the field force has both augmented schools and actually taken on the delivery of MOC training within operational units.

⁶⁰LCol D Hartnett, CLFCSC Chief Standards Officer, *Canadian Land Force Command and Staff College – Conduct of Army Officer Developmental Period 2 – Winter 2003 Update*, (unpublished, prepared for submission to the Army Doctrine and Training Bulletin, Feb 03).

⁶¹Department of National Defence, *Study Paper on the Impact of AOC Implementation as Proposed by Commandant CLFCSC* (Directorate Land Personnel, Ottawa: Maj E. Lefrancois, DLP 6-2, DLP, Prepared for DLP, Feb 03). Although acknowledging that the "recruiting bubble" will need to be addressed in 2007, no considerations have been made to deal with it.

Requirement for a Long-Term Focus

It is clear the forces of reduction and growth can wreak havoc upon the officer production process. The last 10 years have witnessed the mishandling of these internal forces, directly damaging to the health the officer corps. The CF's decision to sacrifice its youth in an effort to achieve downsizing targets is perhaps the most glaring error of the recent past. As a direct result of this decision, officer development and succession have become unbalanced and manning shortfalls have been created. Moreover, a cycle of troublesome peaks and valleys in the production process has been initiated, which observers believe will take decades to correct.⁶²

The CF leadership has made decisions that impact upon officer production from a short-term perspective. Time and again, whether implementing reduction or growth initiatives, solutions have been based upon the reaction to an immediate crisis, demonstrating little consideration or understanding for the longer-term implications. There is a requirement to improve the understanding of how today's decisions impact upon the Army of tomorrow. However, understanding how best to manage officer production in the face of internal forces is just the beginning of the problem. It is equally important to also understand how external societal forces may also complicate officer production management. Only through understanding how both forces collectively impact officer production can one begin to fully explore improving the production management of the Army's most precious resource, its people.

⁶²Office of the Auditor General of Canada, *April 2002 Report...*, para 5.5 "Previous human resources practices have created peaks and valleys in the distribution of the military population... it could take the Canadian Forces as long as 30 years to achieve a stable population profile".

External Societal Forces of Change

Long-Term Forecasting

Managing officer production in a manner that can address short-term manning crises without creating long-term problems is crucial. The long-term problems created in the wake of the short-term solution to the 1990's downsizing illustrate this fact. There is clearly a breakdown in the ability to forecast the outcomes of the HR decisions. While the creation of the previously explained peaks and valleys may produce certain predictable results, this only represents part of the long-term forecasting challenge.

This segment will explain further why forecasting is so important and also so difficult. Once this is done it will be possible to introduce the subtler requirement to predict societal forces that also impact officer production. These forces, from what the CF terms "the emerging personnel environment",⁶³ are represented by new attitudes toward commitment, changes in the Canadian workforce demographic and the growing impact of technology upon military affairs. Together, these external forces will require the officer production process to cope with increased uncertainty and challenges along with those internal forces already in play.

The ability to accurately forecast long-term requirements, based upon rates of attrition, is key to the sound management of the officer production process. Such forecasts determine intake/recruiting requirements and set the pace for development and succession.⁶⁴ On the surface, forecasting intake would seem to be a simple problem – produce a new officer for every one that leaves. Unfortunately, the time delay imposed by developmental requirements makes this far more complex. For example, it takes five to six years for an entrant to complete DP1. Add the time spent during selection and it could be as many as seven years before a recruit is able to fill the void. As such, determining officer intake must not be a reactive process based upon today's need. Instead, it must recruit today to replace what the Army forecasts will be

⁶³ DND, *Military HR Strategy 2020...* pp 10 - 14.

⁶⁴ M. Sidhom and Dr A. Jesion, *Recent Attrition Patterns in the Canadian Forces*. Director Operational Research (Corporate, Air and Maritime) Research Note RN 2000/01, Feb 02, p ii. "Attrition is the major factor in the human resource (HR) planning as it affects requirements for recruiting, training and other developmental actions..."

retiring in the future – today’s recruit has been enrolled to replace someone who will retire in 2010.

Using an analogy to understand the importance and challenges of forecasting, consider attrition as the posted speed limit at which officer production, like a huge truck, must travel. High attrition, as that seen when a large cohort begins to retire, creates shortfalls and gaps that require the truck to accelerate. Conversely, slow attrition similar to that found in a younger force, slows the truck to a snail’s pace, creating stagnation. Carrying the analogy further, consider that the controls on the officer production truck are not very responsive and the driver requires a lead-time of up to seven years to apply the brakes or the accelerator. Given that it is impossible for the driver to clearly see that far ahead, it is critical that he have an accurate road map that shows the road network, indicating when and where the travel speed must be adjusted.

Developing the best possible road map for officer production is the business of strategic planners. For the Army, this is represented in a Long Range Planning Model (LRPM).⁶⁵ This document is created through Generic Modeling (GeM). Very simply, this process examines the current officer population and applies historical rates of attrition to project future production requirements⁶⁶. While the GeM outputs can effectively identify of peaks and valleys that forewarn of major changes in rates of attrition, the degree of unknowns challenge its fidelity. The model considers two sources of attrition, scheduled and unscheduled. The first source represents forecasted releases based upon known terms of service completion dates (SSE/IE/CRA). Unscheduled attrition represents the less predictable group of officers who voluntarily choose to leave the service. It is the challenge of forecasting this second source of attrition that makes the development of the production road map so hard, if not impossible.

As explained, projecting future attrition relies upon the use of historical data that from the last 10 years – determining how to drive by looking through the rear-view mirror. For Army officers, historical attrition indicates that most MOCs lose between six and seven percent of their

⁶⁵ DND, *Army Long Range Planning Model 2003*.... Document provided as part of the 2003 AMORs.

⁶⁶ B. Lee-Shanok, and Dr A. Jesion Dr A, *A Technical Assessment of the Generic Modeling Utility*. Directorate Operational Research, Research Note RN 9907, May 1999, pp 1-3.

trained officers annually.⁶⁷ However, even those who created the process admit there is an inherent “danger in relying upon historical rates in that these may not be applicable to the future”.⁶⁸ This has recently been the case where attrition rates have exceeded historical averages, jumping to levels from eight to 10%.⁶⁹ While such a shift may not sound that significant, a simple illustration will explain its significance.

Suppose the Engineers used the historical annual attrition average of six percent in the development of their LRPM for officer production. Given the size of the MOC, 23 new officers would be required each year.⁷⁰ This figure would then be used to direct the intake

New Attitudes – Generations X & Y

Changes in the prevailing attitudes of current and future generations are likely to affect rates of attrition and the Army's ability to sustain healthy occupations. Specifically, there should be concern over emerging societal trends in "organizational commitment". This term refers to the positive linkage between the officer's attitudes towards his/her career and a reluctance to leave. Commitment is generally characterized by a belief and acceptance of common goals, a willingness to exert effort on behalf of the organization and general desire to remain a member.⁷³

This "propensity to commit", as it has been described by the US Defence Department,⁷⁴ is fostered by two mechanisms. The first represents an individual's understanding of the tangible rewards associated with remaining in the organization, like pay, promotion and a pension. The second mechanism works on emotional level, appealing to the individual's need to belong to the group with which they identify.⁷⁵ Together, these two mechanisms impact worker retention. However, it remains difficult to accurately correlate the degree to which changes in commitment will impact military attrition. This has left some researchers considering commitment as "wild card" in predicting future attrition.

