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CANADIAN FORCES COLLEGE

CSC 32

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**CF Transformation: Evolution, Revolution or Innovation?**

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24 April 2006

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## Abstract

The year 2000 has come and gone and despite the anticipated “Y2K bugs,” the world’s computers did not shut down and life in the 21<sup>st</sup> century began much as it was at the close of the 20<sup>th</sup> century. The “Revolution in Military Affairs” (RMA) continued as the post-Cold War military forces and their governments deliberated over the appropriate force composition, force capabilities, manning and funding necessary in the absence of the old threat. Democratic governments felt that with the spectre of all-out nuclear and high-intensity conflict gone they could redirect many of the monies spent on defence into social programs more attractive to voters. This misguided perception changed somewhat as the impact of the events of 11 September 2001 put a new spin on the scope of conflict in the 21<sup>st</sup> century. The two international interventions dealing with Iraq, the various conflicts in the Balkans and the instability of the Korean peninsula underline the need to retain conventional forces. It is the “War on Terror” and the asymmetric nature of its resulting areas of operations that has brought about another debate on the employment of armed forces as nations grapple with the emerging threat and the complex nature of counter-insurgency operations. In addition, advances in technology have been driving a separate RMA with varying impacts on how armed forces must adjust and incorporate new or improved capabilities. Faced with an additional threat and new equipment, military forces around the world have had to re-examine their fundamental processes and re-orient themselves. The new buzzword has been “transformation.” With this in mind, this paper will examine the current Canadian Forces Transformation (CFT) to determine whether the changes constitute an evolution (continuation of previous tendencies with minor adaptations), a revolution (radical changes, possibly in opposition to evolution) or an innovation (new way of doing business with significant change without discarding the old). CFT will be looked at in the context of the following: the RMA; how the US, the UK and NATO are transforming; results from previous changes in Defence Policy and their effects on the CF; the challenges associated with organizational change and finally the mechanics of General Hillier’s vision of CFT. This paper argues that General Hillier’s vision of CFT and its implementation of IPS 2005 is indeed an innovation without precedent.

## Introduction

The 21<sup>st</sup> century and the new millennium began in uncertainty with fears about the potential impact of the “Y2K bug” and, on the fringes of society, visions of apocalyptic prophecies coming true. While the Earth still rotates and orbits around the Sun and the few computer glitches did not plunge mankind into chaos, there is still much uncertainty as the Information Age emerges as the next evolutionary step for humanity.

The world is in the midst of technological and societal change. The fact that armed conflicts still occur despite the decline of the Warsaw Pact and the expansion and transformation of NATO seems to be the single constant. The development in 1982 of the Personal Computer (PC) and its setting the conditions for both the World Wide Web (WWW) internet explosion in 1995 and the remote offices of the new millennium signalled the dawn of the Information Age. The end of the Cold War in 1989 and the spectre of unsecured nuclear Weapons of Mass Destruction (WMD) has changed the balance of power and made a WMD disaster a real possibility where before strong governmental controls were in place. The human atrocities of the 90s, particularly in developing nations, but not forgetting the Balkans led to the emergence on the international scene of the concept of the “Responsibility to Protect” which has the potential to challenge longstanding traditions of non-intervention in other country’s internal/domestic affairs. The events of 11 September 2001 and the resultant “War on Terror” with the international response for Afghanistan and the rise of suicide bombing as a tactical procedure embraced by extremist insurgencies demonstrates a shift away from the conventional battlefield and is forcing a review of the Laws of Armed Conflict (LOAC). The differences between the two coalitions (the first in 1991 and the more recent in 2003) dealing with Iraq show that even traditional

allies can have divergent opinions that may be difficult to reconcile. These are all indicators of significant change to which military forces and their governments around the world must adapt in order to remain relevant. The military forces must remain effective against the known “conventional” threats but also devise new ways to be effective in the new asymmetric environment.

The process defining the scope of change, adaptation or transformation can be loosely defined as a “Revolution in Military Affairs” (RMA). Such a revolution encompasses not only the military organizations but can and should include the legislative means by which such forces are committed into the spectrum of conflict by their respective civil authorities. The extent to which significant change is implemented can generally be described as an evolution<sup>1</sup> (incremental in nature, absorbing new technologies and ideas into current doctrine) or a revolution<sup>2</sup> (radical changes, sometimes in opposition to previous tenets or procedures). This paper will propose “innovation” as a further descriptor of change that falls outside the just-mentioned “box” of the evolution/revolution debate, while retaining elements of both. For the purposes of this paper, innovation is “change without precedent.”

In April 2005 Prime Minister (PM) Paul Martin unveiled *A Role of Pride and Influence in the World*, Canada’s “International Policy Statement” (IPS 2005), which, for the first time in Canadian history, directly connected the foreign affairs (diplomacy) and defence strategies together with those of development and commerce (trade). This inter-agency cooperation has given prominence to the term “3D +T” approach.” On 1 February 2006 the organizational structure of the Canadian Forces (CF) changed significantly with the

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<sup>1</sup> Microsoft Encarta Dictionary: evolution - the gradual development of something into a more complex or better form.

<sup>2</sup> Microsoft Encarta Dictionary: revolution - a dramatic change in ideas or practice.

dismantling of the Deputy Chief of Defence Staff (DCDS) Group<sup>3</sup> and the coming online of three new Commands in its place: Canada Command (Canada COM), Canadian Expeditionary Forces Command (CEFCOM) and Canadian Special Operations Forces Command (CANSOFCOM). Other changes are in the process of being implemented as General R.J. Hillier's vision of CF Transformation (CFT) becomes realized.

This paper will argue that General Hillier's vision for CFT is an innovation without precedent in the domain of the implementation of Canadian Defence Policy by the CF.

In order to demonstrate the innovative nature of CFT this paper will examine five topics. The first chapter discusses the RMA and attempts to determine why transformation is necessary. The second chapter deals with transformation in the United States (US), the United Kingdom (UK) and in the North Atlantic Treaty Organization (NATO). The third chapter provides a comparison of two transformations, looking back to "Unification" as a basis for comparison to what is different with General Hillier's CFT. The fourth chapter discusses the organizational challenges that could impede transformation and thereby explores what makes the current CFT unique. The fifth chapter is devoted to the mechanics of General Hillier's vision and how CFT should unfold. Finally, this paper will end with a summary of the main arguments and conclude that General Hillier's vision of CFT and its implementation of IPS 2005 is indeed an innovation without precedent, not an evolution nor a revolution.

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<sup>3</sup> The Chief of the Defence Staff is at the top of the chain of command for the Canadian Forces military personnel. To assist him in his duties he was seconded by the Vice Chief and the Deputy Chief of Defence Staff. The VCDS oversees the administrative matters of the CF, dealing with human and materiel resources. The DCDS was in charge of Operations, both domestic and abroad, however CFT has brought about a new command structure that will be discussed later in this paper that has made the position of the DCDS for those specific duties obsolete.

## Chapter 1 – The Revolutions in Military Affairs

### ***What is a(n) RMA?***

There are a variety of definitions as to what exactly constitutes a(n) RMA. Most of the definitions differ in the degree to which changes affecting military forces and/or their employment is significant and whether it is or is not accompanied by a change in society, either as a precursor or as an outcome.<sup>4</sup> For the purposes of this chapter, Williamson Murray's distinction with regard to the larger notion of RMA being more than merely military will serve to address the change in threat and the asymmetric environment: "RMA involve putting together the complex pieces of tactical, societal, political, organizational or even technological changes into a new conceptual approach to war."<sup>5</sup> Andrew Krepinevich's framework for military revolution will be used to discuss the technological aspect of the current military revolution: "Military revolutions comprise four elements: technological change, systems development, operational innovation, and organizational adaptation."<sup>6</sup> These last two elements can be viewed respectively as changes to Tactics, Techniques and Procedures (TTPs) and to doctrine. These concepts respectively set the parameters for the discussions on the asymmetric environment and the impact of new technologies.

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<sup>4</sup> Elinor Sloan, *The Revolution in military affairs: Implications for NATO and Canada*. Montreal: McGill-Queen's University Press, 2002. 18-25.

<sup>5</sup> Williamson Murray, "Thinking about Revolutions in military affairs." *Joint Forces Quarterly* 16 (Summer 1997). 73.

<sup>6</sup> Andrew Krepinevich, "Cavalry to Computer: The Pattern of Military Revolutions." *The National Interest*. (Fall 1994). 30.

## ***RMA induced by changes in threats: The asymmetric environment***

Much has been said and written about the “asymmetric threats” of the 21<sup>st</sup> century and how technology is providing potential enemies new means of defeating conventional militaries. Indeed, a large portion of this paper’s bibliography deals with different aspects of the new threats, and is by no means an exhaustive listing of available literature. This section of the paper adds to the threat dimension the changes that have an effect on the battlespace of today, which is much different than the conventional threat of the recent past. Not only do we see full spectrum operations occurring in near simultaneous time periods, they can be occurring in geographically contiguous areas or in close proximity. This is General Krulak’s “Three block war” which will be discussed in more detail later in this chapter.

In this asymmetric environment, the re-emergence of insurgency warfare as a means to defeat technologically superior forces is driving the development of modernized Counter-insurgency operations (COIN) doctrine. The potential misappropriation of WMD technologies (Chemical, Biological, Radiological and Nuclear (CBRN)) by terrorists adds another degree of complexity to national security policies. General Hillier, as Chief of the Land Staff, developed his own ideas about the evolution of the threat into a presentation on the “Snakes vs. the Bear” which he gave to countless groups of members of the CF. As CDS he has continued to share this threat analysis with other departments of the Government of Canada and to the Press as part of the CFT Vision.<sup>7</sup> This focus on the threat and the requirement to adapt the CF to the new reality is counterbalanced by the emerging notion of Capability-Based Planning (CBP).

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<sup>7</sup> R.J. Hillier, *CF Transformation: From Vision to Mission*. May 2005.

## The three block war

General Krulak made it easy for the American public to understand the shifting nature of conflict and the challenges his Marines would face in the new urban environment during his speech to the National Press Conference on 10 October 1997:

In one moment in time, our service members will be feeding and clothing displaced refugees, providing humanitarian assistance. In the next moment, they will be holding two warring tribes apart - conducting peacekeeping operations - and, finally, they will be fighting a highly lethal mid-intensity battle - all on the same day... all within three city blocks.<sup>8</sup>

Canadian soldiers have been operating in this type of environment since the early 90s during the deployments to the Former Republic of Yugoslavia (FRY), Somalia and Haiti. There is nothing really new in this concept for the CF, except that this description of the asymmetric environment makes it easy to create a rapport with the general population and to do a better job of explaining the complex nature of our current deployment in Afghanistan. This multi-role environment within the same tactical area of operations increases the requirement for intellectual acumen at the pointy edge because transitions from one type of activity to another are unpredictable and involve a constant threat assessment and Rules of Engagement (ROE) analysis specific to the changing situation. In the “conventional environment” soldiers can easily discern combatants from non-combatants, there is an identifiable military objective and an incremental approach to the use of force and can generally understand when to shoot or not. In the asymmetric environment a calm situation can suddenly turn hostile, improvised explosive devices (IEDs) can be placed anywhere and combatants are indistinguishable from the civilian population. So a person calling for assistance may actually require assistance, or may be a suicide bomber or bait for an ambush. The determination of the on-scene

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<sup>8</sup> Charles C. Krulak, USMC, “The three block war: Fighting in urban areas” speech to NPC on 10 October 1997

commander on an appropriate response will depend on his assessment of the situation. The complexities of the situation require more astute analysis. The individual making the assessment, at the tactical level with strategic implications, must be smart enough to understand his complex environment and the repercussions of his actions. As previously hinted at, the “strategic corporal” illustrates the changing nature of the battlespace and makes it obvious that front-line troops must have a better understanding not only of the “big picture” but also their place in it. This brings new challenges to the chain of command that will require changes to current TTPs and doctrine of a “conventional” nature in order to provide the proper context for those at the “coal face” to react to the unstable environment around them. The chain of command must articulate in sufficient detail the why of its directions to subordinates, no longer merely the what and how subordinates needed to accomplish. Understanding the why and any limitations associated with achieving the mission require more depth of thought and creative thinking.

There should be no doubt that soldiers in such a complex environment must be more mentally alert than in a conventional role, but also more mentally agile, in order to make the appropriate decisions at the appropriate times to act in an appropriate manner. Whether sitting down with elders and sipping a cup of tea or dealing with axe-bearing intruders, whether handing out candies by the side of a road or dealing with suicide bombers, whether patrolling on foot or by vehicle to show a presence or dealing with IEDs or ambushes, whether stalking insurgents through caves and over mountains or assisting villagers in distress, the common thread is both the absence of a “conventional” uniformed enemy in plain sight using readily recognizable tactics and the requirement to now go from “hot”

(armed and dangerous) to “warm” (cautiously friendly) because going to “cold” (not tactically focussed) is no longer an option.

## **Counter-insurgency operations**

Historical examples abound of insurgencies and the attempts to quell them. From as far back in time as Ancient Egypt to the current situations in Iraq and Afghanistan, the threat to national security posed by insurgents has required drastic changes to their respective societies and solutions unique to each case. The intent here is not to present the doctrine of COIN ops but rather to expose some of this doctrine’s basic timeless concepts and relate them to how dealing with insurgents requires a non-conventional non-Cold War approach.

When Thutmose III set out to restore Egypt’s sovereignty over its own territory that had been invaded by the Hyksos, he eventually realized that in order to shield Egypt from internal dissension and turmoil, he would have to deal with potential agitators outside the traditional borders. By conducting a determined and well-calculated campaign that began with a revolution in Egyptian military weaponry and TTPs, followed by the securing of his internal lines of communication and power base, he was then able to expand Egypt’s reach beyond its borders.<sup>9</sup> With his victory at Meggido in 1457 BCE he effectively quelled any regional or individual predilection for ignoring Egypt’s new influence in the area and thereby set the conditions for a period of peace and tranquility that would last for nearly 400 years.

In a similar manner, Scipio Africanus was able to lead the Roman State from the brink of defeat at the hands of the Carthaginians and Hannibal in 210 BCE to consolidating the beginnings of the Roman Empire he helped shape and that spread from the Iberian Peninsula to the Balkans and the Black Sea with his last battle at Magnesia in 190 BCE.

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<sup>9</sup> Richard Gabriel, *The Battle of Meggido*. Carlisle PA: U.S. Army War College, 1992. 25.

