Archived Content

Information identified as archived on the Web is for reference, research or record-keeping purposes. It has not been altered or updated after the date of archiving. Web pages that are archived on the Web are not subject to the Government of Canada Web Standards.

As per the <u>Communications Policy of the Government of Canada</u>, you can request alternate formats on the "<u>Contact Us</u>" page.

Information archivée dans le Web

Information archivée dans le Web à des fins de consultation, de recherche ou de tenue de documents. Cette dernière n'a aucunement été modifiée ni mise à jour depuis sa date de mise en archive. Les pages archivées dans le Web ne sont pas assujetties aux normes qui s'appliquent aux sites Web du gouvernement du Canada.

Conformément à la <u>Politique de communication du gouvernement du Canada</u>, vous pouvez demander de recevoir cette information dans tout autre format de rechange à la page « <u>Contactez-nous</u> ».

CANADIAN FORCES COLLEGE - COLLÈGE DES FORCES CANADIENNES AMSC 8 - CSEM 8

The Road to Jointness: Is Canada Heading in the Right Direction?

By/par Lieutenant Colonel Bruce Ploughman

October 2005

This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus, contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National Defence. This paper may not be released, quoted or copied, except with the express permission of the Canadian Department of National Defence.

La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale.

ABSTRACT

Canada faces many challenges on the road to jointness. History has demonstrated, time and again, that the Canadian Forces (CF) capacity to change has been inconsistent at best and stunted at worst. While some institutional change has been proactive in an attempt to improve the way the CF does business, much of it has been reactive in response to budget and personnel cuts.

If the CF is to effect its current mandate and provide its political masters with the global influence they seek, then dramatic change is required. While the Government of Canada has not ruled out unilateral action, participation in multinational coalitions will be the predominant means by which Government will apply the military. In either case, the CF must be capable of leading, both to ensure the success of the mission and to optimize the level of influence garnered. Unquestionably the CF must move towards greater jointness if it is to fulfill its current NATO lead nation status and to maintain interoperability with its most important partner, the U.S.

There are some outstanding issues that continue to stand in the way of jointness. Leadership at all levels must adopt this new joint culture. Sound, relevant and up-to-date doctrine provides the philosophical foundation for this new joint culture. Joint doctrine without joint training is useless – the CF must train to fight as a team and take advantage of the multiplicative effect joint can elicit. The CF must build a command and control system that is clear and unambiguous – one that fosters trust, not suspicion. Finally, the CF must break with its tradition of platform-centric, service oriented procurement and focus on what joint capabilities it need to bring to the fight.

INTRODUCTION

ad hoc – to improvise...the use of ad hoc measures, especially as a deliberate means of avoiding long term policy $(OED)^1$

As a middle power, Canada has for decades attempted to generate a level of diplomatic influence on the international stage disproportionate to its military output. In the "Pearsonian" tradition, much of this output has been centred on the overused (and oversimplified) concept of peacekeeping. Bilaterally, she joined in a marriage with the U.S. to collectively defend North America, though one could question the degree of influence afforded Canada in the prenuptial agreement. Chanting the mantra of multilateralism (and to combat concerns over western hemispheric isolationism), she has also fought for a place at the table in NATO. Thus her defence and foreign policies, though never clearly articulated, were institutionally anchored to the UN, NATO and NORAD. Unencumbered by either doctrine or coherent policy and guided by the principle of disjointed incrementalism (the science of muddling through), Canada as a nation advanced ad hocery to an art form.² Unfortunately, this disjointed, piecemeal approach of applying the military for diplomatic favour and international relevance has had the opposite effect, ultimately weakening her position and bringing her under fire from her allies.³

Nowhere was this more prevalent than during the nineties. While the 1994 White Paper attempted to address the fiscal reality of the day (curtailing defence spending in

¹ J.A. Simpson and E.S.C Weiner, *The Oxford English Dictionary* (Clarendon Press, Oxford, 1989), 152.

² Vernon J. Kronenberg, *All Together Now: The Organization of the Department of National Defence in Canada 1964-1972* (Toronto: Canadian Institute of International Affairs, 1973), 29. See also G.L. Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," *Canadian Military Journal* 3, no. 4 (Winter 2002-2003), 3.

³ Former NATO NAC Chairman Lord Roberston and former U.S. Ambassador to Canada Paul Cellucci made strong comments about deficiencies Canada's defence spending and the resulting lack of capability.

order to address the mounting deficit), it significantly missed the mark on the operational reality of the decreased international stability inherent in the collapse of the bipolar world order. Paradoxically the military was forced to shrink at a time when the demand for a Canadian military presence internationally was escalating.⁴ The net effect was "...a relative decline in the attention Canada paid to its international instrument, as priority was given to getting our domestic house in order." The result of this insular focus was that the 1994 White Paper – asynchronous as it was with the international demand and the foreign policy – remained the defence policy until quite recently. Embryonic attempts by Department of National Defence (DND) to fill the policy void from below, such as *Strategy 2020*, were unable to elicit significant government attention, let alone ratification.