Despite a lack of clarity in predicting how changes in commitment translate into attrition trends, it is clear that today's attitudes towards organizational commitment are bound to have an impact. To begin, it is widely recognized that commitment has seen a general decline over the last 15 years.⁷⁶ This has been reflected by a pragmatic attitude that has current workers

⁷³ Donald W. Jarrell, *Human Resource Planning* (Englewood NJ, Prentice-Hall, 1993), p 130. See also: Debra L. Nelson and James Campbell Quick, *Organizational Behavior* (Cincinnati Ohio, South-Western College Publishing, 2000), p 131.

⁷⁴ United States Department of Defense, *The Wild Card Effect and Military Retention: Latent Social Identities in an Interactive Organization Commitment Model*, (University of Oklahoma: DoD USA, December 2000), Theoretical Background chapter.

⁷⁵ United States Department of Defense, *The Wild Card Effect...* The report explains the "calculative" and "affective" aspects of organizational commitment. Donald W. Jarrell, *Human Resource ...* Jarrell explains these as "emotional" and "cognitive" mechanisms.

⁷⁶ Kolb, Osland and Rubin, *The Organizational Behavior Reader ...* 10-11. Jarrell, *Human Resource Planning...* pp 130-131. See also Debra L. Nelson and James Campbell Quick, *Organizational Behavior* (Cincinnati Ohio, South-Western College Publishing, 2000), p 121.

reciprocating a perceived lack of commitment from their current employers.⁷⁷ Moreover, it has been observed “the ‘organization person’ who would work for one company for an entire career is now rare”⁷⁸ – a harbinger of trouble for a production process that requires such commitment, leading the Army to observe:

*“The public is becoming less prone to accept the authority of government and non-government institutions and agencies such as the civil service, police, banks, churches, universities and the military. These differences may lead to a society that is less willing to make sacrifices for the collective benefit of the nation.”*⁷⁹

These emerging attitudinal shifts have been observed in what has been called “Generation X”, comprised of those born between 1960 and 1980.⁸⁰ Within the officer corps, this group represents the vast majority of those within DP2 and DP3A,⁸¹ beginning to enter the period beyond 20 years of service (pension eligibility). Although the CF does not appear to have attempted to determine whether or not this poses a serious problem, the US Army has. In so doing, it appears convinced that Generation X represents a major retention challenge, helping explain their own recent and dramatic increase in officer attrition, rising from a historical average of 6.7 % to 10.6 % in 2000.⁸² Research shows that Generation X officers no longer see a requirement to remain in the military for reasons of job security. They are more confident in their skills and marketability, and are willing to seek employment elsewhere⁸³.

The CF is not yet sure the Generation X attitudes will impact officer production. In fact, current HR strategy does not lean towards any specific trend. Instead, planners are uncertain, indicating that officer production must be ready for attitudes that reject authority and distrust

⁷⁷ Kolb, Osland and Rubin, *The Organizational Behavior Reader* ... pp 10-11.

⁷⁸ Monica Belcourt, Arthur Sherman, George Bohlander and Scott Snell, *Managing Human Resources* (Scarborough: ITP Nelson, 1998), p 19.

⁷⁹ Department of National Defence, *The Future Security Environment*, Directorate Land Strategic Concepts, (Kingston Ontario: DND Canada, August 1999), p 20.

⁸⁰ Leonard Wong, *Generations Apart: Xers and Boomers in the Officer Corps* (Carlisle PA, U.S. Army War College, October 2000), pp 11-15. See also: Kolb, Osland and Rubin, *The Organizational Behavior Reader* ... pp 10-11.

⁸¹ P. Bender, *Army Officer Distribution Profiles* (DND, Directorate of Strategic Human Resources – Modelling & Analysis, 15 Oct 02). Dr Bender provided Army officer distribution profiles as of Sept 02.

⁸² Wong, *Generations Apart* ..., p 1.

⁸³ Wong, *Generations Apart* ..., pp 11-15.

government or those which accept such institutions and seek long-term careers.⁸⁴ Agreeably, it remains difficult to determine the impact that Generation X will have upon Canada's Army. Even though there has been a sharp increase in attrition, much of this can also be attributed to the size of the older cohort that is beginning to retire, making other trends far less distinguishable.⁸⁵

Adding to the confusion, the impact of the attitudes of Generation Y (i.e., those born between 1979 and 1994) also requires consideration. This group, which now dominates DP1 and is entering DP2, is believed to bring a totally different perspective than Generation X. It is described as enthusiastic, positive, full of energy and highly adept to new technologies, and well suited for the team-based and structured work environments of the Canadian Forces. While these might be seen as almost ideal attitudes for the 'Army of Tomorrow', like Generation X "retaining them is expected to be a real challenge"⁸⁶. This is because this group, also dubbed the "Nintendo Generation"⁸⁷, appears to demonstrate a "notion of career impermanence and lack of long-term focus or commitment"⁸⁸. Generation Y appears ready to change employment if interest or satisfaction is lost. Thus, it would appear that this generation might not be "lifers", committing to 30-year careers.⁸⁹ Even worse, they may quit quicker and earlier in their careers than the more pragmatic Generation X.

There clearly remains great uncertainty about how the attitudes of Generations X and Y will impact future officer attrition rates. While the US observers have made a direct link with new attitudes and increased releases, the CF remains unconvinced. Regardless, it is clear that the Army must be ready for the potential impacts of declining commitment. This lends to improving a means to study, analyse and forecast trends while also ensuring that means exist to foster commitment on both emotional and cognitive levels. Failure to anticipate and react to change

⁸⁴ DND, *Military HR Strategy 2020...* pp11-14. Four possible scenarios considered for long-term strategic HR development.

⁸⁵ Bender and Collin, *Briefing Note...*

⁸⁶ Joanne Sujansky, "The Critical Care and Feeding of Generation Y," *Workforce*, (Vol 81, Issue 5 May 2002), p 15.

⁸⁷ Wong, *Generations Apart ...*, p 25.

⁸⁸ Major Jeff Tasseron, "Military Manning and The Revolution in Social Affairs", *Canadian Military Journal*, (Autumn 2001), pp 53-62.

⁸⁹ David Pugliese, "Forces Toughest Battle: HR" *The Ottawa Citizen*, Oct 15, 2000, p A8. Author's comments are based upon observations from defence analyst Doug Bland.

could compound rates of attrition at a time when it is least needed – the Army is already in a manning crisis.

Demographics – The Aging Workforce, Females and Minorities

It has become clear that the demographic structure of countries such as Canada, the United States and the United Kingdom is undergoing profound change. In the coming years fewer young people will enter the workforce and the size of the working population will slow if not even decrease. It is expected as the working force ages, the competition for young employees will become fierce. Despite such predictions, there is growing concern that employers are not sufficiently aware of the challenges that such change may pose.⁹⁰ The CF, and the Army in particular, must understand the requirement to fully exploit all personnel sources⁹¹ from which it can recruit and maintain its officer corps. Areas, which are perhaps under exploited, are amongst older workers, women and visible minorities. However, as the Army looks to new sources for officers, it must remain fully aware of how this may dramatically impact upon the officer production process.