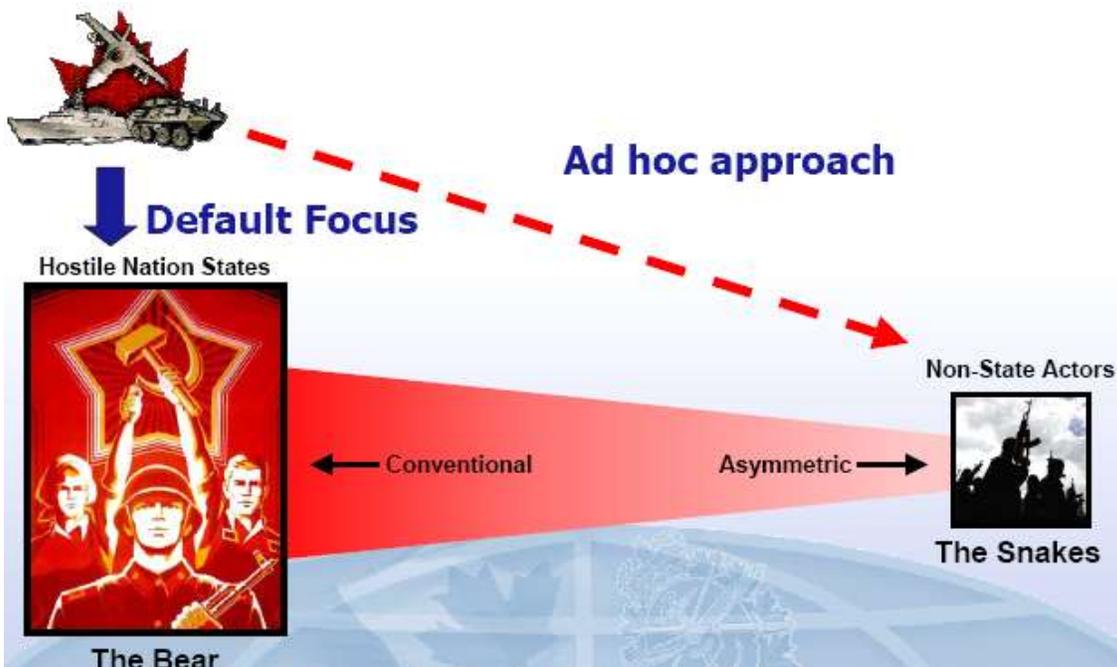
Julius Caesar would later finish the job, dealing in his own time with the Gauls and other Celtic “insurgents.” What sets Scipio Africanus apart from other great military leaders was his understanding of the benefits that came from dealing with allies instead of imposing annexation. His efforts in the Iberian Peninsula were successful because he was able to demonstrate to the local clans that doing business with him and then with Rome would be mutually beneficial whereas their continued support to Carthage and the heavy taxes and devastation its armies exacted from and upon them would only lead to the continued suffering of their people and the ruin of their society. He helped local leaders establish themselves securely in their regions and left them and their societies to themselves without imposing Roman Law, only “expecting” non-aggression and commerce (with some form of tax for Roman coffers). This had a ripple effect across the continent as not only was he strengthening Rome’s access to raw materials, he was also denying the same to Carthage, and so those tribes on the Italian Peninsula that might have been receptive to Hannibal suddenly were less inclined to oppose Rome. He also realized that fighting Hannibal in Italy would not solve the greater problem of Roman stability on the Italian Peninsula. In a sense Scipio Africanus displayed a grasp of EBO without the simultaneity of modern means and his understanding of  $n^{\text{th}}$  order effects led him to believe that Rome would be best served by having a buffer of compliant allies who would not feel the need to resist the yoke of Roman tyranny since their national identity would remain autonomous. The annexation methodology his successors subscribed to eventually set in motion the decline of the Roman Empire six centuries later.

While not textbook examples of COIN operations, these two cases from antiquity show that the concepts of COIN are not new and that it is important to win the battle of

“hearts and minds” and attack enemy cohesion more so than to destroy their offensive capability. They also demonstrate that it can be strategically logical to engage the enemy elsewhere than only on one’s own territory. Shades of the “War on Terror.” The IPS 2005 and Canada’s R2P initiative clearly demonstrate that the Government of Canada (GoC) is committed to addressing potential threats to national security abroad, yet at the same time with a view to providing a helping hand instead of using an attrition-based solution. The CF will necessarily be part of the solution in those areas where peace and security are not fully established. CFT will set the conditions for the CF to have a more noticeable impact on the international stage by concentrating its effects from more focussed joint operations where all the elements are contributing to a national effort.

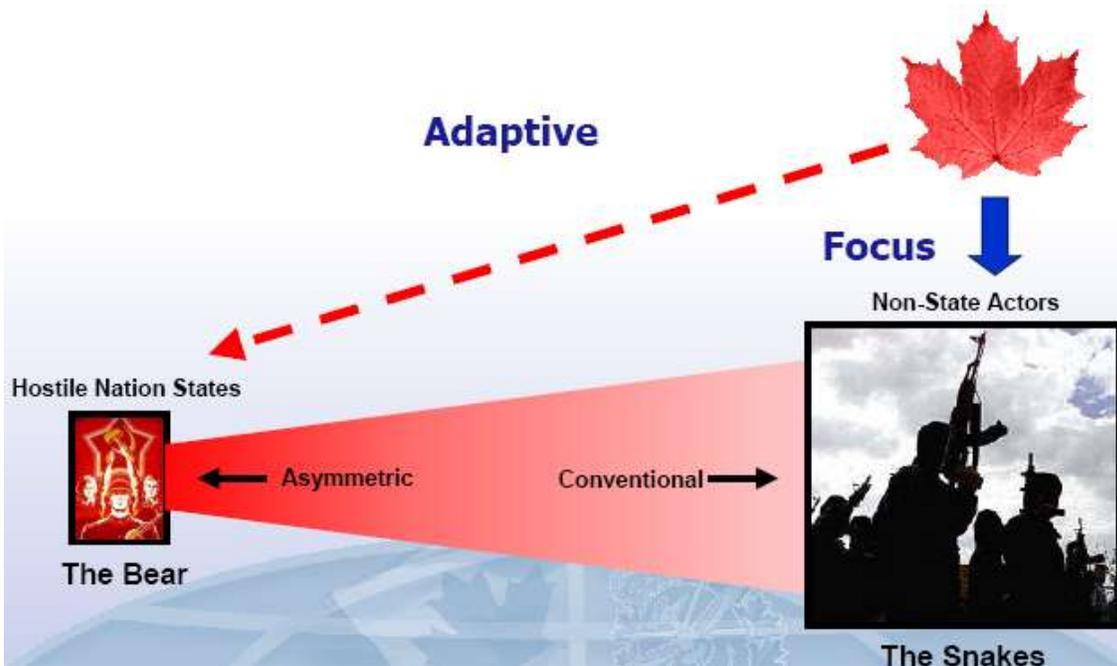
### **The Threat is Snakes not Bears**

While Commander of the Army and Chief of the Land Staff (CLS), General Hillier began the transformation of the Canadian Army. Since becoming CDS this transformation of the Army has been expanded to include the whole of the CF. One of his first illustrations for why the Army needed to change was his drawing on whatever material at hand before his audience (flip chart, blackboard or whiteboard) of three snakes and one bear. These caricatures have evolved into the following two figures (Figures 1 and 2):



**Figure 1: CDS Bear - The old reality**

Source: Hillier, RJ. *CF Transformation: From Vision to Mission*. May 2005. 3.



**Figure 2: CDS Snakes - The new reality**

Source: Hillier, RJ. *CF Transformation: From Vision to Mission*. May 2005. 5.

Invariably the next depiction would be of the change necessary to go from a big bodied force to a thinking one (big head, smaller body). His basic arguments being that the

“Snakes,” who are not always visible, whereby it is hard to tell which ones are poisonous or not, are the new reality and that the “Bear,” representing the Cold War’s Warsaw Pact threat should no longer be the focus – that in effect a paradigm shift has occurred and that which was peripheral is now mainstream and the previous focus is now marginalized. In order to deal with the “Snakes” the Army must adapt and become more cognizant of the scope of the new threat as well as understand that traditional structures have to be re-evaluated and core competencies re-examined in order to develop effective methods to counter the emerging threat and prepare the Army for the next battlefield – that of the asymmetric environment. Much of what he began with the Army has matured into the vision that will be discussed in the last chapter.

So who are the “Snakes” and what makes up the asymmetric threat? The answer to this question, for Canada and the CF, can be found in the International Policy Statement of 2005 (IPS 2005) and in its Defence Policy Statement (DPS 2005). It relates that “Failed and failing states, Terrorism, WMD and Regional hotspots” make up the “International Security Environment of the 21<sup>st</sup> Century.”<sup>10</sup> These are the factors influencing today’s potential battlespace into which Canada will deploy its troops. These factors contribute to an environment that is significantly different from the conventional Cold War battlefield and one in which the CF must find ways to remain effective. CFT is aimed at finishing the transition from the linear and contiguous Cold War battlefield to the asymmetric environment that is characteristic of COIN operations. This threat-based RMA is of itself sufficient to warrant some form of mutation by military forces. Technology is also having an influence on military progress.

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<sup>10</sup> Canada. Department of National Defence. *Canada’s International Policy Statement: Defence*. Ottawa: DND Canada, 2005. 5-6.

## ***RMA driven by technology***

It is not the intent of this paper to enumerate the plethora of technological advances that have been driving this type of RMA, but rather to examine some of the evolving concepts that are generating doctrinal change in order to cope with new systems and their TTPs. Network-centric warfare (NCW) has had a profound impact on naval and air operations, with cross-platform sharing of data changing the battlespace environment. This enhanced interaction between sensors and shooters has enabled Effects-based operations (EBO) to challenge the focus on attrition in Objectives-based planning. This in turn has contributed to setting the conditions for change.

## **NCW and EBO**

John Luddy proposes that:

The goal of network-centric operations (NCO) is to enable forces to accomplish their objectives more efficiently: faster; with fewer troops in harm's way; and with fewer and lighter weapons and other equipment to bring to, sustain, and maneuver in the battlespace. With timely and accurate intelligence, commanders can decide faster, deploy a force of the optimal size and characteristics, command and control that force better, and stay one step ahead of enemy forces. Network-centric operations can improve all of these functions.<sup>11</sup>

NCO would appear to be a “Holy Grail” for governments the world over with respect to modernizing and downsizing their military forces. What is too often overlooked are the important implications of the last sentence, namely that NCO can only improve these functions – not become a substitute for “boots on the ground” or other direct action. While there are significant advantages to having a robust network that connects sensors to shooters, across platforms and branches of the military, giving new scope to the term “joint

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<sup>11</sup> John Luddy, *The Challenge and Promise of Network-Centric Warfare*. February 2005. Internet. Available at [www.lexingtoninstitute.org](http://www.lexingtoninstitute.org). Accessed on 26 September 2005.

operations,” what has only recently been acknowledged is the complexity of the information processing requirement by humans in order to provide positive control on the inter-connected machines. As a result of this complexity, and while the notion of a “Strategic Corporal”<sup>12</sup> is a reality, the data being collected by the network from all the corporals and the chain of command above them has overwhelmed that same chain of command and made it necessary to filter the data into information, and then further analyze provide a useful product that can contribute to a decision or influence a plan. The focus of NCW has begun to shift from the technology back to the individual, from the communications and computers back to the command and control aspects of C4.<sup>13</sup> The importance of the human interface with the “network” will be developed in more detail in the next chapter.

EBO also advocates making best use of sensor and communications technologies to accelerate the “‘kill chain’ of detect-decide-attack-assess”<sup>14</sup> which is similar in nature to Colonel John Boyd’s well publicized “OODA Loop” of “observe-orient-decide-act.” In this category, the U.S. Air Force once believed that it would emerge from the RMA as the superior combat force due to its ability through EBO to inflict surgically precise destruction and to attack the enemy’s will to fight, while avoiding friendly casualties with precision munitions.<sup>15</sup> More recent analysis shown in the *Joint Vision 2020* demonstrates a maturing of this notion into one of more sober reflection that: “Achieving full spectrum dominance

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<sup>12</sup> Charles C. Krulak, “The Strategic Corporal: Leadership in the Three Block War.” *Marines Magazine* (January 1999)

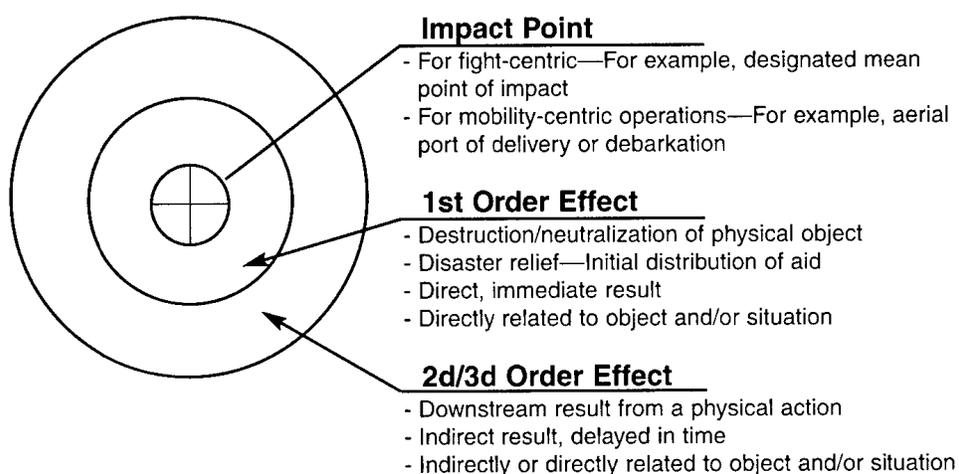
<sup>13</sup> C4: Command, Control, Communications, Computers.

<sup>14</sup> John Luddy, *The Challenge and Promise of Network-Centric Warfare...*

<sup>15</sup> Elinor Sloan, *The RMA*, 13.

does not mean that we will win without cost or difficulty... We should not expect war in the future to be either easy or bloodless.”<sup>16</sup>

Part and parcel of EBO is Effects-Based planning (EBP), the process by which the desired “effects” are defined, the means (kinetic or non-kinetic) to achieve them determined and the assets available to execute the plan are identified. Even though the complexity of EBO and the difficulties associated with measuring the indirect and  $n^{\text{th}}$  order effects has put a damper on its integration as a standalone doctrine, EBP remains a valid intellectual procedure at the strategic and operational levels, translated to the tactical with specific tasks by considering not only the immediate effect of a particular action, but also its 2<sup>nd</sup> and 3<sup>rd</sup> order ones as well ( $n^{\text{th}}$  ...) as depicted in Figure 3:



**Figure 3: Example of First/Second/Third order effects**

Source: Edward C. Mann, Gary Endersby and Thomas R. Searle, *Thinking Effects: Effects-based methodology for joint operations*, 32

The purpose of EBP is to avoid an attrition-based approach to conflict, which essentially seeks the reduction of the enemy’s combat power while protecting one’s own. Edward Smith

<sup>16</sup> United States. Department of Defense. Joint Vision 2020, 2000, 6.

captures the essential differences between Attrition-based and Effects-based approaches to operations in Figure 4:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Focus: Means           <ul style="list-style-type: none"> <li>– Attrition-Based               <ul style="list-style-type: none"> <li>• Focus on “Targets”/ “swift decisive” wars</li> <li>• Military Objectives</li> <li>• Quantifiable Results</li> </ul> </li> <li>– Indirect attack on will</li> <li>– War/Combat only</li> <li>– Deterrence:               <ul style="list-style-type: none"> <li>• Retaliation</li> <li>• Pre-emption</li> </ul> </li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Focus: Will/Behavior           <ul style="list-style-type: none"> <li>– Effects-Based               <ul style="list-style-type: none"> <li>• Focus On “Actions” prolonged, low intensity conflict</li> <li>• Political Objectives</li> <li>• Nonlinear Results</li> </ul> </li> <li>– Direct attack on will</li> <li>– Peace, Crisis, War</li> <li>– Deterrence:               <ul style="list-style-type: none"> <li>• Unacceptable Damage</li> </ul> </li> </ul> </li> </ul> |
|--|---|

**Figure 4: Comparing Attrition and Effects-based approaches**

Source: Edward R. Smith, *Effects-Based Operations: Applying Network-Centric Warfare in Peace, Crisis and War*, 43.

The focus on means in an attrition-based approach to defeating the enemy is a tried and proven methodology. It has won past wars and has evolved somewhat over the last decade into Objectives-based planning (OBP) through a Strategies-to-tasks approach.<sup>17</sup> What remains to be seen is if OBP is still appropriate for the 21<sup>st</sup> century.