Earlier this year much of this was to change for the better. Though there had been fairly recent attempts to address the defence and foreign policy shortfalls, they were done in isolation, no **formal** review was initially conducted (the first defence effort was referred to colloquially within DND as the Not-a-Defence-Review) and – despite adopting transformation as the new religion – appeared to be focused on returning somehow to the 1994 status quo. This was understandable given that the 1994 White Paper remained in effect, notwithstanding that it mandated a construct more suited to the Cold War. 6 Concomitant with the recent changes of the Prime Minister, the Ministers of National Defence and Foreign Affairs, and the Chief of Defence Staff (CDS) was the

⁴ Office of the Auditor General of Canada, *April 2002 Report*, 5.36-5.37; http://www.oag-bvg.gc.ca/domino/reports.nsf/html/0205ce.html; Internet; accessed 16 October 2005.

⁵ Department of Foreign Affairs and International Trade, *International Policy Statement*, http://www.dfait-maeci.gc.ca/cip-pic/ips/ips-overview3-en.asp; Internet; accessed 16 October 16, 2005.

⁶ Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces" (briefing, Canadian Forces Base Halifax, Halifax, NS, February 4, 2005), slides 2-4.

coalescence of the related policies into a single International Policy Statement. Entitled *A Role of Pride and Influence in the World*, it represents a significant turning point for Canada and heralds a renaissance of coordinated Canadian engagement on the world stage. While still built on a platform of multilateralism, it makes the unprecedented assertion that "[Canada] must ultimately be committed to playing a lead role in specific initiatives and, on occasion, to resolving to go it alone."

Leadership, not just participation, is presented as a key enabler in garnering the influence Canada seeks to exert internationally. As a subordinate document to the International Policy Statement, the Defence Policy Statement reinforces the desire to engage more at the leadership level. Institutionally, though, the Canadian Forces (CF) is still structured more for combined operations than joint. As was the case during the Cold War, the three services – army, navy and air force – can more readily operate with like services from other countries than they can with each other. Yet from the first Gulf War forward, multinational coalition operations have almost invariably been joint in nature. Furthermore, the CF is about to assume command of a joint multinational brigade in Afghanistan in February 2006. There is obviously a tacit recognition by the CDS in his vision that the CF needs to move *beyond joint* to integrated, but given the Darwinian pace with which the CF has adopted joint, one could argue that the CF is not yet in a position to assume such leadership roles by anything other than ad hoc means. Put succinctly by

7

⁷ Department of Foreign Affairs and International Trade, *International Policy Statement*, foreward.

⁸ Department of National Defence, *Defence Policy Statement*, http://www.forces.gc.ca/site/reports/dps/main/intro_e.asp; Internet; accessed 16 October 2005. See also Department of National Defence, *Strategic Operating Concept, Draft 4.4*, (Ottawa: Deputy Chief of Defence Staff, 21 May 2004), 13.

⁹ Department of National Defence, Strategic Operating Concept, Draft 4.4, 14, 34.

¹⁰ Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces." See also Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," 8.

Bland, "...allowing forces to deploy with the hope that "things can be sorted out on the ground" is a precarious and unmilitary way to do business." This paper contends that in order to become more effective in these future coalition operations, Canada must become more joint at all levels.

OUTLINE

Joint – ...something that involves true interoperability, functional integration, and order-of-magnitude improvement in capability...¹²

This paper first looks at the history of jointness from a Canadian perspective. The historical overview discusses some of the key milestones along the road to joint and is not meant to be a comprehensive history of organizational structure in the CF. Next, the paper provides argumentation as to why the focus needs to be on jointness for success in coalition operations. Finally, the paper addresses some of the key issues that must be addressed if Canada is to succeed in the journey to jointness.

HISTORY OF JOINTNESS

We trained very hard...but it seemed that every time we were beginning to form up into teams, we would be reorganized.

I was to learn later in life that we tend to meet any new situation by reorganizing; and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency and demoralization. (Petronius Arbiter)¹³

Canada is no stranger to coalitions, though the concept of jointness has successfully eluded her for quite some time. In fact, for much of twentieth century,

¹¹ Douglas Bland, "Canada and Military Coalitions: Where, How and with Whom?" *Policy Matters* vol. 3, no. 3 (February 2002), 13.

¹² Major General John L. Barry and James Blaker, "After the Storm: The Growing Convergence of the Air Force and Navy," *Navy War College Review* vol. LIV, no. 4 (Autumn 2001), 118; [journal online]; available from http://www.nwc.navy.mil/press/Review/2001/Autumn/pdfs/art6-au1.pdf; Internet, accessed 12 September 2005.