As the age of workers increases, it is expected that there will be a marked growth in the working population beyond age 55. Within Canada this group will likely account for 70% of the net increase in the working-age of the population.⁹² Knowing that younger workers may be more difficult to recruit, the CF is currently exploring options to exploit this growing workforce and extend CRA beyond 55. Understanding that compulsory retirement has been part of the mechanism by which promotions are created in a “trickle-down” effect, a corresponding change would be expected to impact upon production.⁹³ Recent studies have concluded that eliminating CRA would have two major impacts. Firstly, it would reduce annual officer intake requirements by almost 10 %, ⁹⁴ a desirable result in a competitive market that also allows the CF to profit

⁹⁰ William B.P. Robson and a BNAC Statement, *Aging Populations and the Workforce*, British-North American Committee, (Winnipeg: Printcrafters 2001), p v. BNAC is a group of leaders from business, labor and academia in the UK, US and Canada that regularly meets to discuss common concerns with experts and policy makers.

⁹¹ DND, *The Future Security Environment...*, pp18-22.

⁹² Robson and a BNAC Statement, *Aging Populations...* p 7.

⁹³ Dr A. Jesion, and L.F. Kerner L.F., *Population Flow Implications of Eliminating the Compulsory Retirement Age*, Directorate of Operational Research, (Corporate, Air and Maritime), Research Note RN 9905, April 1999, p 1.

⁹⁴ *Ibid*, p 12. Over a 10% intake reduction in case study scenarios.

more from its developmental investment. However, eliminating CRA would also slow the flow of officers through the production process, extending the normal amount of time to be spent within DP2 through DP4 and reducing annual promotion opportunities amongst all ranks.⁹⁵ This would make the Army older as well as generate a frustration amongst those whose promotions were delayed, threatening to decrease their commitment to military service.

As the CF continues to debate the scope in which it allows officers to serve beyond 55⁹⁶, the leadership must be aware of the implications upon succession. Clearly it remains important to strike a balance between ensuring the Army has sufficient officers while ensuring that succession promotes officers to rewarding employment that is in line with their developed capabilities.

The issue of extending or even eliminating CRA reinforces the observation that the CF and the Army appear confused about what the ideal, or healthy, officer profile should represent. Comments in recent CF news releases stating, “we want to ensure they [CF members] have a fair opportunity to serve for 35 years”,⁹⁷ highlight a conflict in priorities for officer production. Providing life-long employment opportunities for all is quite arguably not in line with the stated aim of ensuring the officer corps is ready and able to defend Canada. Again, healthy succession requires the ability to release individuals no longer gainfully employed; keeping Captains on the payroll until they qualify for old-age security does not promote the vision for a combat capable army.

The growth of women within the Canadian workforce represents the second profound demographic change. By 2006, it is expected that women will account for 48% of the workforce.⁹⁸ Moreover, they are also emerging as the better-educated segment of Canada’s population.⁹⁹ As such, women represent a vast market from which to recruit future officers. However, despite opening the combat arms to women and directing that “full integration is to

⁹⁵ *Ibid*, p 11.

⁹⁶ DND has yet to formally approve extension of CRA to age 60. The CF remains under an interim policy only.

⁹⁷ Department of National Defence, *Canadian Forces Retirement Policy*, News Release (NR-01.048, 27 June 2001).

⁹⁸ Belcourt, Sherman, Bohlander and Scott, *Managing Human Resources...*, pp 20-21.

⁹⁹ Nelson and Quick, *Organizational Behavior ...*, p 121. Women earn 55 % of undergraduate degrees and 53% of masters.

take place with all due speed” in 1989, 10 years later they remain a meagre 2.9% of the combat arms, well below the “minimum target” of having a 28% representation amongst army officers.¹⁰⁰

Increasing female representation within the Army has been difficult, with intake routinely falling well below desired levels. While some failures have been attributed to poor recruiting practices, women also appear to be less likely to choose a career within the military. US studies believe that this is a result of developed societal norms and behavioural expectations combined with a perception of limited career opportunities within the military.¹⁰¹

Overcoming recruitment challenges associated with women is only part of maintaining a healthy officer corps – retention is equally problematic. In Canada and the US, studies have concluded that women are significantly “more likely to leave [the military] voluntarily”.¹⁰² More specifically, within the combat arms female attrition is over double that of their male counterparts. Why attrition rates are so high has not been explained. Canadian researchers have had difficulty with this subject, struggling with what has been described as a “lack of meaningful data”.¹⁰³ Regardless, female retention within the Army is appallingly low. This needs to be addressed; it would be remarkably inefficient to dramatically increase the intake and investment in the development of female officers only to have attrition rates skyrocket.

Dramatic shifts in the Canadian multi-cultural base represent the third demographic consideration for officer production. Immigration trends have resulted in a rapid growth of visible minorities. It is expected that by 2025 visible minorities will represent over 30 % of the nation’s population.¹⁰⁴ Unfortunately, this growth in population has not translated into similar

¹⁰⁰ Department of National Defence, *Minister’s Advisory Board on Canadian Forces Gender Integration and Employment Equity – 1999 Annual Report* (Ottawa: DND, 1999), Chapter 2.

¹⁰¹ Rita James Simon, *Women in the Military*, (New Brunswick NJ: Transaction Publishers, 2001), p 67.

¹⁰² Susan D. Hosek, Peter Tiemeyer, Rebecca Kilbour, Debra A. Strong, Selika Ducksworth and Reginald Ray, *Minority and Gender Differences in Officer Career Progression* (Santa Monica: RAND, 2001), pp 104-05.

¹⁰³ Department of National Defence, *Minister’s Advisory Board on Canadian Forces Gender Integration and Employment Equity – 2001 Annual Report* (Ottawa, DND, March 2001), Chapter 4C. Current annual rate of attrition is 14.9%.

¹⁰⁴ DND, *Military HR Strategy 2020*, p 11.

representation within the officer corps. Currently only 2% of the officer corps is of such origin.¹⁰⁵

It has been suggested by the CF leadership that the values and backgrounds of non-European immigrants may not favour military service. In fact J.L. Granatstein, a respected Canadian professor and historian, has suggested that the emergence of such increased cultural diversity will exacerbate the growing lack of inclination to “serve the country”.¹⁰⁶ If correct, this would not be helpful if the organizational commitment expectations for Generations X and Y are correct. This reinforces earlier observations that the Army must strive to foster increased levels of commitment, focusing upon socialization efforts within DP1. Otherwise, it would appear that diversity will represent a major challenge to establishing and maintaining commitment to serve.

The current failing of the CF and the Army to attract and retain females and visible minorities means that over almost two-thirds of the potential talent pool in Canada is not being exploited.¹⁰⁷ As the workforce continues to age and the demand for young workers increases it will not be realistic to believe that the situation can be allowed to continue. Without contributions from these segments of the population, the Army will not only have to increase demands upon traditional recruiting sources, but the officer corps will not be truly representative of the nation it serves. Strategies must be developed which will address the attraction and socialization of this group. Again, this requires an increased level of analysis and understanding by HR managers to develop such strategies and to adapt officer production to cope with the full integration of these major workforce contributors.

Officer Production and The Revolution in Military Affairs

The ongoing ‘Revolution in Military Affairs’ (RMA) represents the third major societal force that impacts officer production. This somewhat overused term refers to the rapid

¹⁰⁵ DND, *Gender Integration and Employment Equity – 1999 Annual Report*..., Chapter 2.