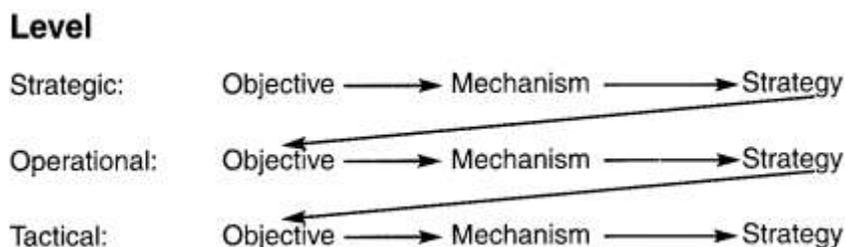
**Objectives-based Planning**

One of the reasons that EBP has not been able to become the dominant process for planning the employment of military forces, from the strategic down to the tactical level, is precisely because of the difficulties in measuring the 2<sup>nd</sup> / 3<sup>rd</sup> order etc. effects it suggests will defeat the will of the enemy. EBP offers no consolation when the anticipated effects do

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<sup>17</sup> Edward C. Mann, Gary Endersby and Thomas R. Searle, “Thinking Effects: Effects-based methodology for joint operations.” CADRE Paper 15, (October 2002). Maxwell Air Force Base, Alabama: Air University Press, 2002, 47.

not have the desired/intended results. While similar in process to EBP, OBP tends to implement lessons from the past into solutions of today. It relies on “examining” past success (experience) to identify the means by which a solution for a current similar situation might be resolved.<sup>18</sup> In determining objectives to be achieved, it also links the objectives from the strategic down to the tactical level, as can be seen in Figure 3:



**Figure 5: Relationship between Objectives and Strategies**

Source: Edward C. Mann, Gary Endersby and Thomas R. Searle. *Thinking Effects: Effects-based methodology for joint operations*, 46

This relationship between objectives and strategies allows a commander’s intent to filter down and shape the subordinate commander’s formulation of his own plan, and in the process reinforces “mission command.” This emphasis on mission command requires each subordinate level of command to have a better intellectual appreciation not only of its own particular tasks, but also those of its immediate superior (and the second level above), so that in achieving its own mission it assists in achieving the higher mission(s) as well.

OBP has been somewhat influenced by EBP, particularly in the intellectual examination of mission analysis and how to successfully complete one’s tasks. However, in the absence of clearly identifiable objectives and with an “enemy” not always able to be distinguished from the non-combatants in a particular area, OBP has limitations that make it of questionable value as a tool when the solutions to military problems are not always kinetic nor destructive in nature. Although the nebulous nature and complexities of divining all the

<sup>18</sup> Edward C. Mann et al, 48.

orders of effects from a particular action make EBP less practical, the aspect of attacking the enemy's will becomes more important in the asymmetric environment where there is generally no identifiable conventional military opponent.

Part of the maturing of the transformation process has involved the recognition that threat-oriented force structures and procurement procedures need to be re-evaluated in terms of what capabilities are necessary to achieve the goals of national security policy.

### **Capability-based planning**

The Technical Cooperation Program (TTCP) is a forum for defence science and technology collaboration between Australia, Canada, New Zealand, the United Kingdom and the United States. Its history dates back to 1957 but it remains at the cutting edge of technology. In 2004 it published a *Guide to Capability-Based Planning*. From this guide it is possible to provide a definition for CBP:

CBP is a systematic approach to force development that aims to advise on the most appropriate force options to meet government priorities. The force options developed should meet strategic objectives, minimize cost and risk and comply with other constraints.<sup>19</sup>

It was developed as an alternative to threat-based planning and represents an attempt to break down traditional stovepipes and provide for more transparency and coherence.<sup>20</sup> The principle attraction of CBP to governments is that it should “enhance the quality of information available to defence decision-makers and defence capability developers.”<sup>21</sup> In theory, this additional information of better quality should focus national capital expenditures on military equipment on the best means to achieve national goals and hopefully prevent

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<sup>19</sup> The Technical Cooperation Program, *TR-JSA-TP3-2-2004: Guide to Capability-Based Planning*. 2.

<sup>20</sup> TTCP. *Guide to Capability-Based Planning*. 1

<sup>21</sup> TTCP. *Guide to Capability-Based Planning*. 6.

internal rivalries between services (Army, Navy, Air Force) who have traditionally been driven to acquire the best piece of equipment on the market without necessarily considering how it may or may not function in the context of a comprehensive approach to national security. More details will be provided in Chapter 5 about joint operations and the requirement for CF elements to work more closely together, not just independently by element.

It should now be clear that the world is going through at least one if not several RMA. New threats have emerged and the battlespace has changed. Any one of these RMA (new threat, new environment, new technologies) in and of themselves would provide an impetus for adaptation. All of them together have galvanized General Hillier and his vision of CFT is a result of intellectual study both from within and outside the CF. The innovation of CFT and the IPS 2005 when being viewed in the context of these RMA is the operational focus being applied to concentrate effort through a joint “package” instead of piecemeal contributions to disparate task forces without a consolidated and therefore more noteworthy presence. Shifting the emphasis of “conventional” away from Cold War concepts to make the “new” COIN environment the “expected” norm has been a key message of General Hillier’s and well integrated into CFT. Canada’s IPS 2005 also makes it clear that Canada is not isolationist and intends to work within alliances. Many of these allies are also transforming.

## Chapter 2 – Transformation abroad

By virtue of its defence industry and the size of its military forces, it should be expected that the United States (US) is leading the way in terms of the RMA and transformation. Its four services (Army, Air Force, Navy and Marine Corps) have different approaches that are being guided in a joint context. The United Kingdom has been participating in the same debates and forging its own vision of national security goals, and the military means to support them when and where appropriate. As these two prominent members of NATO transform, so too must NATO transform. NATO has the added impetus of expansion to incite it to adapt. With its two traditional allies and one of its most significant defence treaty organizations in the midst of transformation, even if Canada did not share the same view of the world as described in the previous chapter, it would be at the very least prudent for Canada to also consider some form of change.

Before addressing these three examples of transformation abroad, defining the term “transformation” is appropriate because as seen when discussing the RMA, differences in opinion on the nature of transformation will have an impact on the scope of the changes taking place that can be attributed to transformation. For the US Department of Defense (DoD) transformation involves:

a process that shapes the changing nature of military competition and cooperation through new combinations of concepts, capabilities, people and organizations that exploit our nation's advantages and protect against our asymmetric vulnerabilities to sustain our strategic position, which helps underpin peace and stability in the world.<sup>22</sup>

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<sup>22</sup> DoD TPG 2003, 3.

NATO leans on this definition but while it accepts it as one to guide military transformation, it prefers to consider, most likely due to the variety of its membership and the more complex nature of the alliance, to look at transformation from a broader perspective:

Transformation is about sustained, purposeful change, often on a large scale, undertaken with the strategic objective of creating or maintaining competitive advantage, or of countering an advantage put in place by an existing or a new competitor.<sup>23</sup>

### ***The United States***

In 1996, the Joint Chiefs of Staff published the document *Joint Vision 2010*. For the first time the different services had a common framework for synchronizing their approaches to the challenges of the 21<sup>st</sup> century. Without actually using the term RMA it provided a template for incorporating new technologies, exploring new directions for doctrinal focus and issues surrounding organizational and structural change. Some extracts from the introduction highlight the sweeping scope of change about to occur:

This vision of future warfighting embodies the improved intelligence and command and control available in the information age and goes on to develop four operational concepts: dominant maneuver (sic), precision engagement, full dimensional protection, and focused logistics. Each of the operational concepts incorporates America's core strengths of high quality people and information-age technological advances, builds on proven competencies, and focuses the development of future joint capabilities. [...] the six critical elements required to transform the operational concepts into joint capabilities [are]: people, leadership, doctrine, education and training, organizational structure, and materiel.<sup>24</sup>

These concepts are updated and the emphasis on "jointness" clearly stated in *Joint Vision 2020* published in 2000: "To build the most effective force for 2020, we must be fully

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<sup>23</sup> NATO Review, 8.

<sup>24</sup> Joint Vision 2010, 1.

joint: intellectually, operationally, organizationally, doctrinally, and technically.”<sup>25</sup> The RMA is specifically noted and leveraged to focus the individual service competencies towards the common goal. An important aspect of this vision should be noted as the first of the six critical elements listed: people. If military forces are to transform successfully, their personnel must be part of the transformation. The individual soldiers will have to adapt to the organizational and technological changes that are intended to better prepare them for the new battlespace.

The publication in 2005 of the *Joint Operational Environment*, a collaborative effort with oversight provided by the US Joint Forces Command, neatly brings together the technology-driven RMA, the threat, the military and governmental policies:

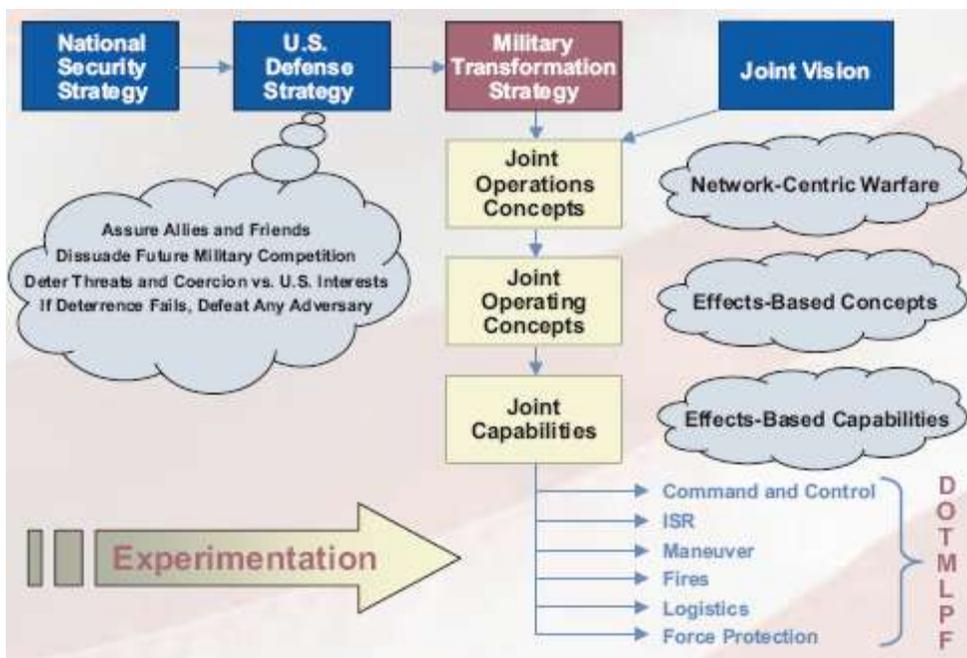
The Joint Operational Environment (JOE) is important for a variety of reasons. It provides a framework to consider when thinking about the future and determining what impact such an operational environment will have on winning in a future conflict. The JOE will have a significant influence on all aspects of doctrine, organization, training, materiel, leadership and education, personnel, and facilities (DOTMLPF) domains. This document is designed to anticipate possible threats, environmental influences, and variables, and to help craft thoughts to shape the future and form the basis for debate and argument. It is essential for innovative and creative thinking.

Here again the emphasis is on a joint approach but also underlining the importance of human activity (creative thinking, debating) in the process of continual transformation.

The Quadrennial Defence Reviews of 1997, 2001 and 2006 all support the continued transformation of the different services and make the links between national security policy and military force development. These links are also illustrated in Figure 6:

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<sup>25</sup> US DOD, *Joint Vision 2020*, 2.



**Figure 6: US Military Transformation**

Source: Military Transformation: A Strategic Approach, Fall 2003, 7.

From this figure one can see the umbrella-like relationships from left to right where National Security Strategy provides the framework for US Defense Strategy to determine the Military Transformation Strategy that is embodied by the Joint Vision. One can also note the importance of NCW and effects-based “concepts.” This is consistent with EBO being looked at from the strategic level and therefore more involved with creating the necessary conditions in which to conduct EBO instead of discussing their details. CBP is also in evidence to address the requirement of acquiring effects-based capabilities. What is noteworthy for CFT is the reinforcement of “jointness.” While technically “unified” since the late 60s, the CF are lacking in experience of joint operations with most of this experience dating back to World

War II. CFT is taking joint operations to the Joint level, adapting the structure of the CF to provide the GoC with the backbone for a “whole of government” approach.<sup>26</sup>

The US DoD supervision of the transformation being conducted by the military services is evident in the Transformation Planning Guidance, which sets out guidelines and an implementation feedback process, including the requirement for updates by each of the services of their own roadmap for transformation.<sup>27</sup> The US Navy has some specific examples that are pertinent to CFT.

### **US Navy (USN).**

The USN has been at the forefront of the RMA with its integration of NCW technologies that have allowed it to synergize the different platforms of its battlespace into a coherent and interoperable network of systems. These technologies have significantly increased the naval commanders’ situational awareness (SA) but the network itself is in part responsible for the initial tendency to try and find communications and computer solutions for the issues of C4. When hardware and software solutions were not forthcoming with the necessary degree of fidelity in judgement, the importance of the human operators was clearly brought out. In 2004 the USN added “Sea Warrior” to its terminology, a fifth capability but first and foremost in importance: its personnel.<sup>28</sup> As will be seen later in Chapter 5, General

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<sup>26</sup> New terminology suggests that lower case joint operations will describe military operations involving more than one service or element whereas upper case Joint operations will describe “whole of government” or “3D+T” operations that involve inter-departmental cooperation.

<sup>27</sup> US DoD, *Transformation Planning Guidance*, Washington, DC: Office of the Secretary of Defense, April 2003. 13.

<sup>28</sup> US DoD, *Vision/Presence/Power 2004: A program guide to the US Navy*, Washington, DC: Office of the Chief of Naval Operations, 2004. 154.

Hillier has identified a change in culture as one of the principles guiding CFT and the focus is on joint operations.

These are all indicators of various concepts and capabilities being adapted to meet the challenges of the 21<sup>st</sup> century as time marches on. Some have been fielded, others are in development. One key aspect of the transformation of the US services is the acknowledgement that as technology advances and influences equipment and doctrine, the people who will use the equipment and put the TTPs to the test in the field must also evolve. The importance of thinking soldiers, airmen, sailors and marines is fully recognized and new strategies for recruitment and training are also being developed. One additional command structure was also created, that of NORTHCOM that deals with the territory of the US as a potential area of operations for US forces on active duty. This is mirrored in Canada by the creation of Canada Command to deal primarily with emergency preparedness planning but also to provide a consistent interface for inter-agency cooperation at the different levels of domestic government, from municipal to provincial and even other federal departments where CF personnel might be called to conduct operations on Canadian soil.

### ***United Kingdom***

The transformation for the British military forces has its roots in the *Strategic Defence Review* of 1998. In 2001 the cross-governmental policy framework that underpinned the previous work was updated in light of the events of 11 September 2001 in *The Future Strategic Context for Defence - 2001*. Based on this new outlook a review of the defence policy, *SDR: The New Chapter* was published in 2002 that consolidated the analysis of the emerging asymmetric environment as interpreted by British analysts. In 2003 a new white paper entitled *Delivering Security in a Changing World* examined the national security

objectives of the United Kingdom in the context of the RMA and raised the issue of CBP. This in turn was followed in 2004 by the second part of the white paper looking at “Future Capabilities.” It is in this last publication that the guidance for transformation of the British military forces can be found.

One of the most important aspects of UK transformation is the realization that it is unlikely for its forces to ever deploy alone like they did in 1982 to deal with the Falkland Islands. There is obviously some regard given by the Ministry of Defence (MoD) and the different British services as to what direction the different US services are taking in their transformation, with a view to remaining inter-operable and complementary. The JOE is of primary concern. Some direction is given from an NCW/EBP perspective while other guidance is given from one based on capabilities. Some of the highlights are that there will be an increase in Special Forces, with new equipment; the Royal Navy will become more expeditionary in a littoral environment; land forces will be structured for small and medium scale operations, and the infantry in particular will undergo changes to the way it is deployed (no more rotations of battalions and their dependents every few years to different bases around the UK and other parts of the world) while retaining the close quarter expertise developed in Northern Ireland; and new aircraft will provide multi-role platforms allowing economies of scale while helicopters will continue to play a key role, particularly in the littoral environment.<sup>29</sup> This is pertinent to CFT and the proposed development of the Standing Contingency Task Force with its amphibious capability yet to be determined, for operations in a littoral environment. More details will be presented in Chapter 5.