¹³ Kronenberg, All Together Now: The Organization of the Department of National Defence in Canada 1964-1972, 86.

jointness was as best an incidental and transient consequence of repeated attempts to integrate and unify the CF. Of note, inter-service rivalry, bureaucratic drag and political ambivalence became recurring obstacles in the move towards a more unified and potentially more joint organization. ¹⁴ With the passage of time, these immutable forces served to repeatedly undermine what had been accomplished, condemning the CF to a seemingly endless pattern of reorganization. Furthermore, until the advent of the current Defence Policy Statement, much of the change that was eventually achieved was in response to fiscal pressures and a perceived need to increase civilian control rather than in a true desire to increase operational effectiveness. ¹⁵ Such was the case in the first preempted attempt at amalgamation as mandated in the 1922 National Defence Act. 16

Having served as three separate and distinct services under three separate ministers during the Second World War, the services struggled through the massive demobilization that followed. The Minister of National Defence of the day, Brooke Claxton, understood the benefits of combining the services into a unified entity – a single defence policy, a single set of regulations and orders, and a simplified chain of command - so he pioneered along the path to integration. ¹⁷ Despite the obstacles listed previously, and aided by the chairman of the newly formed Chiefs of Staff Committee (Lieutenant General Foulkes), Claxton met with a measure of success, establishing an institutional precursor upon which future reorganizations would be oriented. Neither man, though,

¹⁴ Major K.W. Bailey, "Integration and Unification Equals Jointness in 21st Century Canadian Forces" (Toronto: Canadian Forces College Command and Staff Course New Horizons Paper, 2002), 11.

Kronenberg, All Together Now: The Organization of the Department of National Defence in Canada 1964-1972, 23. See also Canadian Forces College, "The Evolution of Post-Cold War Command and Control in the CF" (Advanced Military Studies Course Activity Package A/OF/COM 401/DI-1 Annex B. 2005), 3.

¹⁶ B.D. Hunt and R.G. Haycock, ed., Canada's Defence: Perspectives on Policy in the Twentieth Century (Toronto: Copp Clark Pitman Ltd, 1993), 73. ¹⁷ Canadian Forces College, "The Evolution of Post-Cold War Command and Control in the CF," 1,2.

had accurately estimated the amount of inertia that had to be overcome, so much of their vision remained unfulfilled.¹⁸ During this portion of the CF's collective history, from 1947 to 1960, the idea of jointness was never truly broached.

The fiscal realities of the early sixties, a dysfunctional command and control system and a quagmire-like decision-making process provided the impetus for further organizational change. With a restricted budget and personnel costs on the rise, the services had to deal with an ever diminishing capacity to re-equip and to stave off rust out. The Cuban Missile Crisis reinforced the need for the government to have a clear, unambiguous means to direct military action, having discovered that "...the central administration in Ottawa had no national plans, no intelligence capabilities, and no reliable structure for commanding and controlling the forces." With each of the Chiefs of Staff wielding a veto, and with over 200 standing committees, decision gridlock was commonplace. In the aftermath of the Glassco Commission and the Special Commission on Defence – both of which were convened to address the issues listed above – it fell to the Minister of National Defence, Paul Hellyer, to drive the changes forward.

By force of personality, Hellyer was able to overcome the bureaucratic drag and the political ambivalence.²³ With the enactment of Bill C-90 on 1 August 1964, the

_

¹⁸ Bailey, "Integration and Unification Equals Jointness in 21st Century Canadian Forces," 15-17.

¹⁹ Paul Hellyer, *Damn the Torpedoes: My Fight to Unify Canada's Armed Forces* (Toronto: McClelland & Stewart, 1990), 36. See also Canadian Forces College, "The Evolution of Post-Cold War Command and Control in the CF," 2.

²⁰ Kronenberg, All Together Now: The Organization of the Department of National Defence in Canada 1964-1972, 23.

²¹ Canadian Forces College, "The Evolution of Post-Cold War Command and Control in the CF," 2.

²² The Glassco Report as quoted in Douglas Bland, ed., Canada's National Defence – Volume 2: Defence Organization (Kingston: School of Policy Studies, Queen's University, 1998), 70.

²³ Kronenberg, All Together Now: The Organization of the Department of National Defence in Canada 1964-1972, 28.

integration of the services took effect. With the elimination of the chairman of the Chiefs of Staff Committee and the introduction of the CDS, the chain of command was simplified and the vision of Claxton and Foulkes had finally been realized. The stand up of the Canadian Forces Headquarters (CFHQ), the advent of an integrated strategic level staff and the reorganization of subordinate headquarters along functional lines were expected to streamline the decision making process and to provide "...a substantial reduction of manpower strengths in headquarters, training and related establishments, along with other operating and maintenance costs."²⁴ This, in turn, would increase the percentage of the budget available for capital expenditure. 25 Hellyer also felt the third obstacle – inter-service rivalry – would be eliminated by integration. ²⁶ Of note, much of what integration sought to achieve was focused on decreasing overhead and increasing operational capability. Embedded within this construct is the first glimmer of jointness in a Canadian context.