¹⁰⁶ DND, *Canadian Officership*..., p 28-29.

¹⁰⁷ DND, *Gender Integration and Employment Equity – 2001 Annual Report*... Chapter 1.

transformation underway in modern militaries. While definitions abound, the basic tenet of RMA is that “advances in technology must lead to significant changes in how military forces are organized, trained and equipped for war, thereby reshaping the way in which wars are fought”.¹⁰⁸ This force of change is significant. Its impact upon officer production is profound and must be understood.

Canada’s leadership recognizes that officers must be increasingly developed in a manner that will enable them to keep pace with rapid technological change throughout their careers.¹⁰⁹ This has greatly contributed to the increased emphasis upon intellectual development.¹¹⁰ Such observations have led the Army to stress the requirement to become a “learning organization”¹¹¹ that is led by those with “advanced” levels of education and training.¹¹² Unfortunately, the transformations associated with the RMA may lead to officer production problems. Specifically, the following must be considered: (a) challenges to recruitment as entry-level requirements increase; (b) the developmental challenge of keeping pace with change; (c) the retention challenge from increasingly marketable officers; and (d) the challenges associated with the requirement to reduce and grow occupations undergoing transformation. Each of these will be discussed below.

The external societal advances that drive the RMA, increasing the need for intellectual development, are reflected in the officer production process. Foremost, the CF has placed a greater emphasis upon the education of its officers.¹¹³ As such, an undergraduate degree is now considered an essential component to developing tomorrow’s officers, laying the groundwork to cope with and exploit the accelerating pace of change and development.¹¹⁴ No longer will it be acceptable for a young officer to complete DP1 without having a university degree. For the combat arms, where it had been possible to become an officer without a degree, this translates

¹⁰⁸ Elinor C. Sloan, *The Revolution in Military Affairs* (Montreal and Kingston: McGill-Queen’s University Press, 2002), p 3.

¹⁰⁹ DND, *Canadian Officership...*, p iii.

¹¹⁰ *Ibid*, p 9.

¹¹¹ DND, *Training Directive...*, p 2.

¹¹² DND, *The Future Security Environment...*, p 23.

¹¹³ DND, *Canadian Officership ...*, p 9.

¹¹⁴ *Ibid...*, p 16.

into a heightened recruitment standard. Today, only those with degrees or capable of obtaining them within DP1 are now considered as acceptable candidates for recruitment.¹¹⁵

The Army's demand for increasingly well-educated workers is not unique. The steady transformation of the Canadian economy from an industrial to a service base has also heightened the demand for "knowledge workers". Such workers must generate, process and analyze information, a capability linked to higher levels of post-secondary education.¹¹⁶ While this trend has led an increasing number of Canadians to complete post-secondary education,¹¹⁷ it has equally increased the workforce demand for better-educated employees, increasing the Army's recruiting challenges. As the Director General Strategic Planning has explained, the CF represents "only one of many employers in today's highly competitive labour market, whose appetite for so-called knowledge workers seems insatiable".¹¹⁸

The Engineers, who require officers with applied science university degrees, painfully illustrate how difficult it can be to attract knowledge workers. In recent years, CF has dramatically failed to recruit Engineers, attracting less than half of the target of number of Direct Entry Officer (DEO) entrants.¹¹⁹ Even worse, over a three-year period only one DEO with a degree in civil engineering, considered to be the preferred degree for an Engineer, was recruited. The recruitment difficulties for Engineers became so acute that the MOC compromised the desired level of academic rigour and dropped entrance standards.¹²⁰ In fact, prior to the CF mandating the higher academic standards, the Engineers recruited officers without university degrees altogether to achieve a modicum of success. Clearly this is an unacceptable situation for an MOC that believes it needs at least half of its officers to have a civil engineering degree in order to provide the technical competency required by the Army.¹²¹ It was not surprising that in

¹¹⁵ *Ibid...*, pp 40-41.

¹¹⁶ Herman F. Schwind, Hari Das and Terry T. Wagar, *Canadian Human Resource Management – A Strategic Approach* (Toronto, McGraw-Hill Ryerson, 1999), p 15. "Knowledge workers: members of occupations generating, processing, analyzing or synthesizing ideas and information (like scientists and management consultants)."

¹¹⁷ *Ibid...*, p 15.

¹¹⁸ Department of National Defence, *Beyond 2010 - RMA Concept Paper*, Concept Paper for Director General Strategic Planning (Ottawa: DND, 31 May 1999), Chapter 6: Human Resources.

¹¹⁹ DND, *Briefing to Commanding Officers...*

¹²⁰ DND, *Record of Decisions of the Annual Military Occupation Review (AMOR) MOC 24A ...*, p 3.

¹²¹ *Ibid*, p 2.

2002, when only DEOs with university degrees could be recruited, that less than 30 % of the intake for Engineers was achieved.¹²²

The CF has recently made efforts to improve its ability to recruit well-educated officers. This has included the introduction of up to a \$ 40,000 signing bonus for DEOs with engineer degrees.¹²³ Such an approach to recruiting clearly focuses upon the tangible benefits of becoming an officer. Whether or not such a recruit is likely to be more or less committed to a long-term career is debatable.¹²⁴ However, it remains important to understand that demands of the RMA further compound the challenge to the officer production process from the beginning when recruits are being sought. This observation reinforces the requirement to ensure that all sectors of the Canadian demographic, such as women and visible minorities, are exploited to ensure the intake of intellectual capital.

Beyond heightened intake requirements, the RMA also increases other developmental requirements. The introduction of increasingly sophisticated equipment and technology requires a significant increase in training. For example, the new Light Armoured Vehicle (LAV) has added almost two months to MOC training while the new radios now require almost four times the amount of time to learn to operate.¹²⁵ These improved technologies represent quantum leaps in both capabilities and training demands. Strategic planners within the office of the Vice Chief of Defence Staff have observed that technological innovations are placing increased stress upon “the time available for necessary training and skill development”.¹²⁶

In addition to being trained to use new equipment, tomorrow’s officers must also be developed in a manner that will enable them to oversee the incorporation of new technologies. In order to keep pace with its allies, the Canadian Army must be able to rapidly adapt to the pace

¹²² DND, *Briefing to Commanding Officers...*

¹²³ Department of National Defence, *Backgrounder: Engineering Officer Recruitment Allowance* (Ottawa: DND News Room, 24 Jan 03).

¹²⁴ Belcourt, Sherman, Bohlander and Scott, *Managing Human Resources...*, pp 141-50.

¹²⁵ Department of National Defence, *Record of Decision for MOC 24 DP2 Working Group* (Gagetown: DND, Canadian Forces School of Military Engineering, 30 Jan 01). Additional information provided by Maj D O’Keefe, CFSME Doctrine and Training, 23 Oct 02.

¹²⁶ DND, *Beyond 2010...*

of change,¹²⁷ requiring officers that are able to “use and improve technology available within an appropriate vision and structure”.¹²⁸ From being able to adapt doctrine to match new capabilities, to directing the research and development of new military hardware, tomorrow’s officers must be increasingly comfortable with applied military science. In fact, it is believed that officers must have “a thorough understanding of the application of technology and its broad scientific basis” to be effective in the coming age.¹²⁹

Increased emphasis upon applied military science within the core curriculum of officer development is an important development. To cope, the Army will be required to expand the scope and throughput of the training institutions like that of the Applied Military Science School.¹³⁰ This further represents the shift from experiential to educational development.¹³¹ While the potential impact of having officers spend less time in units developing experience and more time in schools learning is not clear, there is little doubt that the future investment in intellectual development will be significantly increased.

