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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
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The Need for a CF Knowledge Champion

EXERCISE NEW HORIZONS

By /par Major C.L. Cloutier
Syndicate 1/Groupe d'études 1
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ABSTRACT

Canada's primary military allies have recognized that we are currently undergoing a Revolution in Military Affairs (RMA) requiring transformation to knowledge-centric technologies, organizations and doctrine. Those allies have put in place the necessary structures to make such a transformation. The Canadian Government and the Department of National Defence have indicated that they intend to continue participating in military operations as a member of a coalition, requiring continued interoperability with our traditional allies. However, without undertaking significant transformation efforts the Canadian military runs the risk of losing its interoperability and even being excluded from future coalitions.

The transformation of the CF to a knowledge superiority organization will require the adaptation of new technologies, a change to a joint military culture and directed leadership to oversee and coordinate all transformation efforts. The current CF leadership is ineffective in providing such leadership. The organization requires the appointment of a knowledge champion to focus and to coordinate transformation efforts throughout the CF.

The Need for a CF Knowledge Champion

As Chief of the Defence Staff, I call on all members of the Canadian Forces to embrace transformation, to deliver on our operational commitments so that we can continue to demonstrate our relevance to Canadians, and to move forward as a solid and committed team in the months and years ahead.¹

INTRODUCTION

The terms ‘transformation,’ ‘innovation’ and ‘revolution in military affairs’ (RMA) are terms that have been used frequently and often interchangeably in relation to strategies for how today’s military organizations can prepare themselves for the challenges of tomorrow. In a time when the military focus has moved away from conventional conflicts with traditional enemies to a need to be prepared for asymmetric threats from previously unrecognized adversaries, it is generally accepted that the military organizations of today need to transform themselves to adequately respond to this new type of threat and the new world environment. What exactly is the RMA that is driving military transformation? According to the CF “a Revolution in Military Affairs (RMA) is marked by a fundamental transformation in military affairs that results from changes in weapon technology and equipment, operational concepts and military organizational methods.”² The CF needs to participate in the current RMA primarily because a failure to adapt will result in a reduction or loss of interoperability or even potentially an inability to participate in coalitions with its traditional allies. As those allies are undergoing transformation activities now, the CF needs to do the same.

¹ Department of National Defence, *A Time for Transformation - Annual Report of the Chief of the Defence Staff 2002-2003*, (Ottawa: Director General Public Affairs, 2003), IV.

² Department of National Defence, VCDS website entitled “the Revolution in Military Affairs: Canada’s Window on the Future”; On-line; available from http://www.vcds.dnd.ca/dgsp/pubs/rep-pub/dda/rma/primer_e.asp; Internet; accessed 29 March 2004.

The current RMA could be referred to as the knowledge RMA. Although driven to some extent by advances in technology, and in particular by communications and computer technologies, the true revolution is occurring in the military operational concepts being developed because technological advances allow for a new method of warfighting. This new method of warfighting is based on what was referred to in Australia's Strategic Policy of 1997 as "a knowledge edge." The concept was defined in the policy paper as "the effective exploitation of information technologies to allow us to use our relatively small force to maximum effectiveness."³ Given that the CF is also what would be considered a relatively small force, exploiting information technologies to maximize the effectiveness of that force is a concept worth pursuing.

The CDS, as quoted at the beginning of this paper, has called on all CF members to embrace transformation – the transformation being driven by the current knowledge RMA. The Concise Oxford Dictionary (COD) defines transformation as "a marked change in nature, form, or appearance."⁴ "In its simplest interpretation, [the current] transformation is understood as the application of information technologies to the conduct of warfare. But it also means a good deal more."⁵ Therefore, the CF will have to change in a variety of ways, as "a transformation strategy designed to fully leverage

³ Australia, Department of Defence, *Australia's Strategic Policy 1997* (Canberra: Directorate of Publishing and Visual Communications, 1997), 56.

⁴ *Concise Oxford Dictionary* (Tenth Edition) on CD-ROM 2001 Version 1.1, (Oxford: Oxford University Press, 2001).

⁵ Daniel S. Hamilton, Chapter 1 "What is Transformation and What Does it Mean for NATO?" in *Transatlantic Transformations: Equipping NATO for the 21st Century*, ed. Daniel S. Hamilton, (Washington, D.C.: Center for Transatlantic Relations, 2004), 4.

information and information technologies requires alterations in our concepts of operation, doctrine, organizations and force structure.”⁶

The government of Canada under the new leadership of Prime Minister Paul Martin has indicated its intention to reconsider current defence policy and, potentially, structure and capabilities, in the context of an overall review of this nation’s place in the world. In the Prime Minister’s reply to the most recent Speech from the Throne, he stated “the Government is...developing a contemporary approach to: our foreign policy objectives, ...our defence requirements...ensuring, as we invest in defence, that we do so to meet the next challenge and not the last one.”⁷ The Minister of National Defence, David Pratt, recently indicated that “some things do not need to wait the outcome of a defence policy review. He endorsed ... the need to transform to a 21st century fighting force.”⁸ The Canadian military’s closest ally is the U.S. military and the U.S. military is undergoing the most advanced military transformation activity. It is inevitable that the Canadian government will look to ensure the Canadian military remains interoperable with the U.S. This intention is specified in Strategy 2020, which states one of the CF’s primary long-term strategic objectives is to “strengthen our military to military

⁶ David S. Alberts, *Information Age Transformation*, (Washington: Command and Control Research Program, 2002), 29.