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<sup>29</sup> MoD DWP FC 9.

With the UK going in the same general direction as the US, and these two powers being of such historical and economical importance to Canada, the changes occurring in the main alliance that binds all three are worthy of some examination.

## **NATO**

NATO has been a key security institution for its 12 founding members with its principle of collective defence. In 1949 the Soviet Union and the Warsaw Pact nations posed the main threat to NATO. Throughout the Cold War NATO prepared itself for high-intensity conflict in Europe. During this time it accepted four new members with Spain being the last to join in 1982. Since the end of the Cold War NATO has expanded to 26 members, accepting 10 more countries in two rounds of expansion with the latest round of expansion being in 2004. This dramatic increase in membership, coupled with the fact that many of the new members were former Warsaw Pact members, has forced the institution to evolve. The Partnership for Peace (PfP) program and Membership Action Plan provide a structured way for applicants to prepare themselves for membership, ensuring that when they are ready that they will not be a source of instability nor a drain on the organization. NATO has also become more expeditionary in nature, as a reaction to the threat of terrorism and other threats beyond the Euro-Atlantic area.<sup>30</sup>

NATO has also embarked on a CBP model, embodied in the Defence Capabilities Initiative of 1999 with the goal of improving interoperability and critical capabilities. These were re-evaluated in 2002 during the Prague Summit which oriented NATO transformation in three areas: new capabilities; a NATO Response Force; and a streamlined command

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<sup>30</sup> North Atlantic Treaty Organization. *NATO Transformed*. Brussels: NATO, 2004. 3.

structure.<sup>31</sup> Finally, the Euro-Atlantic Partnership Council fosters a broader participation in resolving global security issues by providing a forum for 46 countries around Europe and North America, because they are not members of NATO or the European Union (EU), would otherwise not be included in such discussions.<sup>32</sup> A final indicator of transformation is the establishment of the Euro-Atlantic Disaster Response Coordination Centre which facilitates the sharing of information and provides the mechanism for a cooperative response, which should now be more effective and more rapidly coordinated.<sup>33</sup> This is an improvement over the previously independent national responses which were not based on a common picture derived from shared information.

In 2005, *NATO Review* published a special edition dealing specifically with NATO Transformation. In it one finds the obvious focus on military transformation but also discussion about the political processes to deal with international security concerns. It concludes that while consensus is possible in order to achieve military interoperability through the integration of new technologies, and institutional synergy enabled through its re-organization of the military command structure and the continued development of the NRF, the next arena for transformation is in the political domain where strategic and political consultation on security matters must continue to flow, particularly before conflicts deteriorate to the point of armed intervention.<sup>34</sup> In short, while transformation of the members' military forces into interoperable formations is progressing well, even in a

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<sup>31</sup> NATO, *NATO Transformed*. 9

<sup>32</sup> Allen G. Sens, "Living In A Renovated NATO," *Canadian Military Journal*, Vol. 1, No. 4 (Winter 2000) 79-86. 84.

<sup>33</sup> NATO, *NATO Transformed*. 35.

<sup>34</sup> North Atlantic Treaty Organization. "Examining NATO's Transformation." *NATO Review*. Special Issue (Spring 2005). Brussels: NATO, 2005. 25.

multinational consensus-driven alliance, there is still a lot of work to be done in order to transform the political aspects of the use of force.<sup>35</sup>

Transformation means different things to different nations, however from a military point of view the focus on joint and Joint operations is a common theme, as well as the importance of the human operator. The “whole of government approach” is being explored by the US but the fact that Operation Iraqi Freedom (OIF) is taking longer than expected is a sign that the level of interagency cooperation necessary to achieve this type of cooperation is not quite there yet. The UK is pushing ahead with the concept and using its deployments in both Iraq and Afghanistan to develop a process that works. Canada is a leader in the International Security Assistance Force (ISAF) for the 3D+T approach, making sure that the inter-departmental cooperation mechanisms are in place, even when the CF troops operate under the Operation Enduring Freedom (OEF) mandate. Personal experience also relates that in 2004 in Haiti the CF contingent was quite adept at initiating and completing projects with inter-departmental cooperation.

This chapter has provided a sense of what transformation means and how it is being realized by Canada’s two most important historical allies. The study of the process of transformation by one of Canada’s most notable alliances discovered not only the technological and doctrinal changes occurring in the military sense, but also the civic nature of good government and international politics. The next chapter will take a closer look at how national policy sets the conditions for military modifications.

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<sup>35</sup> Sabrina Schulz, “Transforming NATO Transformation - a Challenge of Leadership in Transatlantic Relations,” *AICGS Advisor* (16 December 2005). Internet. Available at <http://www.aicgs.org/analysis/c/schulz121605.aspx> . Accessed on 22 April 2006.

## Chapter 3 – A tale of two transformations

It is beyond the scope of this paper to examine all the White Papers on Defence since the end of the Second World War and policy itself is not the issue, but rather how the CF are structured and able to implement policy. Douglas Bland provides an insight into the peculiarities of the policy documents written in 1947, 1964, 1971, 1987 and 1994 and from this it is possible to form an opinion that the common threads have been territorial defence, alliance commitments and international intervention within the constraints of perennial governmental reluctance to spend more on defence than absolutely necessary (except in 1987 and 2005).

While some might argue that a “whole of government approach” to Canadian Defence Policy is not a new concept, particularly in light of the Glassco Commission of the early 60s which reviewed each department in detail (from a financial point of view), and the travelling committee prior to the 1994 White Paper on Defence which examined a wide range of policy issues in public fora, IPS 2005 is in fact the first inter-departmental policy document of its kind that includes the comprehensive approach as directed by PM Martin.

There are two Defence Policy statements that provide the background for the argument that General Hillier’s Vision of CFT is not comparable to any previous changes in how the armed forces of Canada conduct military operations. The first deals with “Unification” under Paul Hellyer and the Liberal government of Prime Minister (PM) Lester B. Pearson, and the second with IPS 2005, lead by PM Paul Martin.

## ***1964 White Paper on Defence and Unification***

After the Cuban Missile Crisis of 1962 it was obvious to Parliament that the individual services were more responsive to their sister services in NATO than to the Government of Canada (GoC) and that the “defence establishment was barely under the control of the government.”<sup>36</sup> This contributed to the downfall of the Conservative government of Diefenbaker which led to the elections that resulted in Paul Hellyer being appointed Minister of Defence (MND) in 1963. Hellyer himself began writing in longhand the first draft of what would become the 1964 White Paper on Defence.<sup>37</sup> Even before becoming MND, Hellyer had personal experience of the bureaucracy of the military, from his time in the Royal Canadian Air Force (RCAF) and the Canadian Army at the end of the Second World War, as well as first-hand experience with DND from his previous time as a Member of Parliament (MP) (working for the MND as part of PM Laurier’s government as well as Opposition Defence Critic during PM Diefenbaker’s PC government) that provided him with insight about the challenges facing the Canadian military. The work being done on the “Glassco” Commission, which tabled the report of the Royal Commission on Government Organization at the end of 1962 and early 1963, provided him with clear insight into the organizational problems of the military.<sup>38</sup> Although he did not agree with the published recommendations, he understood the political nature of their construction. The divergence between what the factual observations of the “Glassco” Commission led him to conclude and the politically engineered recommendations that were submitted, provided him

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<sup>36</sup> Douglas L. Bland (Ed.) *Canada’s National Defence: Volume 1, Defence Policy*. Kingston: Queen’s University, 1997, 57.

<sup>37</sup> Paul Hellyer, *Damn the torpedoes: my fight to unify Canada’s armed forces*. Toronto: McClelland and Stewart, 1990. 34

<sup>38</sup> Hellyer, *Damn the torpedoes...* 37.

with the impetus to unify the forces. He also espoused the views of such war heroes as “Lord Louis Mountbatten, Field Marshal “Monty” Montgomery, and General Dwight Eisenhower, [who] ended the war as ‘unificationists’” of one kind or another.”<sup>39</sup>

MND Hellyer’s own strong feelings about the benefits of a single service would see economies of scale through a common materiel management system, a better structured human resource management model, the avoidance of friendly fire tragedies by better communications and a unified chain of command. The latter would also create a focus for strategic debate on force employment, an issue being discussed at NATO where the “folly” of Mutually Assured Destruction (MAD) was giving way to the realization that Cold War conflict would likely begin with “conventional” means before going nuclear.<sup>40</sup> Add to this mix of personal conviction and international pressure the internal competition of the three services, who did not recognize the Chairman of the Chiefs of Staff (CCOS) as their superior leader but rather had individual access to the MND and, as one RCAF internal document with senior hand-written covering notes indicated, were out to “screw” each other.<sup>41</sup>

The two aspects of fiscal responsibility and government control were guiding principles imposed on Hellyer by PM Pearson.<sup>42</sup> They influenced Hellyer’s vision of a unified Canadian Armed Force that would be more responsive to achieving national security goals while at the same time rationalizing procurement expenditures and being able to

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<sup>39</sup> Hellyer, 42.

<sup>40</sup> Hellyer, 35.

<sup>41</sup> Hellyer, 37.

<sup>42</sup> Bland, Vol 1, 57.

provide the GoC with coherent and integrated planning at the strategic level.<sup>43</sup> So what exactly did unification entail?

First and foremost, the 1964 White Paper on Defence was “an attempt to build a defence policy on a Canadian foundation [and that] defence structure [...] should follow strategy.”<sup>44</sup> Unfortunately there was no obvious link to Foreign Affairs, since expeditionary “contributions” for international interventions were viewed as being subordinate to Cabinet and the wishes of the GoC.<sup>45</sup> The subordination of planning the size and employment of expeditionary forces to the whims of Cabinet instead of MND working towards specific national objectives is exposed in PM Pearson’s refusal to reassess Canada’s foreign policy in the interests of a logical and coherent defence policy to build an efficient armed force.<sup>46</sup> In a similar vein, it introduced the notion of a “range of conflict,” what we now know as full spectrum operations. The spectrum was not new since it is essentially a Clausewitzian theory, however it did depart from the Cold War deterrence policy of MAD and opened the door for CBP, in Hellyer’s words “Defence Programming.”

This system will enable Defence Programs to be examined and considered in relation to their overall military effectiveness from the standpoint of achieving a particular mission. It is hoped that the system will enable defence resources to be allocated to Defence Programs in the most effective manner from the point of view of ultimate military output and in accordance with a clear and detailed plan.<sup>47</sup>

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<sup>43</sup> Hellyer, 34.

<sup>44</sup> Bland, Vol 1, 59.

<sup>45</sup> Canada. House of Commons. Special Committee on Defence: Minutes of proceedings and evidence No. 14, 17 October 1963. Ottawa: Queen’s Printer, 1963. 439

<sup>46</sup> Gosselin, Daniel and Craig Stone. “From Minister Hellyer to General Hillier: Understanding the fundamental differences between the unification of the Canadian Forces and its present transformation.” *Canadian Military Journal* (Winter 2005-2006), 8.

<sup>47</sup> Canada. *White Paper on Defence*. Ottawa: Queen’s Printer, March 1964. Section IV.

The other important aspect of unification was the unified chain of command and the doing away with “coordination by committee.” The unified chain of command was based in part on the recommendations of the “Glassco Commission,” however these recommendations did not deal solely with the re-organization of the of the Chiefs of Staff Committee under a single Chief of Defence Staff with a distinct Defence Staff, in order to reduce redundancies and rationalize various headquarters. Unification also announced a new departmental organization to provide the MND with assistance in the “discharge of his responsibility for the control and management of the Armed Forces.”<sup>48</sup> It is interesting to note that no other hard and fast structural changes were forecast, preferring to remain flexible and allow the “men charged with responsibility in their various fields [to] streamline procedures [through] practice.”<sup>49</sup>

Finally, Hellyer believed that a single uniform would set the proper environment for the cultural change he hoped would logically result from the realization of his vision.<sup>50</sup> The decision to abandon traditional (British) service uniforms for the single green uniform common to all services was made in light of the pending amalgamation of common function support trades (Medical, Supply, Legal, etc) who did not want to have a fourth uniform.<sup>51</sup> There were also “compelling psychological and logistical considerations” such as the all-ranks approach to distribution and the inefficiency of stocking a variety of sizes in different colours.<sup>52</sup>

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<sup>48</sup> Gosselin and Stone, “Hellyer to Hillier...” 8.

<sup>49</sup> 1964 White Paper on Defence, Section IV.

<sup>50</sup> Bland, Vol 1, 63.

<sup>51</sup> Hellyer, 173.

<sup>52</sup> Hellyer, 172 - 173.

The concept of what Unification presented to the Pearson government is adroitly summarized in the following quote from Douglas Bland:

Unification [was] initially proposed and justified on an operational basis that envisioned a new type of armed forces working within a new strategic doctrine. [...] Unfortunately for Hellyer, his plans and policies were not supported by Cabinet... [Thus] Hellyer reoriented his argument away from operational considerations to more narrow economic and administrative imperatives. [This] left unification with little to commend if the services were to continue in separate and distinct missions.<sup>53</sup>

Vernon Kronenburg cautions about misusing the terms “unification” and “integration:” “[The first] means the merging of the armed forces and their supporting structures into a single organization with a unitary hierarchy. Integration is something which stops short of unification.”<sup>54</sup>

Wilf Lund also brings harsh criticism in his discussion of the controversy when he says:

The major flaws in the unification policy were that both its rationale and means of implementation were obscure. Its architect, Paul Hellyer, had not spelled out how unification would take place and left the defence portfolio at the most critical point of implementation... [abandoning] his unification project and leaving the armed forces to muddle through in chaos.<sup>55</sup>

This is an unfair summarization since the White Paper of 1964 had purposefully left the details of reorganization vague enough so that when the time was right the appropriate measures could be developed and put into practice. It is also unfair since MND Hellyer was succeeded in his post as MND by his Associate Minister, Léo Cadieux, who was intimately aware of the whole unification process.<sup>56</sup> Unfortunately, political events would change the landscape and in the absence of a determined MND, inter-service rivalries and inefficient

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<sup>53</sup> Bland, Vol 2, 96.

<sup>54</sup> Vernon J. Kronenburg, “All together now: The organization of the Department of National Defence in Canada, 1964-1972,” *Wellesley Papers* 3/1973, Toronto: Canadian Institute of International Affairs, 1973. 9.

<sup>55</sup> Wilf Lund, 2.

<sup>56</sup> Hellyer, 249.

bureaucracy were to steadily erode any of the gains consolidated by unification. What cannot be denied is that his vision of a joint force was indeed visionary, and the creation of Joint Forces Command and NORTHCOM in the US and the previously discussed current transformations abroad are a testimony to the validity of his basic concepts.

The essential elements of the unification and transformation of Canada's military services may seem to be echoed in General Hillier's idea of joint task forces conducting the "combined operations" MND Hellyer envisioned, however MND Hellyer imposed a structural transformation based on legislation (Bill C-90) while General Hillier has been working specifically on the best way to implement policy from within the current construct of the CF. CFT is a military project designed by military personnel, for military personnel. Unification was a political and legislative solution to rationalize resources and re-establish political control over the military personnel. CFT is therefore clearly an innovation without precedent in this context.