As the Army recognizes the requirement to increase the training investment to produce officers who are able to embrace emerging technologies, it must also understand that this investment will in itself challenge the very health of the officer corps. The skills that tomorrow’s officers will require are seen to also be “in great demand domestically”.¹³² Thus, the Army is developing officers that are increasingly capable of leaving the CF. This compounds concerns associated with trends of decreasing worker commitment. Research has identified a direct link between an officer’s commitment to continue to serve with the ability to find equal or better pay and benefits outside the military.¹³³ Thus, during times when the Canada’s economy is looking for talented workers it would be expected that rates of attrition will increase as civilian organizations are able to attract those whose emotional desire to serve may be overcome by the attraction of other more tangible benefits. This observation not only highlights the requirement

¹²⁷ Sloan, *The Revolution ...*, pp 143-46.

¹²⁸ DND, *Beyond 2010 ...*

¹²⁹ DND, *Canadian Officership...*, p 18.

¹³⁰ *Ibid ...*, p 18.

¹³¹ DND, *The Future Security Environment...*, p viii.

¹³² DND, *The Future Security Environment...*, p 23.

¹³³ RAND Corporation, *Future Career Management Systems...*, Annex C – Career Satisfaction, pp223-25.

to ensure a certain degree of pay equity¹³⁴ with civilian employers, but it also speaks to the increased need to ensure an understanding of the importance of socialization in developing emotional reasons to remain committed to serve.

Finally, the RMA also represents a tremendous force for structural change that may come to significantly impact upon officer production. New technologies will greatly impact the way that future armies will fight, changing how forces need to be structured. Increases in the range, lethality and accuracy of weapons enable land forces to cover more ground with fewer soldiers. This drives the current trends for armies to be light and agile with a sophisticated command and control networks, enabling a small force to act quickly and decisively before its opponent can respond.¹³⁵ As Canada's current Army Commander Lieutenant-General Jeffery has observed, such trends will bring about a "fundamental" change in how the Army is structured.¹³⁶

While it is unclear as to what the 'Army of Tomorrow' (2007) or the 'Army of the Future' (2027)¹³⁷ will look like, it appears certain that the status quo is not an option. The Army has chosen not to pursue the replacement of the Leopard main battle tank when it is retired from service in the 2020s, but will replace it by a lighter system that may, or may not, be manned by the Armoured Corps. Similarly, the future of the Field Artillery is uncertain as more lethal and accurate rocket systems evolve which could replace more conventional gun batteries. Conversely, the desire to increase the command support capabilities within fighting formations may represent growth for reconnaissance, intelligence and communications occupations.¹³⁸

While no major structural changes have been announced, it is not inconceivable that over the next few years Army combat arms MOCs may dramatically change in establishment strength. As has been earlier demonstrated, it will be critical that HR managers are actively involved in the

¹³⁴ Belcourt, Sherman, Bohlander and Scott, *Managing Human Resources...*, pp 350-51. "Pay Equity: An employee's perception that compensation received is equal to the value of the work performed."

¹³⁵ Sloan, *The Revolution ...*, pp 123-42.

¹³⁶ Lieutenant-General Jeffery, Chief of the Land Staff, *Address to the Conference of Defence Associations*, Speaking Notes, Ottawa, Feb 2002.

¹³⁷ DND, *Advancing with Purpose...*, pp 8-12.

¹³⁸ Lieutenant-General Jeffery, Chief of the Land Staff, *Presentation to Canadian Forces Command and Staff Course 29*, 10 April 2003 (quoted with permission).

implementation of such change from the onset. Failure to do so will expose affected MOCs to

The Way Ahead – Recommendations for Better Understanding and Management

Today, as this paper is written, the Artillery Corps is short about 65 junior officers, representing 15% of the MOC. Moreover, it is forecast that another 25 to 30 officers will retire before the year's end. Remarkably, amidst this growing personnel crisis, only six new Artillery officers will graduate from this year's class of candidates. As the CF responds, recruiting over 75 Artillery officers a year (creating a triple-cohort), it will take at least seven years before such shortfalls are corrected.¹³⁹ This represents a catastrophic failure in the management of officer production, one that not only undermines the ability of the MOC to fulfil its operational duties, but a breakdown that will leave massive peaks and valleys in the officer profile, haunting Artillery personnel management for the next 30 years.¹⁴⁰

The HR problems plaguing the Artillery Corps are not unique. Many other officer MOCs are experiencing unexpected shortages. This has led the Infantry to double its officer intake, while non-combat arms MOCs like the Signals Corps have quadrupled their intake.¹⁴¹ As the shortages begin to impact readiness, arguably the Army leadership should be taken to task for the apparent gross mismanagement of the officer production process. However, it is probably safer, and more accurate, to suggest that today's problems are a product of a broken HR system that has lacked the ability to understand and manage the impacts of internal and external HR forces of change.

With a view to avoiding future HR catastrophes, this final segment will provide recommendations for adapting how the officer production process is managed. Building upon the general understanding of internal and external forces, recommendations for the way ahead will concentrate upon three aspects of how the CF must adapt: (a) professionalizing HR management; (b) clearly establishing the "healthy" profile for the Army officer corps; and (c) adapting and creating management tools that foster commitment and enable growth and

¹³⁹ DND, *Army Long Range Planning Model...*, Annex B.

¹⁴⁰ Office of the Auditor General of Canada, *April 2002 Report...*, para 5.5.

¹⁴¹ DND, *Army Long Range Planning Model ...*, Intake Summary.

reduction in a manner that does not compromise the production process. Once discussed, the recommendations of this segment will lay the foundation for this paper's conclusion.

Building HR Expertise

The CF has acknowledged that during the downsizing of the 1990s, much of its HR management capability was lost.¹⁴² Those left to manage the Army's most precious resource did so with a diminished understanding for the nature of the challenges at hand. In 2000, the Director Defence Analysis provided the following comment to support this assertion:

"There is a lack of solid conceptual underpinning for HR policy and strategy, stemming partly from a lack of research. HR [management] operates largely in a reactive and piecemeal mode. High priority should be placed on establishing an overarching framework for human resources development".¹⁴³

Not long after this comment was made, the CF began to take measures to "rebuild" its lost HR capability, creating the Long Term Capability Plan (LTCP). This plan is designed to provide "analysis of the HR environment" and subsequently recommend "projects and initiatives" to address the challenges of the future.¹⁴⁴ This initiative has ensured that HR issues receive visibility at the most senior levels, resulting in increased support for HR management which has become the CF's top priority. LTCP has developed recruiting and retention initiatives as well as ensuring HR organizations (i.e., recruiting centres, education and training institutions) are well funded and staffed.¹⁴⁵ Unfortunately, it has also been observed that the LTCP lacks the necessary HR expertise required to ensure the projects are properly designed to achieve intended results. Those developing policies are seen to have "valuable military knowledge but often very limited experience in human resources".¹⁴⁶ Such observations have cast some doubt over the

¹⁴² DND, *Military HR Strategy 2020...* pp 32.

¹⁴³ Director Defence Analysis, *The Development of the Human Capability*, A DND/CF Concept Paper on CDE and M&S, Winter 2000.