⁷ Office of the Prime Minister website, “*Address by the Prime Minister in Reply to the Speech from the Throne, February 3, 2004*,” available from <http://www.pm.gc.ca/eng/sft-ddt.asp?id=2> ; Internet; accessed 10 April 2004.

⁸ Colonel (Retired) Howie Marsh, “A Summary of the 20th Annual CDAI Seminar, 26 February 2004,” *On Track CDAI’s Defence Affairs Quarterly* 9, no. 4 (March 2004): 7.

relationships with our principal allies ensuring interoperable forces, doctrine and C⁴I (command, control, communications, computers, and intelligence).”⁹

THESIS

Within the U.S., the military transformation is composed of three effects, “first, it is channelling the course of military-technological innovation; second, it is giving rise to new tactics and operational concepts; and third it has triggered a period of organizational experimentation.”¹⁰

The transformation of the Canadian Forces (CF) to a knowledge-based institution, possessing a capability that will be referred to as ‘knowledge superiority’ will also require three elements: new technology, a change in culture, and strong, directed leadership. The current ad-hoc approach to transformation in the CF is ineffective. In order to transform, the CF requires a knowledge champion be appointed to focus and to coordinate transformation efforts throughout the CF.

An examination of each aspect of the transformation requirements of technology, culture, and leadership will indicate the flaws in the CF’s current approach to transformation. Technology acquisition and adoption decisions are being made on a piece-meal basis, without ensuring they fit into an overall strategic vision of the technologies needed for the CF of the future. The CF culture remains one rooted in the past, environment-oriented and efforts to create a joint culture to this point have been superficial and ineffective. The leadership of the CF remains focused on the crises of

⁹ Department of National Defence, *Shaping the Future of the Canadian Forces: A Strategy for 2020*, (Ottawa: National Defence Headquarters, June 1999), 10.

¹⁰ Andrew Latham, MacAlister College, St Paul, Minnesota, *The Revolution in Military Affairs: Implications for the Canadian Armed Forces*, Council for Canadian Security in the 21st Century, Research Papers; Internet available at: www.ccs21.org ; accessed 21 January 2004.

day-to-day operations and budget constraints. The current leadership is constrained by these ongoing crises, and by its inability express the needs of the future CF to the Canadian government and public. A comparison of the CF with other military organizations' transformation efforts will be made. As well, a contrast will be shown between the methods used to bring about previous successful change activities within the CF and current transformation activities. Both these will demonstrate the need for the appointment of a knowledge champion. Such a position must be embodied in an individual and office with sufficient credibility and authority to be given responsibility for oversight and coordination of all efforts to transform the CF into a knowledge superiority organization.

NEW TECHNOLOGY AND THE KNOWLEDGE CHAMPION

The American military is the undisputed world leader in the development and utilization of military technologies. There is no possible way the CF, given its limited budget and modest size, could potentially hope to match the U.S. in the technology arena, particularly with regards to research and development of new technologies. However, the CF does have an advantage over many other military organizations in that it is a preferred ally of the U.S., and as such holds a privileged position with regards to leveraging the technological advances developed by that nation. Canadian access to such technologies is provided at relatively low cost, at least as compared to the original investment of research and development funding required. Canadian government expenditures on R&D over the past twenty years have averaged approximately 1.5% of Gross Domestic Product

(GDP), as compared to American government R&D expenditures of about 3% of GDP.¹¹ When one considers that the American GDP in 2002 was more than ten times the GDP of Canada for that same year, it becomes apparent that in terms of sheer spending on R&D the Canadian government cannot even come close to matching the investment of its American neighbour, and thus could not expect to have the same sort of resulting technology development.¹² The Canadian military can, therefore, benefit greatly from privileged access to the results of American R&D.

The Canadian position as a preferred ally of the U.S. comes as a result of a multitude of close binational military ties between the two nations, ties such as joint cooperation in the Permanent Joint Board on Defence (PJBD), the Military Cooperation Committee (MCC), the recently established Binational Planning Group (BPG)¹³ and of course the combined command for defence of North American aerospace, NORAD.

Canada's participation in projects led by the U.S. military such as the Joint Strike Fighter (JSF), the Canadian Military Communications Satellite system (CANMILSATCOM¹⁴) or even, potentially, the National Missile Defence (NMD) project

¹¹ Andrew Richter, Institute of International Relations, British Columbia, *Canadian Research and Development*, Council for Canadian Security in the 21st Century, Research Papers; Internet available at: www.ccs21.org; accessed 21 January 2004.

¹² The World Bank Group Quick Reference Tables from the World Development Indicators database, World Bank, July 2003; On-line; available at: <http://www.worldbank.org/data/databytopic/GDP.pdf>; Internet; accessed 4 April 2004.