## ***IPS 2005***

### **PM Martin's Overview**

PM Paul Martin's *A Role of Pride and Influence in the World* really only has PM Brian Mulroney's *Challenge and Commitment* as a competitor for being a "catchy" title and escaping the bureaucratic nature of "White Paper on Defence" that give the impression of stalwart consistency. It is interesting to note that both policy statements were produced under a spirit of cooperation between the DND and the CF leadership, where other policy statements were more often than not a cause for confrontation (1947, 1964, and 1971, as

would be the case in 1994).<sup>57</sup> What is different in the IPS 2005 is the harmonization of policy with other departments: Department of Foreign Affairs and International Trade (DFAIT) and the Canadian International Development Agency (CIDA). As the PM himself puts it in his foreword:

For decades, there was a slow erosion in Canada's commitment to its military, to international assistance and to our diplomatic presence around the world. Then, during the nineties, there were more cutbacks as our government made tough decisions to save the country from financial calamity. As a result, our international presence has suffered. But thanks to the sacrifice and resolve of Canadians, we have restored our fiscal sovereignty and have spent the past year renewing our investments in domestic priorities, such as health care. Now is the time to rebuild for Canada an independent voice of pride and influence in the world. It won't be easy. We will have to earn our way in defence and security. We will have to earn our way in international assistance and global commerce. And we will have to understand that we can't simply recreate what we once had. Instead, we must build today for the world of tomorrow.<sup>58</sup>

In so doing he is correct to recognize that a comprehensive policy is necessary to reverse the effects of neglect (while conveniently ignoring his party's and his own influence in the decline) and that a concerted effort to inform the Canadian public would also be required in order to provide them with a framework for understanding the scope of changes being contemplated. This is alluded to when he explains the reasoning behind the new approach, which can be interpreted as an acknowledgement of the RMA:

From time to time a government needs to take a hard and comprehensive look at what is working and what is not in its foreign policy; at how the world is evolving and whether Canada is prepared; at how best to project Canadian

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<sup>57</sup> While the 1994 White Paper on Defence was preceded by a Special Joint Committee of the Senate and the House of Commons to consult with Canadians on matters pertaining to defence policy, the variety and diversity of special interest groups ensured that no clear consensus could be achieved, other than the realization that Defence expenditures would have important repercussions on social projects, or inversely that less money spent on Defence would mean more money available for other things. Joel J. Sokolsky, "Canada, Getting it Right Time: The 1994 Defence White Paper." US Army War College Strategic Studies Institute Conference Series, Carlisle, PA: May 1995. 8.

<sup>58</sup> IPS 2005 2005 Overview, iii.

values and interests into the world and make a real difference in the lives of its embattled peoples, now and in the future.<sup>59</sup>

The overview also “establishes the principles and priorities that will guide the next generation of Canadian global engagement.”<sup>60</sup> The priorities are outlined in general for “Diplomacy, Defence, Development and Commerce” (otherwise known as 3D + T where Trade is used in lieu of Commerce) with the detail provided in each subordinate section. For the purposes of this paper, only the 2005 Defence Policy Statement (DPS 2005) will be discussed. The unique collaboration (or at least coordination) between departments and the oversight provided by the PM’s office (PMO) leading up to the publication of IPS 2005 make PM Paul Martin’s *Role of Pride and Influence in the World* and its “chapter” on defence an innovation not only in Defence Policy but in GoC synergy as well. This innovative approach does not, however, provide any substantial policy innovations other than a more detailed list of tasks for the CF.<sup>61</sup>

## **Defence Policy Statement 2005**

CF Transformation was announced in no uncertain terms when MND Bill Graham stated that “With this policy statement, and the investments included in Budget 2005, the Government is setting a course that will guide the military in its transformation over the long term.”<sup>62</sup> In stating that “The key to this more effective, relevant and responsive force is the transformation process on which the Canadian Forces are now embarked” he set the

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<sup>59</sup> IPS 2005 Overview, ii.

<sup>60</sup> IPS 2005 Overview, 30.

<sup>61</sup> Gosselin and Stone, “Hellyer to Hillier...” 9.

<sup>62</sup> IPS 2005 Defence, 7.

parameters for the CF to respond to the RMA.<sup>63</sup> This section of the DPS 2005 further expands on six areas for review: a fully integrated and unified approach to operations; evaluation of the force structure; coordination with other government departments and interoperability with allied forces; command, control, communications, computers, intelligence, surveillance, and reconnaissance capabilities (C4ISR); greater emphasis on experimentation; and last but not least, to continue to invest in people.<sup>64</sup> There is also specific guidance with respect to maritime, aerospace, land and special operations capabilities and disaster relief (an orientation towards CBP). The parameters that delineate General Hillier's vision of CFT are clearly laid out with the DPS 2005 definition of transformation:

Transformation, however, is not just about technology and equipment modernization. It will require a fundamental change to the culture of our military to ensure a fully integrated and unified approach to operations. This will require new command and operational structures, including the creation of a national operational command headquarters (Canada Command), and fresh thinking surrounding concepts and doctrine. It will mean introducing new capabilities, while using existing ones in different and innovative ways. Above all, it will put a premium on having in place the right people with the right skills to get the job done. They will provide both the ideas and the leadership to help propel the Canadian Forces into the future.<sup>65</sup>

What is of a landmark nature is the 3D + T approach that acknowledges that finding lasting solutions to deal with the asymmetric threats to Canadian National Security must be a concerted GoC effort and not just a DND responsibility:

The challenges involved in rebuilding countries devastated by war or internal strife are enormous and cannot be handled by military forces alone. Instead, they demand the involvement of other government departments and non-governmental organizations. Canada's recent experience in Afghanistan points

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<sup>63</sup> IPS 2005 Defence, 11.

<sup>64</sup> DPS 2005, 11-12.

<sup>65</sup> DPS 2005, 4.

to the ongoing need for close collaboration between National Defence, Foreign Affairs and the Canadian International Development Agency in pursuit of common objectives.<sup>66</sup>

The question arises as to how this paper can advance that General Hillier's vision is unique and an innovation without precedent when such precise and complete guidance is provided in the DPS 2005. Those who might be having similar thoughts are forgetting the unprecedented levels of cooperation between the CDS and MND, and the fact that even the PM had an interest in what General Hillier had to say, recognizing his recent experience while on exchange with the US Army and as Commander ISAF and the transformation he had begun in the Army. It would be presumptuous to attribute the entire scope of IPS 2005 to General Hillier, but it is safe to say that he made a positive impression that is reflected throughout the DPS 2005.

This chapter shows that CFT is an innovation without precedent primarily by the fact that it is the first internally-led transformation by the military, for the military. There is no requirement for legislation to be passed or for ministerial approval to be sought. The CDS is firmly in control of the reorganization and committed to making the CF more effective. Previous transformations have tried to make the CF more efficient.

The details of the implementation of CFT announced in the DPS 2005 will be dealt with in the final chapter. Before looking at them, part of what makes General Hillier's vision unique is his understanding of the challenges that need to be overcome in order to maintain momentum and avoid the disappointment of squandered opportunities. General Hillier seems to have taken lessons from the difficulties faced by MND Hellyer and draws on organizational management theory in order to overcome inertia and get the process started.

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<sup>66</sup> DPS 2005, 9.

## Chapter 4 – Organizational Theory

There are two main areas where the different transformations occurring across the globe run the greatest risk of floundering, and they both have to do with people. The first deals with the ability of humans to keep up with the technological advances, particularly in the command and control (C2) and C4 issues inherent to NCW. The second deals more with human behaviour as part of institutions and the dynamics of organizational change. As demonstrated with the US services and UK MoD, governmental departments in the process of transformation have specifically identified their people as critical capabilities whose “modernization” is every bit as necessary as adopting leading edge technology in order to ensure that transformation continues.

### ***Human inputs during NCO***

Ross Pigeau and Carol McCann paint a confusing and chaotic picture of command, control and C2 resulting from their studies beginning in 1993 that were partially published in their article *Reconceptualizing Command and Control* in 2001.<sup>67</sup> What they propose as a remedy will be further explored because it is relevant to some aspects of General Hillier’s vision of CFT. David Alberts and Richard Hayes have published in *Power to the Edge: Command... Control... in the Information Age* a new concept that has the potential to render the conventional hierarchy of the military rank pyramid obsolete.

While the new definitions that Pigeau and McCann propose for command, control and C2 are useful from a semantics perspective to eliminate the circular definitions in general

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<sup>67</sup> Ross Pigeau and Carol McCann. “Re-Conceptualizing Command And Control.” *Canadian Military Journal* Vol. 3, no. 1 (Spring 02): 53-64, 53.

use today, they must be understood in order to better examine the much more practical concept of their “CAR” model which deals with “Competency, Authority and Responsibility.”<sup>68</sup> The relevant definitions and concepts are presented in table 1:

**Table 1: Pigeau-McCann Definitions**

Command:	The creative expression of human will necessary to accomplish the mission.
Control:	Those structures and processes devised by command to enable it and to manage risk.
Competency:	Physical, intellectual, emotional and interpersonal skills.
Authority:	Difference between legal (formal) and personal (informal).
Responsibility:	Degree of legal and moral liability accepted by individual.

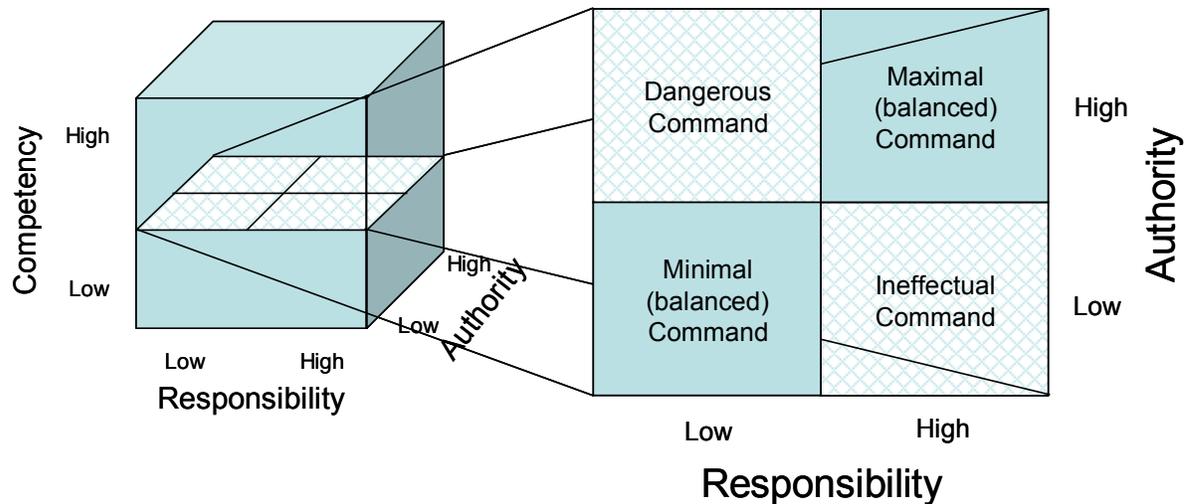
Source: Ross Pigeau and Carol McCann. *Re-Conceptualizing Command And Control*. 56, 58-59

“The “CAR” model allows [one] to map out the entire space of command capability as well as situate individual[s] within this space.”<sup>69</sup> As commanders climb the ladder of competency, through experience, training and education, they should, in theory, also be receiving and earning more authority, as well as accepting more and more responsibility. The model is best illustrated by the following three figures (8-10):

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<sup>68</sup> Pigeau and McCann, 57.

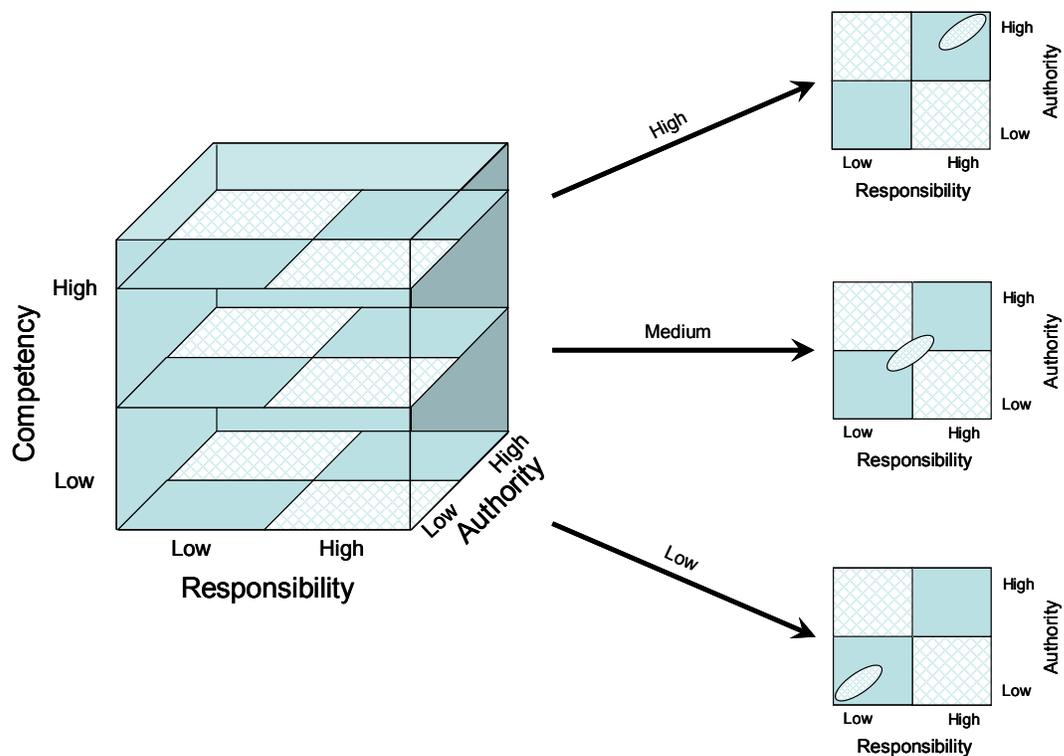
<sup>69</sup> Pigeau and McCann, 60.



**Figure 7: Relationship between A and R when C is constant**

Source: Ross Pigeau and Carol McCann. *Re-Conceptualizing Command And Control*. 59.

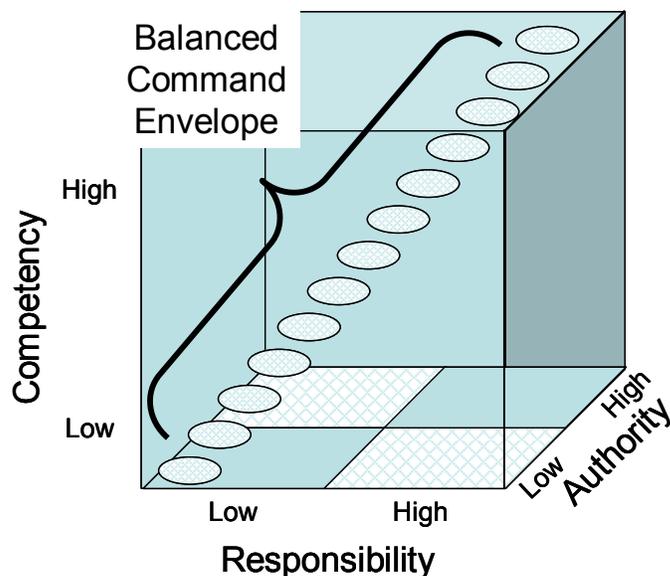
This figure (8) shows that for a specific level of Competency, the relationship between Authority and Responsibility is divided into two balanced quadrants and two that are not. An individual with high Responsibility but low Authority is not being given the tools necessary to be effective and in a similar vein, someone with low Responsibility but high Authority is being put in a potentially dangerous command situation. As will be seen in the next figure, as an individual gains competency, it is logical that with a commensurate display of Responsibility, an increasing amount of Authority should be awarded.



**Figure 8: A and R as C progresses**

Source: Ross Pigeau and Carol McCann. *Re-Conceptualizing Command And Control*. 60.

The three cross-sections represent increasing levels of competency and on the right one can see the resultant progression from the bottom left corner to the top right of the “balanced” command zone.