¹⁴⁴ DND, *Military HR Strategy 2020...* pp 32.

¹⁴⁵ Department of National Defence, *Defence Plan On-Line* (Ottawa: DND, VCDS, FY 03-04, http://vcds.mil.ca/DPOnline/FY5PrioritiesHRPersMil_e.asp).

¹⁴⁶ Office of the Auditor General of Canada, *April 2002 Report...*, paras 5.74 to 5.80.

CF's ability to fully understand the challenges and the degree to which current initiatives will have long-term success.

This lack of HR expertise is not only prevalent amongst those developing the LTCP but throughout the CF. Those who direct and conduct HR management are not, by the vast majority, HR professionals.¹⁴⁷ Instead, recruiting, career management, and HR policy development is the realm of those whose military careers cross the path of HR from time-to-time. Furthermore, senior policy development and recommendations are often reliant upon ad hoc boards and committees whose depth of understanding of the nature of the challenges may be suspect. The Auditor General has recommend that the CF develop a HR occupation that maintains experience and expertise to “identify issues, develop policy, and implement changes over the long term”.¹⁴⁸ This reflects observations that have been made within the US Navy.

The recommendations of a USN Task Force on HR Management have argued that more than improved systems and dedicated resources were required to manage HR in the future. The report asserted that the creation of an “HR profession” represents the best means to properly understand and adapt to the current HR environment. Unfortunately, the report went on to submit that HR managers with the desired level of ability to analyse issues and propose solutions “do not exist in either the military or civilian communities” and that such a capability would need to be created. Reinforcing Canadian observations, the USN report recommends the creation of an “HR career field” where the requisite level of competency could be established.¹⁴⁹

When such observations are placed alongside the increasing complexities of the HR environment, it would be wise for the CF to improve its level of HR expertise. Specifically, it should increase the permanence and professionalism of HR management organizations, exploring the possibility of creating an HR career field where expertise and competence could be further developed. This recommendation would represent the basis for improved management of officer production.

¹⁴⁷ *Ibid*, para 5.76.

¹⁴⁸ Office of the Auditor General of Canada, *April 2002 Report...*, para 5.83.

¹⁴⁹ The United States Navy, *Implications for Getting Under Way: HR Management for the 21st Century – Task Force Recommendations*, (http://www.chinfo.navy.mil/nvapali...secnav/asn_mra/hrm21/implyget.html).

Recommendation 1: Increase the permanence and professionalism of HR management organizations, exploring the possibility of creating an HR career field.

Defining the Healthy Profile

The second key area for improvement lies in the requirement to better define the desired “healthy” profile that officer production is to maintain. From the beginning of this paper, it has become increasingly apparent that HR managers are operating with a narrow understanding of what is required to maintain healthy officer occupations. Generally speaking, production requirements are based upon keeping pace with rates of attrition and are less focussed upon a more precise definition of a healthy MOC. For example, it would appear that little consideration has been given to determining the optimal age and time an officer spends within the DPs, merely establishing minimum developmental time but no maximum. Instead, the concern is increasingly focussed upon officer retention regardless of age and rank achieved so long as the production investment is maximized.¹⁵⁰ This expresses an implicit desire to retain officers for life-long careers, regardless of potential. While allowing captains to serve until 55, and extending others with special skills to 60,¹⁵¹ may reduce production requirements, such an approach may not be designed to meet the operational demands of an occupation. Furthermore, such an approach suggests that the Army is allowing the HR environment and the forces of change to dictate the composition of its officer corps – adapting the officer profile rather than adapting to the challenges it faces.

The approach of the US Army is quite different to that of Canada. It employs an “up-or-out” production philosophy. Once officers have advanced to their potential they are released from service. This approach is designed to maintain a “youthful and vigorous force”.¹⁵² While this requires a larger investment in training, it is an effective means to regulate the flow of

¹⁵⁰ DND, *Military HR Strategy 2020* ..., “Recruit, Develop Retain” philosophy implies tremendous emphasis upon retention strategies.

¹⁵¹ Office of the Auditor General of Canada, *April 2002 Report*..., para 5.65. Outline of July 2001 retention strategy initiatives.

¹⁵² RAND Corporation, *Future Career* ..., p 106.

personnel through the development process. Moreover, it produces the type of officer corps that the US Army believes it needs to fight and win wars.

It is not entirely clear what the Canadian Army desires for the profile of its officer corps. There is no openly stated requirement for youth but an emphasis upon capability, leaving room for the career-captain. This observation runs in contrast to the previously explored arguments of Pigeau and McCann who stressed the importance of maintaining a balance between an officer's capability and level of employment. If this is to be the case, a healthy profile demands a steady flow of succession. Retaining officers without the capability (competency) to advance is not the problem, it is their impact that they have upon the succession of others that is at risk. As explained, without a steady rate of attrition across all rank levels, peaks and valleys in the officer profile are created. This produces dramatic fluctuations in the rate of officer production that lead to employment imbalances.

It is perhaps because of this lack of clarity that production models use historical profiles as their benchmark. As such, the Army monitors trends in the ages and numbers of its officers based upon maintaining the status quo, and not what is deemed to be optimally suited for operational purposes.¹⁵³ Thus, when it is observed that the average age of a major has dropped below the historical average, it is not clear as to whether or not this represents a problem. While this approach is useful in recognizing major trends and irregularities, like those associated with an aging officer corps, it again lends one to believe that it is the HR environment that is driving officer production and not operational requirements. Ideally, the Army should first establish that which is desired and then strive to overcome the forces that challenge its attainment; to do otherwise is to accept a lesser end product.

Recommendation 2: Establish the desired/healthy profile that officer production is to maintain based upon the operational needs and not the challenges of the current HR environment.

¹⁵³ Dr. Paul Bender, Directorate Strategic Research (HR) 3 – Modelling and Analysis. Commentary within e-mail correspondence on 20 Jan 02.

The reliance upon historical data presents an additional problem in itself. As previously explained, the ability to accurately forecast the production requirements five to seven years ahead of time is essential to good HR management. The current shortages are often attributed to failures in this regard, where “[HR] managers did not have the data to guide recruiting and attrition decisions”.¹⁵⁴ The errors made in the 1990s stemmed from failures to observe the trends associated with an aging officer corps, and the peaks and valleys in the officer profile. Unfortunately, even though such trends are now being considered, it is likely that the modelling process may fail again. Current models continue to rely on historical data, still held as the best means of predicting attrition.¹⁵⁵ It is hard to imagine that historical trends will accurately depict the impact of the emerging trends in HR environment. Again, this speaks to the importance of having the input of HR professionals in the development of planning models with increased fidelity. Otherwise, the Army could find itself again caught off guard by changes in rates of attrition that history was unable to accurately predict.

Recommendation 3: Determine officer production requirements from an understanding of the forthcoming impact of the HR forces of change, and not only solely reliant upon historical data.

¹⁵⁴ Office of the Auditor General of Canada, *April 2002 Report...*, para 5.2.

¹⁵⁵ Dr A. Jesion and M. Sidhom, *Recent Attrition Patterns in the Canadian Forces*, Directorate of Operational Research, (Corporate, Air and Maritime), Research Note RN 2000/01, February 2000, p 29.