¹³ Philippe Lagassé, "The SORT Debate: Implications for Canada" *IRPP Working Paper Series* no. 2003-01 (November 2003): 24.

¹⁴ CANMILSATCOM is a project which permits Canada, under MOU with the U.S. DOD, to participate in their Advanced Extremely High Frequency system. Terminal acquisition and support by DND will be permitted through the U.S. Foreign Military Sales (FMS) program, and the Canadian government will seek offset Industrial Regional Benefits (IRBs) of up to 100% of the contract value. Information from National Defence website on Protected Canadian Military Satellite Communications Project; On-line; available from http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/ddm/dpr2003/srlmcp/lmcp1_e.asp; Internet; accessed 4 April 2004.

are all examples where Canada's relatively modest contribution provides enormous gains in the level of technology access provided by the U.S. Not only does the Canadian military gain access to the technology and equipment developed through such projects, but as part of the quid pro quo for Canada's participation, Canadian industry also gains access to a share of the development and government acquisition funding through such projects. An additional benefit, then, is the importation of the skills and technology itself into the Canadian economy and industrial sector.

There are several reasons why Canadian military access to American military technology is critical. The first reason is that the CF has stated its aim to continue and even improve its interoperability with its American ally in the future. "The US...will probably act as the lead nation in most future operations in which Canada will participate...it is essential that the CF maintain interoperability with US forces..."¹⁵

The second reason is that the American military has made greater progress than any of its allies along the transformation-driven path toward jointness in all aspects of military operations and acquisitions. The Canadian military's best opportunity to improve its own jointness is to adopt many of the technologies which have been developed with a joint operating concept in mind, rather than trying to retroactively adapt technologies to function in a joint environment. One might say of the CF "the recognition that transformation is inherently joint and coalition has not yet reached

¹⁵ Department of National Defence, *Canadian Forces Strategic Operating Concept, Draft 4.0*, (Ottawa: National Defence Headquarters, 26 March 2004), 12.

critical mass.”¹⁶ The sooner the CF recognizes and adopts such a mindset, the more quickly the organization will be able to transform itself.

Another reason for the criticality of the CF’s privileged access to American technologies is that “conventional military power rests, increasingly, on the ability of states to put together combinations of sensors and weapons and to make them function together in a fluid environment.”¹⁷ The United States is the nation which has best developed systems that best accomplish this synergy – achieving the interoperability between weapons platforms and sensors to increase the lethality and precision of each.

One might argue, of course, that the CF can ill afford to invest in new knowledge-oriented technologies when its traditional weapons systems and platforms are ‘rusting out’ and in dire need of modernization or replacement. However, ignoring the need to invest in knowledge technologies in favour of traditional equipment would be a grave error. Although initially costs may rise due to the overlap over maintaining traditional equipment and acquiring knowledge technology, in the long run efficiencies will be achieved. U.S. defence analysts have studied the issue and determined that knowledge investment would “develop a robust, information-based “system of systems.” This system of systems would in turn boost efficiency to the point where DoD could cut future requirements for large, forward-deployed military forces.”¹⁸ The CF could undoubtedly achieve similar efficiencies through effective use of information technologies. “Generally

¹⁶ Alberts, *Information Age Transformation*...14.

¹⁷ Eliot Cohen, “Technology and Warfare” in *Strategy in the Contemporary World*, ed. John Baylis, James Wirtz, Eliot Cohen, Colin S. Gray, (New York: Oxford University Press, 2002), 246.

¹⁸ Colonel Stephen L. Wolborsky, *Swords Into Stiletos: The Battle Between Hedgers and Transformers for the Soul of DOD*, (Boston: Harvard University’s Weatherhead Center for International Affairs, 2000), 3.

speaking, RMA makes changes in strategy and reduces battle space to increase effectiveness of each fighting unit. This is cost effective.”¹⁹

Access to modern technology relevant to the transformation of the CF, then, would not appear to be a barrier to the CF’s ability to transform itself. Indeed, the implementations of some modern, made-in-Canada technologies provide examples of technological innovation in the information technology field that rivals that of any nation. One such example is the Iris Digital Communications System that has given the “Canadian Army...the most integrated digitized command and control system in the world.”²⁰ As impressive as the description of the system may sound, however, there is a problem with it. The problem with this highly modern communications system is that it was developed and purchased for, and will be used solely by, the Canadian Army. The interoperability of the system with the other CF environments, if it is to come, will be developed as a follow-on project. Such has been the case all too often with CF system acquisitions, they are acquired to address a single capability deficiency, but are not planned as part of an overall holistic approach to providing a suite of systems which will be interoperable with both allies and the other CF environments. A knowledge champion would provide oversight to ensure a more holistic approach to systems acquisition.

The essence of the quandary of what technologies the CF should be acquiring, then, is that there is no single office or individual considering capital projects in light of future capabilities required according to a ‘transformation strategy’ for the organization.