**Figure 9: The Balanced Command Envelope**

Source: Ross Pigeau and Carol McCann. *Re-Conceptualizing Command And Control*. 61

In this figure the thirteen ovals represent the optimal evolution of the Authority being granted as a function of growing Responsibility and improved Competency. These “steps” show the “Balanced Command Envelope” that would be an ideal career progression model for a commander, from recruit to CDS.

The relevance of this model to CFT is how it defines and relates the authority and responsibility concepts to the competency of commanders. As we will see later, this is a fundamental aspect of one of General Hillier’s six principles for transformation, and has tangential repercussions in two of his other principles as well.

In *Power to the Edge* David Alberts and Richard Hayes propose that:

When power to the edge concepts are applied to command and control and its supporting infrastructure, military organizations will be able to overcome the shortcomings of their Industrial Age predecessors and develop the interoperability and agility necessary for success.<sup>70</sup>

<sup>70</sup> David Alberts and Richard Hayes. *Power to the Edge*. Washington DC, USA: CCRP Publication Series. 2003. Internet. Available at [www.dodccrp.org](http://www.dodccrp.org). Accessed on 22 October 2005, 165.

To fully comprehend the radical nature of change that could occur one must understand the underlying construct based on Alberts and Hayes' definitions of agility, power, the edge, and edge organizations which are presented in the following table:

**Table 2: *Power to the Edge* definitions**

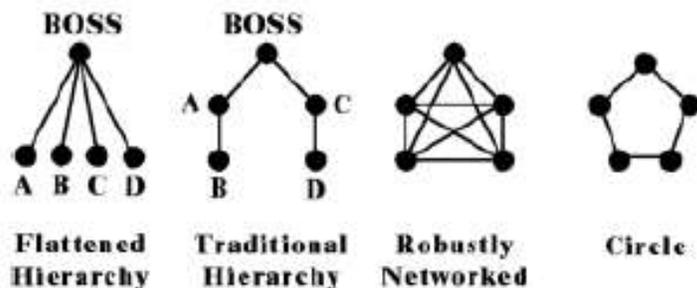
Agility:	Incorporates the following six attributes [for commanders and individuals]: robustness, resilience, responsiveness, flexibility, innovation, and adaptation.
Power:	Power is the ability to make something happen.
The edge:	In an Industrial Age organization, being at the edge can mean being (1) far from the center, at the “pointy end of the spear” (2) lowest in rank, or (3) in contact with the customer. Paradoxically, the first two are associated with a lack of power while the third is focused on the ability to make things happen.
Edge organization:	Edge organizations are characterized by the widespread sharing of information and the predominance of peer-to-peer relationships.

Source: David Alberts and Richard Hayes. *Power to the Edge*. 128, 166, 173, 176.

Edge organizations are also dependant on their network infrastructure and in order to enable truly Information Age command and control, the “Global Information Grid”<sup>71</sup> will have to become more robust, at least the parts that an “edge worker” would be relying on to effect some form of power. The potential for change in the military structure can be assessed from the following figure, where the third depiction is the preferred one in the concept portrayed in Figure 11:

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<sup>71</sup> Alberts and Hayes, 188.



**Figure 10: Four network topologies**

Source: David Alberts and Richard Hayes. *Power to the Edge*. 182.

The upheaval can be further deduced from their table comparing hierarchical and edge organizations:

**Table 3: Comparison of organizational attributes**

	<b>Hierarchies</b>	<b>Edge organizations</b>
Command	By directive	Establishing conditions
Leadership	By position	By competence
Control	By direction	An emergent property
Decision making	Line function	Everyone's job
Information	Hoarded	Shared
Predominant Information Flows	Vertical, coupled with chain of command	Horizontal, independent of chain of command
Information Management	Push	Post-Pull
Sources of Information	Stovepipe monopolies	Eclectic, adaptable marketplaces
Organizational Processes	Prescribed Sequential	Dynamic Concurrent
Individual at the Edge	Constrained	Empowered

Source: David Alberts and Richard Hayes. *Power to the Edge*. 218.

This concept of “Power to the Edge” could be the future of NCW, although considering how difficult it has been in some institutions to understand and accept the notion that the actions of individual soldiers can have a strategic impact, it is unlikely that this extreme vision of the RMA will have an impact on military forces in the near future. As some of the underlying assumptions and suppositions become practical realities as opposed to theoretical conjecture, aspects of this concept of empowered “edgers” may eventually find their way into

mainstream military operations. This is one vision that will need a significant military culture change in order to have any chance at success.

These two models were discussed for two reasons. The first is to further demonstrate the importance of the human operator in both a logical framework for evolution as well as in a radically different command structure. CFT represents a departure from the familiar C2 and C4 environments of the Cold War towards the asymmetric threat. The Pigeau-McCann model ties well with the CDS' principle of "Authorities, Responsibilities and Accountabilities" and should be integrated into CF doctrine. The second model presents a revolutionary concept that demonstrates that while innovative, CFT is not a radical departure from accepted theories and is therefore not a revolution. This latter model also underscores the CDS principle of culture change, as well as providing an interesting example of creative thinking that should engender interesting debates.

Culture change in large institutions is not usually easy to impose in rapid order, especially in military forces, because of the vagaries of human behaviour and the constraints of bureaucracy.

### ***Organizational Change***

In the business world the threats are different than those affecting national security policy and so industry is not driven to change for the same reasons as military forces. However, the technology-driven RMA do have an impact on defence industries and while the blue-collar worker is not as fearful for his life as perhaps the soldier on patrol, there are still the stresses of structural reorganizations. Globalization poses a threat to the established "world order" in commerce and international trade and where technology has been a leading catalyst for the RMA and their resultant transformation in military forces, one could suggest

that it is a catalyst in the business world as well, creating a “Revolution in Business Affairs” (RBA). While management theory often likes to usurp military terminology for its own purposes, the “RBA” is not replete with military transformation terminology – yet. Instead, we find three more mundane concepts of “Managing Innovation and Change,” “Managing Change and Transition” and “Winning at change.”<sup>72</sup>

## The politics of change

In order to achieve transformation, the people in the organization will ultimately be responsible for its success or failure. In this sense, the small “p” political aspect of human interaction must be addressed:

Accomplishing innovation and change in organizations requires more than the ability to solve technical or analytical problems. Innovation almost invariably threatens the status quo, and consequently, innovation is an inherently political activity.<sup>73</sup>

In order to create the conditions for success, champions of change must ensure that “the actual implementation [is] understood and executed properly.”<sup>74</sup> This will require three different initiatives:

First, there will be a political campaign, which should create strong and lasting support for the desired change. A second initiative will be a communication campaign, ensuring that all major stakeholders understand and share the idea of change and are committed to the principles, and consequences behind it. Finally, there will be a rationally planned campaign that makes sure that the human and material resources necessary for a successful change are available. Without paying attention to these political

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<sup>72</sup> Stewart Clegg, Martin Kornberger and Tyrone Pitsis. *Managing and organizations: an introduction to theory and practice* 373. Harvard Business School. *Managing Change and Transition*. John P. Kotter “Winning at change.”

<sup>73</sup> Pfeffer as quoted in Stewart Clegg, Martin Kornberger and Tyrone Pitsis. *Managing and organizations: an introduction to theory and practice* London: SAGE Publications, 2005, 384.

<sup>74</sup> Clegg et al, 384.

implications, innovative ideas cannot be turned into actionable and tangible outcomes.<sup>75</sup>

In the case of CFT, General Hillier has obviously been on track since these three steps appear to have been followed at the macro level (outside the CF) as the GoC commitments to DND have been announced in the budgets. The fact that they have been allocated resources in the budget is proof positive that there has been “buy-in” and that the major stakeholders (GoC) are aware of the consequences of their actions to set the conditions for transformation to occur. There was also a similar process within the CF that enabled the new command structure to get on with business in a new location: the allocation of personnel, equipment and communications (human and material resources) illustrates the existence of a concrete plan. While finding a building, installing phones and computers and building the right organizational structure to accommodate the shift from DCDS Group to the resultant commands and identifying the right individuals to fill appropriate positions does not properly convey the scope of CFT, it does illustrate the fact that there is a plan, and that the plan is working.

### **Marching in steps**

Depending on which management textbooks one reads and how far back in time one wishes to study the literature proposing solutions to circumnavigate the inherent risks associated with organizational change, one can find five, seven or eight recommended steps.<sup>76</sup> This paper will present two models for comparison. The first has seven steps, the

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<sup>75</sup> Clegg et al, 384.

<sup>76</sup> Jeff Hiatt, *Five Steps for Creating Effective Visions*, Internet. Available at <http://www.prosci.com/visions.htm> Accessed 22 April 2006.

second has eight. The latter is more important in the CFT context since General Hillier himself quotes from John Kotter.

## The Harvard Way

The Harvard Business Essentials model is presented here in a tabular form in order to summarize its main concepts.

**Table 4: Seven Steps to Change**

<b>Step</b>	<b>Description</b>
Step 1. Mobilize Energy and Commitment through Joint Identification of Business Problems and Their Solutions.	Requires a clear definition of the business problem and answers the question: "Why must we do this?"
Step 2. Develop a Shared Vision of How to Organize and Manage for Competitiveness.	A clear vision and communications plan to articulate how the change will: 1) improve the business and 2) how those improvements will benefit employees. An effective vision can get most employees on the side of change.
Step 3. Identify the Leadership.	Must have a visible leader and a sponsor of change, someone who owns and leads the change initiative.
Step 4. Focus on Results, not Activities.	Measurable short term performance improvement goals need to be identified, even though the change campaign is a long-term, sustained one.
Step 5. Start Change at the Periphery, Then Let It Spread to Other Units without Pushing It from the Top.	The likelihood of success is greatest when change is instigated in small, fairly autonomous units. Once change on a smaller scale is accomplished and witnessed by employees in adjacent units, diffusion of the change initiative throughout the organization is much more likely.

<b>Step</b>	<b>Description</b>
Step 6. Institutionalize Success through Formal Policies, Systems.	Getting an organization to change requires risk-taking and effort by many people. In order to consolidate gains, new policies that describe how work is to be done and new reporting relationships need to be introduced in order to keep the focus on what has been improved and not revert to old procedures. Employees need to be as concerned with the “journey” as with implementing a new process itself. <i>Continuous</i> improvement is the ultimate goal.
Step 7. Monitor and Adjust Strategies in Response to Problems in the Change Process.	Change leaders must be flexible and adaptive and their plans sufficiently robust in order to deal with the inevitable unanticipated problems that could imply alterations in schedules, sequencing and personnel.

Source: Harvard Business Essentials, Chapter 3, 31-50.

## **John Kotter’s Way**

John Kotter’s article deals with many of the same ideas but with different terminology and priorities. His eight steps are presented in Table 5.

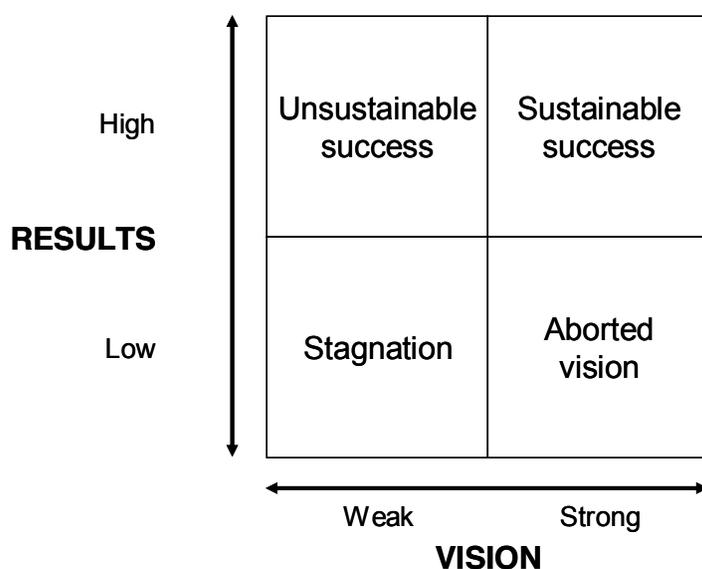
**Table 5: Eight Steps to Transform Your Organization**

<b>Step</b>	<b>Description</b>
1. Establish a Sense of Urgency	<ul style="list-style-type: none"> <li>• Examine market and competitive realities</li> <li>• Identify and discuss crises, potential crises, or major opportunities</li> </ul>
2. Form a Powerful Guiding Coalition	<ul style="list-style-type: none"> <li>• Assemble a group with enough power to lead the change effort</li> <li>• Encourage the group to work as a team</li> </ul>
3. Create a Vision	<ul style="list-style-type: none"> <li>• Create a vision to help direct the change effort</li> <li>• Develop strategies for achieving that vision</li> </ul>
4. Communicate the Vision	<ul style="list-style-type: none"> <li>• Use every vehicle possible to communicate the new vision and strategies.</li> <li>• Teach new behaviours by the example of the guiding coalition</li> </ul>

Step	Description
5. Empower Others to Act on the Vision	<ul style="list-style-type: none"> <li>• Get rid of any obstacles to change</li> <li>• Change systems or structures that seriously undermine the vision</li> <li>• Encourage risk-taking and non-traditional ideas, activities and actions</li> </ul>
6. Plan for and Create Short-Term Wins	<ul style="list-style-type: none"> <li>• Plan for visible performance improvements</li> <li>• Creating those improvements</li> <li>• Recognize and reward employees involved in the improvements</li> </ul>
7. Consolidate Improvements and Produce Still More Change	<ul style="list-style-type: none"> <li>• Use increased credibility to change systems, structures, and policies that don't fit the vision</li> <li>• Hire, promote, and develop employees who can implement the vision</li> <li>• Reinvigorate the process with new projects, themes, and change agents</li> </ul>
8. Institutionalize New Approaches	<ul style="list-style-type: none"> <li>• Articulate the connections between the new behaviours and organizational success</li> <li>• Develop the means to ensure leadership development and succession</li> </ul>

Source: John P. Kotter, *Winning at Change*.

Of these eight steps, great importance is given to Step 3, because of its impact on success:



**Figure 11: Vision, Results, and Sustainable Success**

Source: John P. Kotter, *Winning at Change*.

In comparing the two models for achieving organizational change the only apparent difference between them is found in Kotter's Step 4 – Communicate the Vision. The Harvard steps can be lined up with Kotter's in the following table:

**Table 6: Comparison of Models for Change**

<b>John Kotter's Eight Steps</b>	<b>The Seven Harvard Steps</b>
1. Establish a Sense of Urgency	1. Mobilize Energy and Commitment through Joint Identification of Business Problems and Their Solutions.
2. Form a Powerful Guiding Coalition	3. Identify the Leadership
3. Create a Vision	2. Develop a Shared Vision of How to Organize and Manage for Competitiveness.
4. Communicate the Vision	
5. Empower Others to Act on the Vision	5. Start Change at the Periphery, Then Let It Spread to Other Units without Pushing It from the Top.
6. Plan for and Create Short-Term Wins	4. Focus on Results, not Activities.
7. Consolidate Improvements and Produce Still More Change	7. Monitor and Adjust Strategies in Response to Problems in the Change Process.
8. Institutionalize New Approaches	6 Institutionalize Success through Formal Policies, Systems.

When displayed side by side, the column on the left appears more military in style and reads like a list of tasks to accomplish. This by itself makes Step 4 much easier. The innovation without precedent in CFT is that the CDS himself is the champion of change and the best communicator of the vision. His approach has been to reach out to all levels of the CF and other departments as well and convince them that CFT is a good thing and make them want to be actively involved and looking forward to the changes. In contrast, he could have tried to force changes on the elements by virtue of his authority, but he chose not to go that route.

General Hillier has demonstrated his understanding of these different principles of organizational change by first developing a vision for Army transformation, being able to “sell” it to the MND and PM, and eventually see buy-in from the other departments involved.