Overcoming the Forces of Change

Greater understanding of how the forces of change impact upon officer production will improve HR management. The ability to predict deviations from the officer profile years in advance will ensure that intake or release targets are adjusted before problems fully develop. Still, such improvements alone are not likely to be enough to maintain a healthy officer corps. Ideally this improved level of understanding should allow the CF to develop means to mitigate the impact of the forces, described in a contemporary text as “controlling” and “neutralizing” HR variables.¹⁵⁶ Improved management tools will help maintain the officer profile on the Army’s terms and not those of the prevailing HR environment.

An improvement in the ability to attract and retain personnel (i.e., commitment) in the coming HR environment is seen as the key to enabling the Army to control its own destiny. The following conclusion from the Centre for Military Strategic Studies indicates that the quality of military life is at the root of fostering such commitment:

“Ultimately the success or failure of DND to recruit and retain sufficient numbers of quality personnel is directly linked to the quality of life the CF offers its members and the excitement, challenge and opportunities a career in the military can provide.”¹⁵⁷

It is increasingly apparent that the CF and the Army recognize that quality of life (QOL) is essential to attracting recruits and fostering long-term commitment. In 1998 the CF began a QOL programme that led to the restoration of compatible salaries, health care reforms and improved housing and family support networks.¹⁵⁸ These initiatives were designed to foster commitment on both the emotional and cognitive levels, improving the bond between the Army and the individual while also providing improved benefits associated with remaining in service. Given the emerging HR environment, continuing

¹⁵⁶ Donald W. Jarrell, *Human Resource Planning...*, pp 208-11.

¹⁵⁷ Jim Fergusson, Frank Harvey, and Rob Hubert, *To Secure a Nation: Canadian Defence and Security in the 21st Century* (Prepared for the Council for Canadian Security in the 21st Century, Calgary, 2001), p 23.

¹⁵⁸ DND, *CDS Report: 1999-2000...*, p.2.

such initiatives is important to establishing and maintaining commitment to serve. It would appear that the input of HR professionals in monitoring and recommending measures to maintain and improve QOL should be considered. Regardless, such initiatives must continue.

Recommendation 4: Continue to monitor and design quality of life initiatives to promote commitment to service.

Understanding the general decline in commitment to service, it is not likely that QOL initiatives alone will be enough to prevent the effective strength from “bleed[ing] away in times when the civilian economy offers a variety of challenging and well paying jobs”.¹⁵⁹ Thus, reinforcing the importance of ensuring commitment is well developed on the emotional level, creating a culture where individuals want to stay. As explained, socialization, stressed within DP1, is designed to not only produce officers that are good performers but develop strong intentions to remain with the organization.¹⁶⁰ Developmental activities that create *trust* and *identity* towards the CF/Army are essential components of the initial socialization.¹⁶¹ Adapting this process to earn the commitment of the current generations that are reluctant to trust and commit is important to officer production stability.

Furthermore, it is essential that the socialization process embrace the attitudes and values of a far more diverse officer demographic in the years to come. As previously discussed, the inability to portray a desirable identity, linked to poor socialization practices and methods, is partly to blame for the ongoing failures in the attraction of quality personnel from all segments of Canadian society. Despite recent efforts, “the CF is still attracting young, white males, mainly English-speaking”.¹⁶² Overcoming this failing will be vital in the future as competition for workers increases. Again, capable

¹⁵⁹ Fergusson, Harvey, and Hubert, *To Secure a Nation...*, p 23.

¹⁶⁰ Nelson and Quick, *Organizational Behavior ...*, pp 544-47.

¹⁶¹ DND, *Canadian Officership in the 21st Century...*, pp 40-41.

¹⁶² Office of the Auditor General of Canada, *April 2002 Report...*, para 5.47.

HR professionals must seek innovative solutions towards attracting a wider spectrum of talent.

Recommendation 5: Improve the officer socialization process to increase trust and promote the CF/Army identity in a manner that attracts the entire Canadian demographic to serve.

The final area where the CF could seek to improve commitment and the overall management of office production lies in the service contracts it makes with its officers. Ideally, contracts should be designed in a manner that allows the Army to shape the profile of the officer corps through a conscious decision to re-engage selected officers and let others depart upon completion of limited service. Thus, as previously explained, succession would be based upon retaining the best for advancement and releasing those who have reached the limit of their potential. It should not be a matter of simply advancing those who chose to serve long enough to complete the DPs.

The employment contracts that the Army makes with its officers are outlined in the Terms of Service (TOS) as previously explained. The current TOS encourage commitment to serve through offering benefits such as annuities and pensions upon completion of successive contract extensions. This also allows the opportunity to direct attrition through only offering service extensions to selected individuals. Although the current TOS offers an excellent means to foster commitment, it has recently been suggested that the benefits have compounded attrition problems.¹⁶³ For example, allowing an officer to retire with a pension after 20 years of service essentially provides a “financial incentive to retire and seek a second career”.¹⁶⁴

The CF is currently conducting a review of the TOS and is expected to complete a conversion to new terms in 2007.¹⁶⁵ As this is developed it will be important that retention incentives and attrition mechanisms exist to support the desired officer profile. Re-occurring themes such as “employee security” and “career-for-life” are predominant within the current

¹⁶³ DND - DMEP, *Background Reading – Terms of Service (TOS) Review ...*, p 2.

¹⁶⁴ RAND Corporation, *Future Career Management Systems...*, 225.

¹⁶⁵ DND, *Military HR Strategy 2020 ...*, Annex D.

review process documents.¹⁶⁶ Again, without a clear vision of a healthy profile, such considerations may be seen to override the operational needs of the Army. However, there is also encouraging discussion of introducing short contracts to deal with periods of unforeseen growth that would bring the capability to release such personnel in greater numbers so as to avoid a double-cohort in the production profile.

The new TOS must be designed to walk the fine line between placing the Army's needs first while also demonstrating commitment from the Army to the officer. As has been observed, the "up-or-out" development philosophy of the US Army is at odds with fostering commitment of the member.¹⁶⁷ Again this is where HR expertise is essential. The new TOS must be designed in such a manner that it will encourage commitment while enabling healthy attrition. It must be designed so that the production peaks and troughs created by the internal forces and the attraction and retention problems associated with the societal forces can be controlled. A lofty objective perhaps, but one that clearly needs to be pursued.

Recommendation 6: Redesign the Terms of Service to foster commitment while also ensuring measures exist to release officers in order to maintain a balanced officer profile.

An officer corps with a strong commitment to service where only the very best are retained for development to the most senior ranks has been presented as the ideal. The three previous recommendations support this, enabling officer production to manage the external societal forces that challenge commitment and the internal forces of reduction. However, it is difficult to conceive a means to address the internal force of growth, beyond that achieved through increased rates of retention. As previously demonstrated, within the front-end loaded officer production process, it is impossible to achieve substantial force growth without introducing a host of problems associated with the introduction of large cohorts of officers. As a reminder, an increase in PML by only 10% can produce massive peaks and valleys in the officer profile that takes decades to correct.

¹⁶⁶ DND - DMEP, *Background Reading – Terms of Service (TOS) Review* Executive Summary: Attitudes and Preferences of Canadian forces Members on Terms of Service Issues.

¹⁶⁷ Beth J. Asch and John T. Warner, "A Theory of Compensation and Personal Policy in Hierarchical Organizations with application to the United States Military," *Journal of Labor Economics*, Volume 19, Issue 3 (July 2001), pp 523-62.