¹⁹ Sharjeel Rhizwan, “Revolution in Military Affairs (RMA)” in *Defence Journal* 4, no. 2 (September 2000) [journal on-line]; available from <http://www.defencejournal.com/2000/sept/military.htm>; Internet; accessed 28 April 2004.

²⁰ Department of National Defence, Army Equipment, Iris Overview, On-line; available from http://www.army.forces.gc.ca/lf/English/2_0_62_1.asp?uSubSection=62&uSection=5; Internet; accessed 28 February 2004.

“Strategic planning tends to be based on a ‘bottom up’ as opposed to ‘top down’ identification of ... capability requirements for the CF, which results in demands on resources over the longer term that far exceed the funds available.”²¹ A knowledge champion would provide such top down oversight, currently lacking, and help provide a framework against which acquisition decisions could be judged, in light of how the purchased systems would contribute to the overall transformation of the organization.

CULTURAL CHANGE AND THE KNOWLEDGE CHAMPION

Even if such acquisition issues were to be overcome, and appropriate technologies were to be put in place, transformation to a knowledge superiority organization requires other elements of change to achieve the increased speed of decision-making required in the future. “Quick decision-making [an essential element of the current military RMA] comes not only from technology, but also from appropriate doctrine, focussed joint organisational structure and well-trained personnel.”²² Changes to any of the foregoing elements – doctrine, organization and the training of personnel – is bound to encounter significant resistance. Organizational change from service environments to a joint environment, and the doctrinal changes needed to facilitate such change are among those most resisted.

Changing any military’s doctrine...is like trying to stop a tank armor by throwing marshmallows at it. The military, like any huge modern

²¹ Department of National Defence, *Achieving Administrative Efficiency, A Report to the Minister of National Defence by the Advisory Committee on Administrative Efficiency*, (Ottawa: NDHQ, August 21, 2003), vii.

²² Department of National Defence, *Capability Outlook 2002-2012*, available from http://www.vcds.forces.gc.ca/dgsp/00native/rep-pub/CAPABILITY_OUTLOOK_E.pdf; Internet; accessed 1 March 2004.

bureaucracy, resists innovation – especially if the change implies...the need to learn new skills and to transcend service rivalries.²³

The COD defines an organization as “an organized body of people with a particular purpose, such as a business or government department.”²⁴ The COD also defines culture as “the customs, institutions, and achievements of a particular nation, people or group.”²⁵ The CF, as an organization, has its own organizational culture. Not only the CF, but also each of the three environmental components could also be said to have their own unique cultures. Like any such organization, the CF and its component environments hold to their existing cultures, accepting change, and especially sweeping transformational change, only with difficulty. “The current CF structure, with its bureaucratic and hierarchical levels of command, leads to slow, sometimes ineffective change. Historically, it has taken decades to develop new concepts and to field new systems.”²⁶ This is not surprising given that “RMAs are, by nature of the potential operational and organizational changes, antithetical to existing cultural norms and bureaucratic structures.”²⁷ The current culture of the CF, despite being a unified force, is one of three solitudes, with the majority of members clinging to an identity associated with the air force, army, or navy environment. Such a culture impedes the ability of the organization to transform to a joint approach to operations.

²³ Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, (Toronto: Little, Brown and Company, 1993), 52.

²⁴ *Concise Oxford Dictionary*.

²⁵ *Concise Oxford Dictionary*.

²⁶ Department of National Defence, *Capability Outlook 2002-2012*.

²⁷ Jeffrey R. Cooper, Chapter 5 “Another View of the Revolution in Military Affairs,” in *In Athena's Camp: Preparing for Conflict in the Information Age*, ed. John Arquilla and David Ronfeldt, (Santa Monica, Calif.: RAND, 1997), 100.

One might argue that the CF has begun developing a jointness capability through the establishment of the Joint Operations Group (JOG). The JOG was created with the intention of it being one of the changes required to transform the organization, but this change as yet has not made any significant improvement in the CF's transition toward being a truly joint organization. The JOG does not provide a functional command with actual troops trained and prepared to function as a joint force. In fact, to this point, the JOG provides little more than a coordination function providing a "operational command and control capability"²⁸ to deployed units provided by each of the three environmental commanders. It is difficult to see how such a minimal joint effort is going to lead to the envisioned attribute in the CF Strategic Operating Concept, which states that in future:

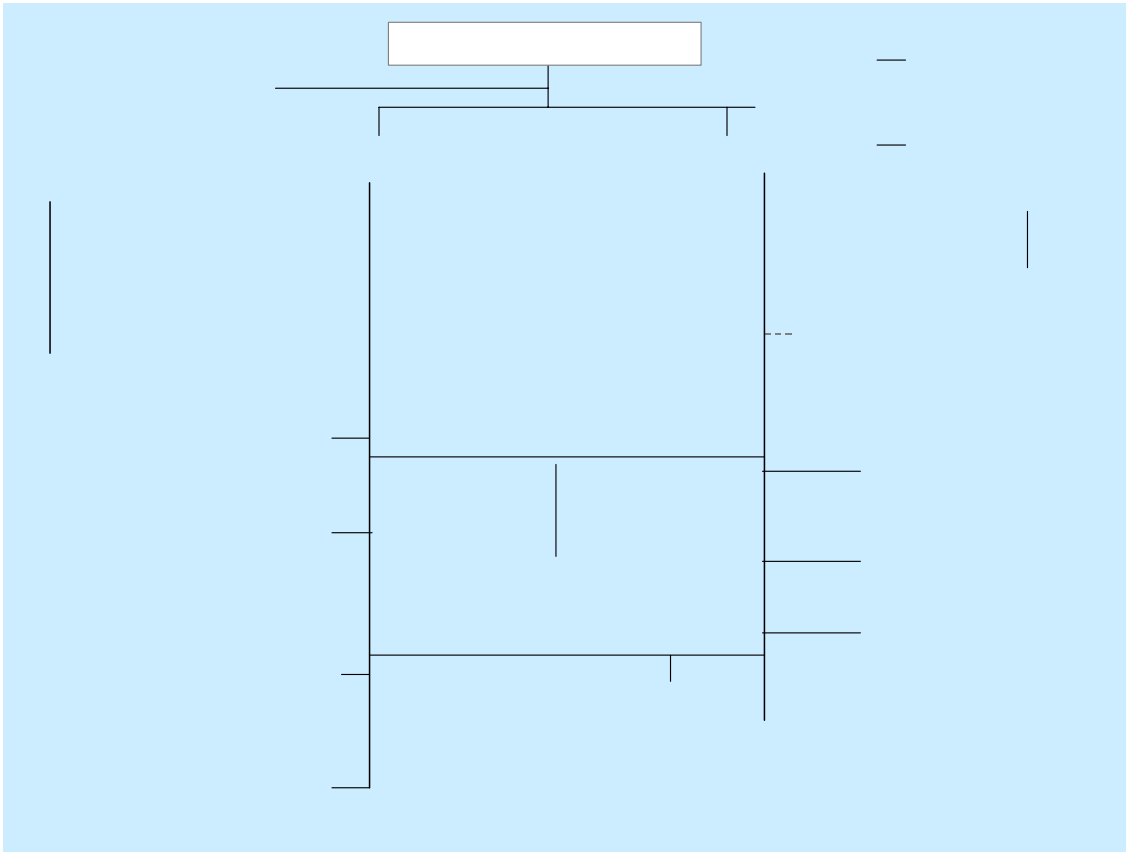
At the strategic level, all CF operations will be inherently joint. At the operational and tactical levels, individual missions will determine the required joint composition of the contributed forces, with the CF having the ability to conduct single environment to fully joint operations.²⁹

Organizations are relatively transparent in indicating the priorities allotted to the various activities they undertake. Within a hierarchical organization such as the CF, it is clear that the higher in the organization the lead individual or office for an activity is placed, the higher the level of importance placed on that activity. If one looks at the overall organization chart of DND/CF, Figure 1, one can see that there is no indication of an office or organization responsible for ensuring the transformation of the Canadian military. Nor is there a specific

²⁸ Department of National Defence, *Canadian Forces Joint Operations Group* website; On-line; available from http://www.forces.gc.ca/site/operations/CFJOG/index_e.asp; Internet; accessed 26 April 2004.

²⁹ Department of National Defence, *Canadian Forces Strategic Operating Concept*... 15.

indication within the organization chart of an office responsible for promoting “jointness” as a key aspect of the transformation of the CF.



will be discussed later in this paper within the context of leadership. In addition, among the Unified Combatant Commands of the U.S. military, the organizations assigned operational control of U.S. combat forces, one of the commands is specifically named Joint Forces Command and has been given the mandate to lead the transformation of U.S. joint warfighting into the 21st Century.³² A diagram showing that the Joint Forces Command is prominently positioned within the U.S. military hierarchy is shown at Figure 2.