In being identified by the political masters as one in whom the GoC could entrust the transformation of the CF and bring it in step with PM Paul Martin's vision as stated in the IPS 2005, General Hillier has remained the beacon for CFT, even when presented with the challenges of a change of government. By travelling to Afghanistan at the same time as PM Stephen Harper in early 2006, General Hillier was able to once again demonstrate his leadership and dedication to the troops by ensuring a message of support from the highest level of GoC was delivered to the front lines. So what *is* General Hillier's vision?

## Chapter 5 – General Hillier’s Vision

The official vision only dates back to 10 March 2005 as laid out in the CDS Planning Guidance issued to the CDS Action teams because CFT could not be “announced” prior to the GoC mandating that the CF transform as part of IPS 2005. It is important to understand that this would not have been the first time the ideas and concepts were being laid out for further action. Indeed, early in 2004 during the Capability Development Working Group and then later the Future Capabilities Working Group essential elements were developed and then refined.<sup>77</sup> A similar process would have been followed for the MND staff as regards the DPS 2005 and the inter-departmental coordination necessary to achieve PM Martin’s vision in IPS 2005 would suggest that the seeds were sown even earlier. General Hénault announced the requirement in 2003:

To enable transformation, the CF must embrace transformational thinking and leadership, nurture public and CF understanding of the strategic and technological forces driving transformation, and achieve unity of purpose by focussing on clear priorities. While transformation will be a multi-year challenge, it is a path we must pursue now and move forward more aggressively.<sup>78</sup>

We also know that Army transformation, being driven by then LGen Hillier, began in 2002.<sup>79</sup>

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<sup>77</sup> Hillier, R.J. CDS Planning Guidance: CDS Action Teams, 10 March 2005, 1.

<sup>78</sup> Hénault, R.R. “A time for transformation.” *Annual Report of the CDS, 2002-2003*, 16.

<sup>79</sup> Hillier, R.J. “Army Transformation: Punching above our weight,” CMJ, 3.

## General Hillier's Vision of CFT

### The Vision Statement

Directly from the Planning guidance:

Our military will become more effective, relevant, and responsive, and its profile and ability to provide leadership at home and abroad will be increased. The CF will become more effective by better integrating maritime, land, air and special operations forces. The CF will become more relevant, both at home and abroad, by adapting its capabilities and force structure to deal with threats that arise from the kind of instability that we have seen abroad, especially in failed states. The CF will become more responsive by enhancing its ability to act quickly in the event of crises, whether in Canada or around the world. The transformation of the CF will focus on the establishment of new integrated (joint) organizations and structures, including a unified national command and control system. These goals demand that the CF move beyond traditional thinking to adopt a fully integrated and unified approach to operations.<sup>80</sup>

General Hillier's vision can also be summarized from his 35 slide presentation to "Fix, expand and modernize the CF in order to be more relevant, responsive and effective."<sup>81</sup> He envisioned CFT occurring over four stages. These four stages are: 1) the development of a unified CF vision that was done in tandem and concurrently with the DPS 2005 and included the Planning Guidance for and analysis of the Action Teams; 2) the fundamental restructuring of CF operational command and control and the separation of strategic and operational-level staffs; 3) the institutional alignment of other CF structures that force generate specific military capabilities that directly support the execution of CF operations while providing broader service delivery functions to the CF as a whole; 4) analysis and recommendations for the evolution of CF force generation design and execution.<sup>82</sup>

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<sup>80</sup> CDS PG, 1.

<sup>81</sup> Hillier, R.J. *CF Transformation: From Vision to Mission*

<sup>82</sup> CDS 1950-9 (CT) 18 Oct 2005, 5.

## Stage One

This stage covered the development of a unified CF vision which was done in tandem and concurrently with the DPS 2005. This stage also included issuing the Planning Guidance to the CDS Action Teams and the analysis of their final reports. During this stage the six principle listed in the presentation *CF Transformation: From Vision to Mission* were also more precisely defined and eventually distributed in their more detailed form in September 2005.

## The Six Principles

**Table 7: CDS Six Principles for Transformation**

<b>Principle</b>	<b>Description</b>
1. Canadian Forces Identity.	Our first loyalty is to Canada. Beyond this fundamental imperative, all service personnel must look past environment, component or unit affiliations to most closely identify with the CF. The greater good of Canada and the CF will, in every instance, take precedence over considerations of service, component or unit affiliation.
2. Command Centric Imperative.	The CF command and control structure must be optimized to provide the most effective and responsive decision and operational support to designated strategic, operational and tactical commanders. This principle imposes the requirement to clearly delineate and separate line and staff functions, establishing a distinct and unambiguous chain of command that coherently integrates strategic, operational and tactical headquarters and elements. It further establishes the need to effectively group capabilities under the appropriate command to best meet operational needs – coupled with the ability to rapidly shift these capabilities from one command to another to meet unforeseen or higher-priority commitments. The key is the allocation of mission-essential capabilities to operational and tactical commands, formations and units coupled with the ability to rapidly re-group and re-task capabilities between these entities as required.

<b>Principle</b>	<b>Description</b>
3. Authorities, Responsibilities and Accountabilities.	Commanders must be provided a clear articulation of their assigned authorities, responsibilities and accountabilities. In turn, commanders must ensure that they have a careful and comprehensive understanding of this direction and intent and that they, in turn, provide equivalent clarity in the provision of their guidance to their subordinate commanders.
4. Operational Focus.	Within the CF, operations and operational support take primacy over all other activities and considerations. This is a particular challenge at the strategic level in which departmental, corporate and CF priorities intersect; however every strategic decision must be measured against the effect, positive or negative, that it will have on the CF's ability to effectively execute its assigned missions. Transformation initiatives that increase CF operational focus should be given the highest consideration.
5. Mission Command.	The CF will continue to develop and exemplify mission command leadership – the leadership philosophy of the CF. In essence, mission command articulates the dynamic and decentralized execution of operations guided throughout by a clear articulation and understanding of the overriding commander's intent. This leadership concept demands the aggressive use of initiative at every level, a high degree of comfort in ambiguity and a tolerance for honest failure.
6. An Integrated Regular, Reserve and Civilian CF.	Regular, reserve and civilian personnel will be more closely integrated into virtually every CF structure in order to ensure the best utilization of appropriate skills and experience at every level. In simple terms, what the individual can do is more important than where he or she came from or what uniform, if any, they wear.

Source: CDS SITREP 2, Anx A, Sep 05

The descriptions of these principles are fairly explicit even though reinforcing doctrine to a large extent. The fact that General Hillier felt it necessary to underline the relationship between Authority, Responsibility and Accountability contributes to the first principle of Culture Change, as well as having to explicitly spell out the command-centric imperative to make staff officers understand the scope of their duties. By spelling out these principles and communicating them across the CF he was informing military personnel of the

higher standards being expected as a result of CFT. By giving “fair warning” military personnel had the opportunity to adjust, if necessary, and understand the expectations coming from the top. This has generated more respect from the bottom up as different milestones are achieved and the new processes become more familiar and less intimidating and the new structure appears to be doing at least as well as the old, if not better in many areas.

### **CDS Action Teams**

Four CDS Action Teams (CAT) were formed to look at C2, force generation, operational capability and institutional alignment.<sup>83</sup> A tight schedule was imposed and updates were due in advance of the final reports set for June 2005, in order to brief all General and Flag officers at Armed Forces Council (AFC) that month. Their principle recommendations are listed in tabular form as follows:

**Table 8: Compilation of CAT Recommendations**

<b>CDS Action Team</b>	<b>Recommendations</b>
CAT 1 Command and control	<ul style="list-style-type: none"> <li>• Separation of Strategic and Operational Staffs.</li> <li>• Separation of Military and Civilian Staff.</li> <li>• Separation of Line and Staff.</li> <li>• Evolution of Environmental Chiefs of Staff Functions.</li> <li>• A New CF C2 Structure.</li> </ul>
CAT 2 Force Generation	<ul style="list-style-type: none"> <li>• Integrated Force Development System (IFDS)               <ol style="list-style-type: none"> <li>a. the establishment of a strategic level Central Force Development Authority (CFDA) reporting to the CDS;</li> <li>b. the creation of a Network Governance Structure for the Integrated Force Development System.</li> </ol> </li> <li>• Integrated Managed Readiness System (IMRS); To meet future security challenges, the CF will deploy integrated Task Forces brought to readiness through an Integrated Managed Readiness System (IMRS). The IMRS will bring various capability components, both military and civilian, to the appropriate level of readiness by providing an integrated Force Generation (FG)</li> </ul>

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<sup>83</sup> CDS PG, 1.

<b>CDS Action Team</b>	<b>Recommendations</b>
	<p>process. The CF does not currently have an IMRS or an integrated FG process. Key recommendations are that:</p> <ol style="list-style-type: none"> <li>a. a strategic-level authority be created as the “owner” of the IMRS with responsibilities as described in this report;</li> <li>b. an Operations Support Command be created with specific responsibility for FG of NSEs, and with other responsibilities as described in this report;</li> <li>c. an IMRS Working Group be established to energize the IMRS process as soon as practicable; and</li> <li>d. a Command-Centric IMRS be adopted as the IMRS model, which includes FG of NCEs well in advance of missions.</li> </ol> <ul style="list-style-type: none"> <li>• Integrated exercise and training framework to support the IMRS system;</li> </ul> <p>The Integrated Exercise framework, as part of the IMRS, will provide a multi-year plan that will set the timing for Task Force integration, validation and certification exercise events.</p> <ul style="list-style-type: none"> <li>• Coalition Advocacy concept</li> </ul> <p>Future operations will require the Canadian Forces to increasingly work with non-traditional allies, especially in countering asymmetric threats in failed and failing states. To facilitate these operations, strong relationships will have to be developed and nurtured based on mutually-beneficial defence objectives. With some rationalization of the existing programmes and a strong governance structure, a focused and coherent programme could be implemented.</p>
CAT 3 Operational Capabilities	<ul style="list-style-type: none"> <li>• In addition to a Defence Capability Plan, and building on the CAT3 conceptual framework for operations, a CF Operating Concept (Domestic/International) should be developed to further clarify the operational implications of the CF Vision;</li> <li>• On the basis of CAT3 preliminary findings, CBP planning should be institutionalized within CF/DND;</li> <li>• To facilitate CBP, a series of real-world (SECRET AUSCANUKUS) scenarios should be developed to guide integrated FD within CF/DND. These scenarios must be clearly linked to Government objectives, prioritized according to Government policy, and approved by the CDS for planning purposes;</li> <li>• To ensure the incorporation of best-practice methodologies, CF CBP staff should conduct regular visits with their US, UK and AUS counterparts to</li> </ul>

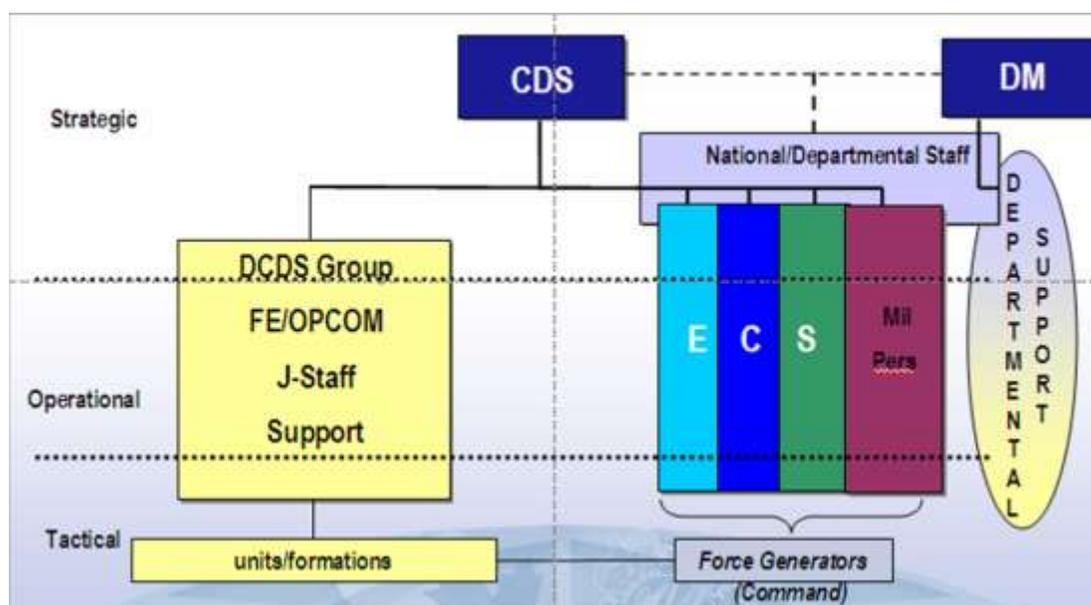
<b>CDS Action Team</b>	<b>Recommendations</b>
	<p>remain abreast of innovations; and</p> <ul style="list-style-type: none"> <li>• To ensure the authority and transparency of a top down force development process within an integrated national command structure, consideration should be given to establishing a Chief of Force Development at the 3-star level.</li> </ul>
<p>CAT 4 Institutional Alignment (Recommendations only for the near term presented here)</p>	<ul style="list-style-type: none"> <li>• Adopt a single Individual Training and Education framework such as that recommended by the Human Resources System Transformation.</li> <li>• Allow the deployment of civilians on operations through approval of the draft Defence Administrative Order and Directive and the accelerated completion of the DCDS Direction on International Operations.</li> <li>• Mitigate the delays in the currently lengthy security clearance by allowing the enrolment of recruits with a security clearance while reviewing the security process including the organization structure of DPM to increase efficiency.</li> <li>• Contribute to an interagency security “community” with increased outreach and, in the longer term, the development of an interagency professional development security programmes and curriculum.</li> <li>• Investigate the extent to which integrated military-civilian work force planning can both support transformation and increase the deployment capacity of the CF. This would include identifying roles, such as administrative ones, currently conducted by CF members that could be filled by civilians; and integrated recruitment drives to maximize synergies and efficiencies in attracting recruits or civilian employees that share common requirements with distressed military trades.</li> <li>• Vigorously pursue the pilot project for contracting authority with Public Works and Government Services Canada. This will include the designation of a senior focal point for all major projects and Departmental contracting authority on military specific procurement.</li> <li>• Identify and support a “fast-track” all major capital projects that are critical for the success of CF transformation.</li> </ul>

Source: CAT Final Reports

One can see from the guidance given and the recommendations that fell out from the analysis of the “problem” assigned to each Action team that the scope of CFT is far reaching and will result, as the four stages of General Hillier’s transformation come to pass, in a CF that will be very different at the end of Phase 4 than it was in 2005. The recommendations and the strategy for maintaining CFT momentum are encapsulated in General Hillier’s six principles.