Lateral entry, where officers are introduced to the Army across all levels of rank, would mitigate the impact of forcing all new officers through the same entry point. For example, if the Army were able to directly hire civilians to become majors, the pressure upon the rate of development and succession within DP1 and 2 would be reduced. Whether it is the Canadian Public Service¹⁶⁸ or private corporations like General Electric,¹⁶⁹ other large hierarchal organizations are able to directly hire senior managers. While the programs that enable entrants to bypass lower levels of employment require roughly three to five years of training, they greatly accelerate the production of senior employees.

Senior observers within DND and the Government of Canada have suggested that the CF consider lateral entry as a means to enhance HR management. It has been argued that this would not only serve to reduce the impact of introducing massive entry-level cohorts but it would enable the CF to exploit a wider talent pool of recruits from amongst experienced civilians.¹⁷⁰ However, adopting such an approach to producing officers is arguably far more difficult to achieve within the Army's combat arms than within that of a civilian organization. A RAND Corporation study for the US Department of Defense observed that while a lateral entry scheme would assist in providing stability to the officer production process it could also bring serious consequences to the nature of the profession. The conclusions of the study argued that:

“Lateral entry is likely to weaken culture in that it significantly alters the nature of the officer profession. By bringing individuals in from civilian status at other than the beginning of a career, the sense of closed community developing the knowledge and skills of officers through long service changes dramatically. Additionally, lateral entrants may be viewed as outsiders and create resentment if

¹⁶⁸ Treasury Board of Canada, *Management Trainee Program Policy* (Ottawa: Government of Canada), available on-line at www.tbs-sct.gc.ca/pol/hrpubs/TB_856/MTPP1-1E.html. The Public Service offers a 5-year program to accelerate employees/entrants to middle/senior management appointments within the Government of Canada.

¹⁶⁹ General Electric, *GE Careers – EFLP*, available on-line at http://gecareers.com/Campus/eflpp_program_guide.cfm. GE offers a 2½-year program to accelerate a high-potential employees/entrants to senior appointments within the financial management department.

¹⁷⁰ Office of the Auditor General of Canada, *April 2002 Report...*, para 5.86. See also, DND, *Development of the Human Capability*, ... p 3.

their arrival is perceived by those already in the organization as limiting promotion opportunity or denying them access to coveted positions.”¹⁷¹

Thus, the development of an accelerated officer production process could undermine the socialization of the officer corps. Despite such risks, the Army may have no choice but to consider such an option. As the current operational environment evolves, there is potential that tomorrow’s Army may need to grow to cope with new foreign and domestic security demands.¹⁷² Should this be the case, and measures to stem increased rates of attrition fail, a lateral entry scheme may become necessary. Clearly this would represent a significant challenge to provide such entrants the adequate training and experience to perform at a level similar to those who have been successively developed over the time-intensive production process. However, it would be prudent for the CF and the Army to follow-up upon the recommendation to explore the possibility of developing such a scheme. Again, as is the case with other HR management issues, a proactive, not reactive, approach is vital to ensuring the Army is ready to cope with the arrival of forces of change.

Recommendation 7: Explore the possible development of a lateral entry program to complement the officer production process.

¹⁷¹ RAND Corporation, *Future Career Management Systems...*, 168.

¹⁷² Lieutenant-General Jeffery, Chief of the Land Staff, *Presentation to Canadian Forces Command and Staff Course 29*, 10 April 2003 (quoted with permission).

Critical Work Ahead

Much work needs to be done over the next few years if the continuous series of officer production problems are to be avoided. It is apparent that the challenges brought on by the internal and external forces of change are becoming increasingly complex. There is a real need for improved HR management expertise within the CF and the Army. In conjunction with clearly defined operational requirements for the officer corps, HR managers must be able to accurately forecast the impact of the oncoming forces and develop improved means to mitigate their impact. Failure to improve understanding and adapt the CF's means to manage officer production will leave the Army in a continued reactionary mode, allowing the HR environment, not operational requirements, to determine the nature of officer production.

The seven recommendations contained within this final segment offer a starting point from which the forces of change that are impacting the officer production process can be effectively managed. The failure to do so will risk the operational readiness of the Army to fight and win in war.

Conclusion

“The requirement is to shape the future not merely react to it.”¹⁷³

This research paper has explored how the HR forces of change impact the production of Army combat arms officers. In so doing, it has demonstrated that the CF must adapt how it manages officer production. The changes in HR management must begin with establishing a common vision of the officer corps that is both developed and sustained in a manner that focuses upon achieving the Army’s ultimate purpose – to fight and win in war. To date, this lack of vision has led to flawed HR decisions resulting from confused priorities between retaining officers in order to amortize a developmental investment and the requirement to field a vibrant fighting force.

The lack of a clear vision for officer production has compromised the process when internal and external HR forces of change are applied. Internal forces, applied by the CF/DND to implement direction to reduce or increase the strength of the officer corps, have been badly managed. With a remarkable lack of long-term vision, management decisions have focussed solely upon the immediate requirement and have neglected future implications. Thus, the manner in which force reduction and growth has been conducted produced dramatic personnel peaks and valleys within the production process. Senior managers failed to recognize that such irregularities would greatly disrupt long-term succession, causing segments of the officer population to stagnate while others accelerated beyond the capacity of the development system. Ultimately, the production cycles that were allowed to develop created the manning crisis that faces the CF today. Improved officer production management must begin with the ability to apply such forces with a long-term focus.

While the results of how internal forces are applied may be predictable, it is the external forces of change, originating from Canadian society, that represent the most pressing challenge to better understand. Emerging trends in society that will greatly challenge its ability to attract and retain officers should concern the CF. The general decline in the willingness to remain

¹⁷³ DND, *Canadian Officership in the 21st Century...*, Executive Summary, p i.

committed to military service, reflected in today's younger generations, combined with increased competition for talented workers, presents a major HR management challenge. Moreover, the current pace of technological advancement, requiring a greater investment in training and education, will only serve to make officers more marketable, increasing the temptation to leave the military. More than ever before, attracting young men and women from across the entire Canadian demographic, something that it has yet to effectively achieve, will be critical. Without an in-depth understanding of such forces, the CF will not be able to correctly anticipate their impacts and take proactive measures to preserve the health of the officer corps.

Several recommendations for how the CF might best adapt officer production in order to cope with the HR forces of change can be drawn from this research paper. Firstly, an improved level of understanding must begin with increasing the level of expertise amongst HR managers themselves. A knowledgeable cadre of personnel experts is required to guide CF leadership in the management of officer production, ensuring that policy development and key decisions are made with the best possible understanding of their outcomes. From the leaders themselves, it is imperative that they provide a clear vision and overarching framework for the desired profile that a truly healthy officer corps is to represent. Finally, with such measures in place, improved means to overcome the HR forces of change can be developed. Such improvements must clearly serve to foster the commitment to serve from among all segments of Canadian society while also improving mechanisms to both increase and reduce the establishment in a manner that does not compromise the production process itself.

The production of officers for Canada's Army is a matter of great importance to the nation. The degree to which the CF is able to develop and sustain the officer corps will be largely dependant upon its ability to understand and manage the forces of change in an increasingly uncertain HR environment. To overcome such challenges, military leaders need to act proactively, driving change in order that the production process be adapted so that the vital business of producing officers will not be compromised.

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