Combatant Commands

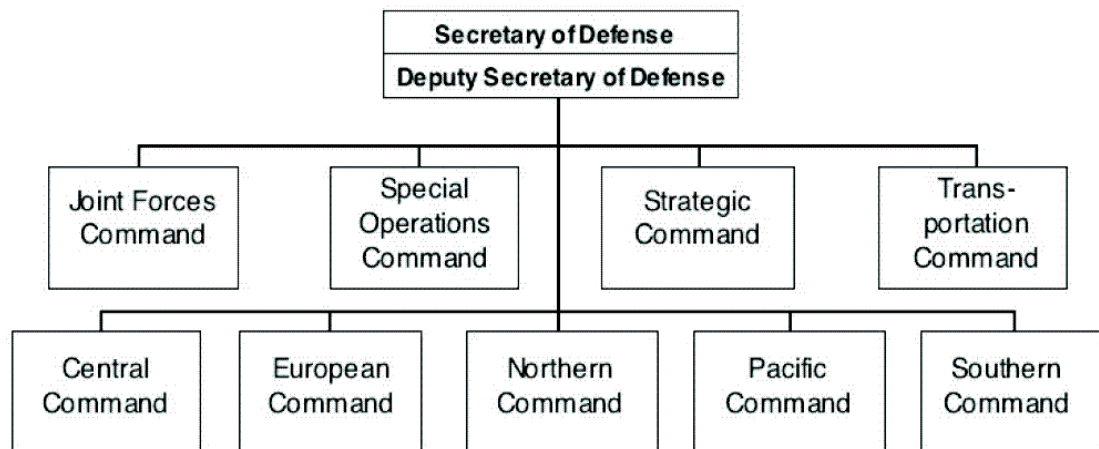


Figure 2 – Joint Forces Command within the Department of Defense³³

At much the same time the U.S. military was implementing Joint Forces Command to facilitate its transformation, NATO, another of Canada’s primary alliances, was recognizing the need to transform. By November 2002, when the NATO Summit was held in Prague, the leaders of that organization had come to the realization that the

³² Department of Defense, U.S. Joint Forces Command website, available from <http://www.jfcom.mil/about/History/abthist6.htm> ; Internet; accessed 14 March 2004.

³³ Department of Defense, DoD website, available from <http://www.defenselink.mil/> ; Internet; accessed 28 February 2004.

Alliance needed to transform itself to face the challenges of the future, referring to the event as the “Transformation Summit.” One of the primary changes agreed upon at the Summit was to create a

Streamlined military command – NATO’s command structure will be restructured into a leaner, more efficient, effective and deployable command structure, in order to meet the operational requirements for the full range of Alliance missions. There will be two strategic commands, one operational –the strategic command for Operations (Europe), and one functional – the strategic command for Transformation (United States).³⁴

The actual implementation of the new NATO command for transformation, titled Supreme Allied Commander Transformation (SACT) became effective on 19 June 2003.

“In creating this new command, NATO has assured itself of being able to employ an institutionalized tool for managing change, coordinating innovation, and harnessing the power of nations to move ahead towards a new way of war fighting.”³⁵ Although NATO depends on its member nations to contribute troops and capabilities, the establishment of SACT ensures that its transformation efforts are focused within a high-level office capable of both monitoring and driving its transformation efforts. To further emphasize the overall coordination of transformation efforts between NATO and its member nations, particularly its most powerful member, the Commander of U.S. Joint Forces Command, Admiral E.P. Giambastiani, is dual-hatted as NATO's Commander SACT.

When one considers the limited mandate and capability of the JOG in comparison with the far-reaching transformation mandate of both the U.S. Joint Forces Command and

³⁴ NATO Update document dated 25 November 2002, available at <http://www.nato.int/docu/update/2002/11-november/e1121e.htm>; Internet; accessed 15 March 2004.

³⁵ Lieutenant General Michel Maisonneuve, “Transformation A New Buzzword,” Bravo Defence, (Winter 2003)[journal on-line]; available from http://www.vcds.forces.gc.ca/dgsc/pubs/cel/bravo/winter03/NATO_e.asp; Internet; accessed 1 March 2004.

NATO's SACT, one can see that the Canada military has a long way to go toward a truly joint culture. The emphasis on transformation of the organization is not apparent, and current efforts are insufficient. Much as current CF strategy documents may emphasize a need to be more joint in the future, as of yet the structural changes needed to arrive at that capability have not been made. A knowledge champion, driving the concept of joint operations to improve the CF's knowledge superiority, would bring to bear the pressure needed to make such substantive changes.

DIRECTED LEADERSHIP AND THE KNOWLEDGE CHAMPION

The other essential element required for the CF to successfully transform itself into a knowledge superiority organization is strong, directed leadership toward that end. One limitation of the current leadership's ability to take such steps was identified in a recent report by the Minister's Advisory Committee on Administrative Efficiency as a lack of originality in thinking within the CF, a need to "shift toward greater creativity and flexibility..."³⁶ The difficulty with attempting such a shift is that the individuals being asked to shift their mindset have progressed through and achieved success in their careers within the current organizational culture. It is therefore difficult to change the attitudes and behaviours of individuals away from what have previously been successful and rewarded methods for them and their predecessors.

The same report to the Minister further emphasized the problem of low risk tolerance within the CF/DND, stating that as a result, managers resist "all but the most

³⁶ Stephen Thorne, "Slash Military Bureaucracy – Report," *The Halifax Herald Limited*, Wednesday, February 4, 2004, available at <http://www.herald.ns.ca/stories/2004/02/04/Canada188.raw.html>; Internet; accessed 4 February 2004.

incremental change.”³⁷ To succeed in changing the existing risk-averse mindset, “there must be room for innovators and ‘heretics’. The CF organizational culture must be identified, monitored and improved.”³⁸ Currently, there is no organizational focus within the CF attempting to identify and determine ways to improve its traditional conservative culture. “Defence relies extensively on consensus as a decision-making philosophy.”³⁹ Despite a number of studies identifying the need for more individual accountability, management by consensus continues to be the norm, and when consensus is not achieved, decisions tend to be delayed until a compromise solution is reached.