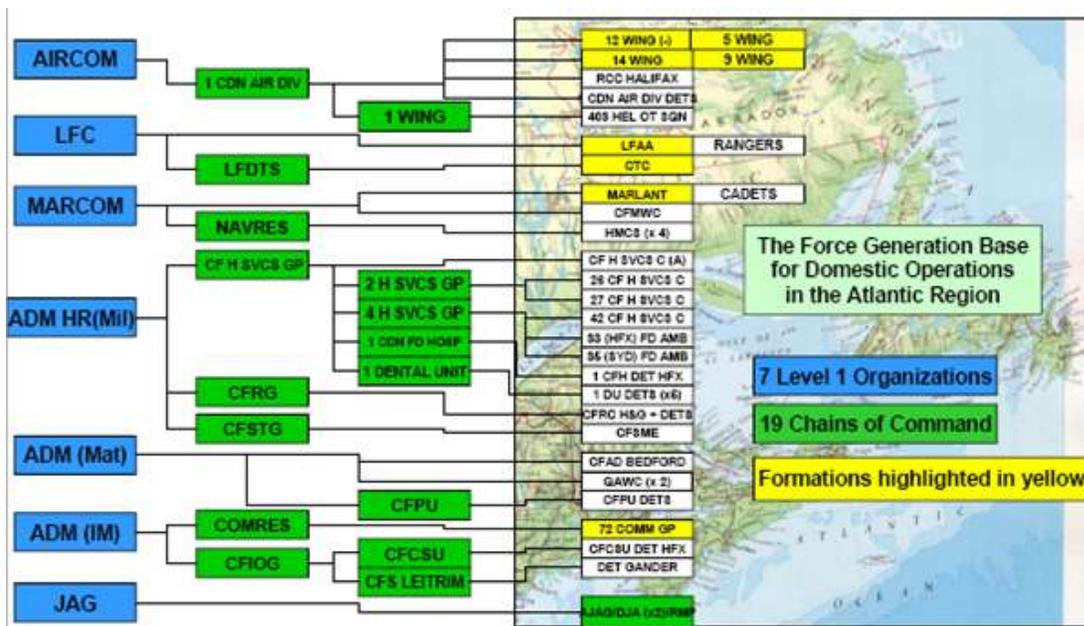
## Stage Two

This phase essentially deals with the reorganization that occurred on 1 February 2006 with the standing up of the following commands: CANCOM, CEFCOM, CANSOFCOM, CANOSCOM and the directorate for CF Development, as well as the realignment of elements of the DCDS Group. A brief description of each HQ will be tabulated for the reader to understand the magnitude of change involved, but first some illustrations of “how it was:”



**Figure 12: 2005 CF C2 Structure**

Source: CDS Presentation to AMSC, Nov 2005. 23.

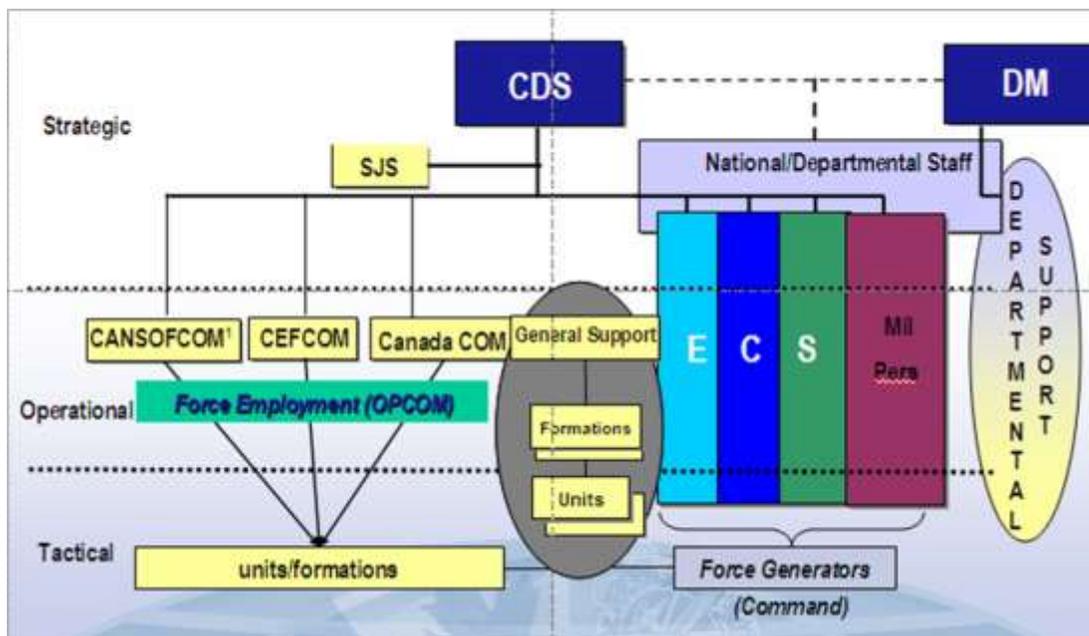


**Figure 13: The Atlantic Example of complexity in 2005**

Source: VCDS Briefing to CSC 32, October 2005, slide 26

Figure 14 was one of the preferred illustrations of the lack of unity of command because it shows just how dysfunctional the structure really was. Fortunately not all regions of Canada presented as complex an environment.

Figure 15 shows how it is today, although the General Support entity below has been renamed CANOSCOM and the additional directorate of Chief of Force Development (CFD) is not reflected:



**Figure 14: 2006 C2 Model**

Source: CDS Briefing to AMSC, Nov 2005. 26.

The key organization to note on Figure 15 is the Strategic Joint Staff, which can appropriately provide the CDS and MND with strategic analysis while allowing the operational-level commands to perform their duties better. There is still cooperation between levels but responsibilities are better defined and authority more clear.

## The new CF Command structure

**Table 9: The new commands**

Command	Role
Canada Command	As an integrated national operational command headquarters, Canada COM will allow the CF to bring the best available military resources from across Canada to bear on a crisis or threat, wherever it occurs, nation-wide. The creation of Canada COM means that for the first time, a

Command	Role
	unified and integrated chain of command at the national and regional levels will have the immediate authority to deploy maritime, land and air assets in their regional areas of responsibility in support of domestic operations.
Canadian Expeditionary Forces Command	<p>CEFCOM will bring together under one operational command the maritime, land and air force assets to conduct humanitarian, peace support or combat operations wherever they are required internationally. CEFCOM will also be responsible for setting the standards for integrated training and final certification of assigned forces – ensuring that all units and personnel selected to conduct overseas duties are fully trained and ready to do so.</p> <p>CEFCOM will help ensure the CF are more:</p> <ul style="list-style-type: none"> <li>• relevant in the new international security environment , by providing a force better suited to adapt its capabilities and force structure to deal with threats that arise from the kind of instability found in failed and failing states around the world;</li> <li>• responsive by enhancing their ability to act quickly in the event of international crises. The CF will arrive on the scene faster, move more effectively within theatre, and increase it's capability to sustain deployments; and</li> <li>• effective by providing the ability to deploy the right mix of forces – maritime, land, air and special operations – to the right place at the right time, in order to produce the desired result.</li> </ul>
Canadian Special Operations Forces Command	<p>CANSOFCOM will be capable of responding to terrorism and threats to Canadians and Canadian interests around the world.</p> <p>CANSOFCOM will be composed of Joint Task Force 2 (JTF2), the CF' special operations and counterterrorism unit; a special operations aviation capability centred on helicopters; a Joint Nuclear, Biological and Chemical Defence Company ; and supporting land and maritime forces. The SOG will be capable of operating as an independent formation but its primary focus will be to generate Special Operations Forces (SOF) elements to support Canada Command (Canada COM) and the Canadian Expeditionary Forces Command (CEFCOM). Integrating special operations forces in this manner will increase their impact in operations, as well as the range of options available to the government in the deployment of the CF.</p>

<b>Command</b>	<b>Role</b>
Canadian Operational Support Command	<p>CANOSCOM supports all CF domestic, continental and international operations. Its first task is to generate task-tailored operational support organizations for the new operational commands - Canada Command (Canada COM), Canadian Expeditionary Force Command (CEFCOM) and Canadian Special Forces Command (CANSOFCOM).</p> <p>CANOSCOM will be responsible for planning and executing the delivery of national-level operational support for theatre activation, sustainment and termination of a CF operation. Within CANOSCOM is a full range of all combat support and combat service support functions, including aspects of military engineering, health services, military police, logistics, land equipment maintenance, personnel support, resource management, and communications and information systems (CIS).</p> <p>A truly joint and interoperable organization, CANOSCOM is designed to work closely in support of the operational commands. By uniting all its operational support organizations under one command, the CF quickly and effectively achieves relevant, responsive support to operations both at home and abroad.</p>

Source: DND Backgrounders, internet, available at [www.dnd.ca](http://www.dnd.ca), accessed on 19 March 2006.

### **Stage Three**

In addition to two new military capabilities that will be described shortly, General Hillier recently (28 February 2006) initiated another review process that will change the way headquarters (HQ) are staffed and manned through:

The down-ranking of all staff positions; the use of Non-Commissioned Members (NCM) in positions traditionally held by officers; the co-location/ consolidation/ centralization of services and command centres that support all HQs, allowing for staff reductions; and where appropriate, the use of “matrixed” staff support.<sup>84</sup>

These are departures from the current norm and as such will have an impact on the culture of the CF.

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<sup>84</sup> CDS Direction, Evolution of Operational Headquarters, 28 February 2006, 2.

## Standing Contingency Task Force

The Standing Contingency Task Force (SCTF) is still in its developmental stages.

The vision is for a rapid reaction force:

The SCTF will be established to respond rapidly to emerging crises. This high-readiness task force will be made up of existing, designated maritime, land, air and special operations elements organized under a single integrated combat command structure. It will be ready to deploy within 10 days' notice and will provide an initial CF presence to work with security partners to stabilize the situation or facilitate the deployment of larger, follow-on forces should circumstances warrant. The SCTF will also provide a land- or sea-based command element capable of leading a multinational contingent for a period of up to six months,<sup>85</sup>

## The Canadian Special Operations Regiment

The Canadian Special Operations Regiment (CSOR) will be a highly trained, high mobility special operations force that is capable of independent operations, as well as supporting both special and conventional operations forces. At full strength of approximately 750 personnel, the battalion sized unit will be composed of three direct action companies and a special-forces company that will complement other capabilities in CANSOFCOM, including JTF 2. Personnel in the unit will possess a host of skills that enable them to operate in a variety of terrains and environments. Drawn from all parts of the CF, the unit will provide the Commander CANSOFCOM with a broad range of SOF capabilities to operate in Canada and abroad. Highly flexible and adaptable, unit members will be able to work in small groups for extended periods of time without requiring significant support.<sup>86</sup>

These two new units reinforce the tendency towards joint operations with the added effects that a concentration of Canadian military forces working together can achieve as a symbol and focal point for national strategic objectives. Both of these concepts are without precedent other than the amphibious operations done as a combined joint force during World

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<sup>85</sup> DND Backgrounder, CEFCOM, Internet, [www.dnd.ca](http://www.dnd.ca) accessed 19 March 2006.

<sup>86</sup> Doug Allison, "Highly trained, high mobility special operations force." *The Maple Leaf* Vol 8 no. 44. 14 Dec 2005. Ottawa: DND, 2005. 17.

War II. Even though the elements retain their distinctive uniforms, there is no doubt at the operational level that joint Canadian operations are the way of the future.

### ***Stage Four***

The Analysis and recommendations for the evolution of CF force generation design and execution has not been a priority issue. There is ongoing work and the CFD will present recommendations to the CDS when sufficient analysis has occurred. This analysis will have to take into consideration the current transformations during Phase Three and is therefore in a data collection and organizational state. Some of the findings and recommendations from the CDS CAT final reports will be addressed and more direction will be provided from the CDS as transformation continues since he “will remain personally engaged.”<sup>87</sup>

In this chapter we have uncovered some of what CFT has already changed and the fact that the IPS 2005, the DPS 2005 and CFT vision were all worked on in a collaborative manner at the macro level. This too is an innovation without precedent. CFT is an ongoing process, but already significant structural change has occurred, and the institution is consolidating its gains through a feedback and analysis process that is supported by confirmatory orders and new policies and TTPs. General Hillier is setting the conditions to “Win at change” and making sure the necessary steps to consolidate gains are being followed.

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<sup>87</sup> CDS 28 Feb Evolution Operation Headquarters, 3.

## Conclusion

As was presented, the Information Age is displacing the Industrial Age at the dawn of the new millennium as the next human era. The domains of technology, economics (globalization, RBA), politics (reform or transformation of international organizations or treaties) and security (War on Terror) have been in a state of constant and dynamic flux, particularly since the end of the Cold War. Canada has been searching for its place in this new environment, recognizing in IPS 2005 that it can have a role to play on the international stage in order not only to achieve its security goals, but also to make the world a better place. The asymmetric environment in which all departments of the GoC must now operate and the far-reaching changes induced by the RMA require a concerted and comprehensive approach in order to achieve some sense of orderly transformation and avoid an ineffectual evolution.

This paper has determined that the different RMA are evolutionary in nature, despite the radical concept of *Power to the Edge* whose time is not yet here. What has been observed is that to a large extent transformation abroad has been heretofore primarily reactive, and principally driven by the “network.” To some extent, the risks associated with this method are being mitigated by the adoption of a proactive approach based on capabilities. CBP, while it must remain cognizant of threats and other “trends,” transcends the inevitable fascination with technological progress by looking forward to an anticipated conceptual environment and the necessary ways of countering potential threats (among other things) instead of on the means. A further finding was that people are the instruments of transformation, whereas technology can only provide them with the tools that will evolve as they react to their new circumstances.

The RMA being global in nature, it is not surprising to find that transformation abroad is similar in nature to that occurring at home. CFT is therefore appropriately mindful of change among Canada's closest allies, yet has embarked on a path within its means and best suited for its emerging role as a partner in the 3D+T approach. This is an innovative approach for GoC and it has also been shown that General Hillier was an agent of change who has had some influence on its development. Furthermore, the study of the 1964 White Paper on Defence illustrated how different CFT is from previous evolutions. While MND Hellyer's plan for "unification" and its enactment by Parliament was undoubtedly a watershed event, the fact that it was driven, more precisely imposed, on the military by the MND and GoC, demonstrates that it was not collaborative in nature. It was not even collaborative at the macro level, since Paul Hellyer practically wrote it himself without consulting his Cabinet peers.

In the discussion on organizational theory, the CAR model of Pigeau and McCann is particularly noteworthy since its fundamental concept of the requirement for a graduated relationship between all the planes in the three dimensional model is a necessary ingredient in General Hillier's third and fifth principles of "Authorities, Responsibilities and Accountabilities," and "Mission Command." Both of these are also important to the first and sixth principle of "Canadian Forces Identity," and "An Integrated Regular, Reserve and Civilian CF" since the cultural changes necessary to achieve these last two will also involve attitude changes in the former ones as well. Finally, the second principle of the "Command-Centric Imperative" is also a cultural shift away from bureaucracy and towards the fifth principle of "Operational Focus." That is not to say that HQs and their staffs have a lesser role to play, nor does it mean that Commanders can ignore staff recommendations, but that

all efforts and interactions between subordinate and senior commanders and staffs should be with a view to achieving operational objectives: getting the mission accomplished.

It was also brought forward during the discussion on organizational theory that institutional behaviour, particularly when confronting change, could pose challenges to transformation, or “innovation” in the business world, and that General Hillier has been careful to create the conditions for continued success, be it in defining an understandable vision, in communicating the vision or by developing a robust campaign plan with short, mid and long term goals (and thereby measurements). These results are being consolidated in policy and practice. He is also a visible and tireless champion of change and remains committed to the vision and the institution, just as John Kotter’s eight steps indicate he should be. This is another innovation on his part, since he has taken the time to inform himself of the challenges before embarking the CF into transformation, and designing a plan as a consequence. This is getting close to “power at the edge” since he has not been content to remain atop the pyramid and give orders for change, but has taken his message to the front lines and other places (other departments, other agencies) in order to get buy-in and ownership at all levels of the vision. In essence, it is not really his vision, but the CF Vision, that each CF member should espouse and seek to enable the six principles.

Finally, some of the details about CFT were presented. A new command structure, a new strategic staff, more changes to follow in the further delineation of ministerial and military responsibilities, and the integration of all members of the defence team is ongoing. The joint nature of future operations with a view to having a recognizably substantial Canadian impact in a chosen theatre, instead of continuing with previous trends in allocating naval, air or land forces to larger coalition forces. This is necessary to best achieve the

synergy of 3D+T as well as to provide Canadian citizens at home a credible and visible contribution to Canada's "Role of Pride and Influence in the World." There should be no doubt left that General Hillier's vision of CFT and its implementation of IPS 2005 is indeed an innovation without precedent.

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