Another limitation identified by the report to the Minister was the high turnover rate among General and Flag Officers, giving them “too little time at the strategic level... to develop the depth and breadth of experience required to contribute fully to institutional leadership at the most senior levels.”⁴⁰ In recognition of this problem, the Minister’s Committee on Administrative Efficiency recommended that the MND appoint a “senior official for a five-year term to lead transformational change in Defence.”⁴¹

The CF is certainly not the only military organization faced with the difficult challenge of transforming itself. Even in the U.S., where the military establishment has arguably embraced the need for transformation, Admiral (retired) William Owens, a former Vice Chairman of the Joint Chiefs of Staff criticized the military’s unwillingness

³⁷ Department of National Defence, *Canadian Forces Strategic Operating Concept*...15.

³⁸ Commodore Daniel McNeil, “Technology, History and Revolution in Military Affairs,” *Canadian Military Journal* 1, no. 4, (Winter 2000): 17.

³⁹ Department of National Defence, *Achieving Administrative Efficiency*... iv.

⁴⁰ Department of National Defence, *Achieving Administrative Efficiency*...vii.

⁴¹ Department of National Defence, *Achieving Administrative Efficiency*...xii.

to change while speaking at a conference on transformation held in the spring of 2001. Adm (ret'd) Owens "argued that true transformation is being held back by service parochialism, leadership without vision, stovepipe organizations, a lack of jointness, and too much attachment to old platforms and technologies."⁴² However, later in 2001, undoubtedly as a result of the terrorist attacks of 11 September of that year, the need to transform the American military became one of the government's preeminent priorities. As a result, the President appointed retired Navy Vice Admiral Arthur K. Cebrowski as the director of the Office of Force Transformation (OFT) within the Office of the Secretary of Defense.

In announcing the OFT creation and Admiral Cebrowski's appointment as the first incumbent, President Bush stated:

Art Cebrowski is the perfect guy to promote and analyze our transformation efforts, I chose him for his broad military experience, his strong credentials in joint operations and information technology and his grasp of the cultural and technical issues involved in transformation. Cebrowski has been called the "father of network-centric warfare," one of the centerpieces of the department's transformation planning.⁴³

The President, in this statement, indicated his faith in Vice Admiral Cebrowski's capabilities and credentials to fulfill the mandate of the Director of Force Transformation. By placing the Director of Force Transformation within the direct chain of command of the Office of the Secretary of Defense, the President has given the Director the ability to speak directly to the government and to the American public on issues he considers

⁴² Conrad C. Crane, ed. *Transforming Defense*, (Carlisle, PA: Strategic Studies Institute, U.S. Army War College, 2001), 89.

⁴³ Press Release of the Office of the Secretary of Defense, dated 26 November 2001, available at http://www.defenselink.mil/news/Nov2001/b11262001_bt599-01.html; Internet; accessed 28 January 2004.

important in transforming the U.S. military, without having to receive approval or support from the military chain of command.

The Canadian government at times has used a similar model to ensure certain changes would occur within the Canadian military. Following the Somalia scandal and several other military cultural crises that arose during the mid-1990s, there were a number of reports prepared for the Minister of National Defence and for the Prime Minister. These included the Dickson⁴⁴ report on Leadership and Management of the Canadian Forces, the Report of the Special Advisory Group on Military Justice and Military Police Investigations and a variety of others.⁴⁵ Eventually, however, the sheer number of reports and recommendations overwhelmed the ability of the Minister and his staff to track the Department's implementation progress. The recommendations numbered into the hundreds and applied across the organization, affecting the education system, military justice system, human resource management and others.

In response to the need to provide oversight to the Department's efforts to implement this rather large cultural transformation, the Minister appointed the Honourable John Fraser⁴⁶ as Chairman of the Minister's Monitoring Committee on Change. The Committee's mandate was to observe and document the rate of progress at which the approved changes were being implemented within the Department, and to

⁴⁴ The Dickson report was prepared by a Special Advisory Group under the Chairmanship of former Chief Justice of the Supreme Court of Canada, the Right Honourable Brian Dickson.

⁴⁵ Department of National Defence, *Minister's Reports*, available from http://www.forces.gc.ca/site/minister/reports_e.asp ; Internet; accessed 10 April 2004.

⁴⁶ The Honourable John Fraser, P.C., O.C., O.B.C., C.D., Q.C. is perhaps best known as the first Speaker of the House of Commons to be elected by secret ballot and has also had a long association with the Canadian Forces.

provide regular progress reports to the Minister and the Canadian public.⁴⁷ As a result of this very structured and public accounting of change activities within the Department, the majority of change recommendations were implemented (and were done so in a relatively rapid manner considering the size of the bureaucracy of DND). The recommendations not implemented were those found to be impractical or better resolved through a different approach. In each case of non-implementation the reasons were explained to and considered by, the Minister's Monitoring Committee and through their reports, by the Government and the Canadian public. This is not to say that the recommendations would have been ignored and not implemented without such independent oversight, however the transparency and urgency of the efforts would clearly have been lessened without it.

Previous transformation efforts within the DND/CF, then, can be seen to have been most successful when overseen and directed by a leadership authority outside the normal hierarchy, one without competing obligations and responsibilities. It is the institutionalization of managing change and coordinating innovation that does not currently exist within DND/CF, but which must occur if a true transformation is to take place. "Transformation, strategy, jointness, and even readiness are inextricably intertwined."⁴⁸ Each of the service environments has an organization responsible for strategic planning, which in theory corresponds with the activity of planning for changes in the future. However, there is also a Directorate General of Strategic Planning (DGSP) at NDHQ, which would seem the logical focus for coordination of such activities. Yet

⁴⁷ Department of National Defence, Terms of Reference on the Minister's Monitoring Committee on Change, On-line; available from http://www.forces.gc.ca/site/reports/monitor_com/eng/annex1_e.htm ; Internet; accessed 10 April 2004.

⁴⁸ Douglas A. MacGregor, Chapter 8 "Transforming Jointly" in *Transforming America's Military*. ed. Binnendijk, Hans (Washington, DC: National Defence University Center for Technology and National Security Policy, 2002), 220.

the mandate of DGSP is split between “strategic visioning” and “in-year management” among other activities such as business planning. When an organization splits its focus between managing current activities and visioning future strategy, inevitably the future strategy will seem, and be treated, as the less urgent activity.

The DND/CF, unlike our American allies or even NATO, has not yet recognized the need to focus transformation efforts within a single office. The office must be invested with an individual having sufficient credibility and influence to overcome the parochial service-oriented focus of the three environments, and the bureaucratic approach to change that exists within NDHQ. The knowledge champion appointed will need to have the support of the Government to ensure that transformation efforts can be coordinated throughout the Department and the CF. The recommendation put forward by the Minister’s Committee on Achieving Administrative Efficiency recommending the appointment of an individual to lead transformation efforts in the Department states that:

Success in this role would require a senior official with extensive government experience, a thorough understanding of Defence, an appreciation for the opportunities and challenges presented by new technology, and a strategic perspective. The appointed individual would also have to be credible in the eyes of Defence leadership, government and the Canadian public. Finally, he/she would have to possess well-developed interpersonal, team-building and communication skills to succeed in this very challenging transformational assignment.⁴⁹

CONCLUSION

Canada’s principal allies, the United States and NATO, have embarked on their own defence transformation strategies, developing new military capabilities to respond to

⁴⁹ Department of National Defence, *Achieving Administrative Efficiency*...xii.

the transformed technological and security environment.⁵⁰ The Canadian government, even though it has not provided recent policy direction to the Canadian military, has already begun to publicly acknowledge its need to maintain interoperability with allies.

Our government's reliance on an international security policy centred on coalition operations means that the CF cannot but respond to developments abroad if it is to make any meaningful contribution to international operations.⁵¹

In order to maintain interoperability, the Canadian military will need to transform to a knowledge superiority organization. The CF has begun to take some steps toward such a transformation, seen in the language used within recent strategy documents. However, the transformational changes within the CF lag behind those of our close allies.

Although Canada has access to some of the most advanced military technologies in the world through its privileged ally status with the U.S. military, a lack of focus in equipment and systems acquisitions has limited the benefit gained from this access. Similarly, although the organization claims to be transforming toward a more joint culture, the CF has, as yet, made only modest strides toward the creation of a truly joint operational capability. Possibly most critical aspect of the required military transformation is that of leadership. Unfortunately "the nature of military affairs operations and the requirement to manage public issues frequently capture decision-making, and... decision-makers often focus on their day-to-day activities rather than longer-term, strategic issues."⁵² The current DND/CF leadership, therefore, is not in a position to remove itself from the more pressing concerns of ongoing operational and

⁵⁰ *Ibid*, ii.

⁵¹ Paul Mitchell, "A Transformation Agenda for the Canadian Forces: Full Spectrum Influence," *Canadian Military Journal* 4, no. 4 (Winter 2003-2004): 62.

⁵² *Ibid*, iii.

budgetary crises and focus on long-term transformational planning. Nor do the individuals in positions of leadership remain static sufficiently long to develop and implement a creative vision for a transformed military.

All three of the key aspects of implementing transformation within the DND/CF are receiving insufficient impetus given the organization's current approach to the issue. Having reviewed other organizations' approach to transformation, and even the DND/CF approach to previous change initiatives, one can see the need for appointment of a knowledge champion to drive transformation efforts. This paper has shown that the most effective approach is the appointment of an individual with sufficient credibility, autonomy and knowledge to ensure the efforts and decisions needed for an effective transformation are brought to the attention of the Government and the Canadian public, in addition to the organization's internal audience. Such an individual would be a true knowledge champion.

“The potential for revolutionary change and transformation arises from the integration of critical military capabilities across service lines.”⁵³ The CF requires the appointment of individual responsible for monitoring and integrating activities across the various environments, while coordinating and providing oversight to technology acquisitions, cultural and structural changes to the organization. Without such a knowledge champion, the CF will fall behind its allies and potential adversaries in its quest for knowledge superiority. The time to begin a true transformation of the CF to a knowledge superiority organization is now. The CF needs the appointment of a knowledge champion.

⁵³ MacGregor, *Transforming America's Military*...220.

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