It could be argued that the subsequent Bill on Unification – Bill C-243 in 1967 – served to undermine much of what integration sought to achieve. The civilianization of the national level headquarters (subsequently named National Defence Headquarters or NDHQ in 1972) moved the focus incrementally away from operations towards business practices and administration – in essence bureaucratic drag was reintroduced.²⁷ The elimination of the services (and their distinct uniforms) had the backlash effect of entrenching service identity, which ultimately lead to the strengthening of inter-service

 ²⁴ *Ibid.*, 22.
 ²⁵ *Ibid.*, 23. 25% was the target.

²⁶ Hellyer, Damn the Torpedoes: My Fight to Unify Canada's Armed Forces, 42.

²⁷ Bailey, "Integration and Unification Equals Jointness in 21st Century Canadian Forces," 30.

rivalries.²⁸ With the Cold War in full swing, the employment of the forces continued independently along service lines, each subordinated to their NATO service counterpart. Though now a single armed force, the CF was anything but joint.

The end of the Cold War heralded the golden age of *ad hocery* for the CF. As was the case during the Cuban Missile Crisis, NDHQ had neither the structure nor the collective understanding necessary to effectively command and control the forces during the first Gulf War.²⁹ A joint staff was cobbled together out of necessity to address the shortfall and to meet the challenges of the nineties, as the CF stumbled headlong from one contingency operation to the next. While the tactical level understood these coalition operations to be the new norm, in the absence of a joint structure and the requisite underlying doctrine, issues of interoperability had to be resolved in the field.

Foreshadowed by the events of 1964, the next significant reorganization commenced in the aftermath of the 1994 White Paper. The need to redefine operations in the post-Cold War construct was usurped by the need to downsize and consolidate, given a mandated reduction of personnel from 84,000 to 60,000 and a projected budget reduction from \$12 billion to \$9.25 billion. Though guidance was provided to the Management Command and Control Re-engineering Team (MCCRT) to focus on the conduct of joint operations, the speed with which the reorganization occurred, the civilian principles upon which the reorganization was based (management re-engineering) and the focus on pre-determined personnel reduction targets meant that operations, joint or

²⁸ Kronenberg, *All Together Now: The Organization of the Department of National Defence in Canada* 1964-1972, 79.

²⁹ Canadian Forces College, "The Evolution of Post-Cold War Command and Control in the CF," 4. Office of the Auditor General of Canada, *November1996 Report*, 34.15; http://www.oag-

byg.gc.ca/domino/reports.nsf/html/9634ce.html#0.2.Q3O5J2.O25UY6.RJTLQE.101; Internet; accessed 18 September 2005.

otherwise, enjoyed anything but primacy.³¹ The reduction and reorganization of commands along service lines, the introduction of the Environmental Chiefs of Staff (ECSs) into NDHQ and the subsequent fight for the diminishing pot of capital all served to re-invigorate the inter-service rivalries.

Over the past half decade, the turbulence of the nineties subsided somewhat and the CF made tentative steps towards joint capability, though the institution remained somewhat rudderless in the absence of an up-to-date defence policy. Early efforts at transformation were stunted by reduction-induced paranoia, as each service (save perhaps the army) myopically sought to maintain some ill-defined status quo, in the absence of a clearly defined (and governmentally endorsed) strategic vision. This was rectified by the advent of the DPS which, for the first time since integration in 1964, advocates a structure that is operationally focused, thus addressing the issue of bureaucratic drag. Its Canada First policy takes aim squarely at inter-service rivalry. 32 A charismatic CDS, with a force of personality that rivals his almost-namesake from 1964, has achieved a level of prime ministerial favour that is likely without precedent. Unfortunately it is too early to tell if the CF can overcome years of inertia and get beyond joint to true integration.

³¹ Lynn Gordon Mason and Raymond Crabbe, A Centralized Operational Level Headquarters (Ottawa: Report for the Department of National Defence, December 2000), 10. See also Forces College, "The Evolution of Post-Cold War Command and Control in the CF," 6. Management engineering principles and organizational theory suggest that you would build the new structure and processes, populate it and then determine if there were any tangible savings. In this case military effectiveness was sacrificed for perceived organizational efficiency.

32 Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces."

JOINT OR COMBINED?

However, truly joint operations allow the complete spectrum of joint capabilities to be available to engage an opponent across the spectrum of his forces. Thus land, maritime, aerospace, special operations, psychological operations and civil-military capabilities can be employed synergistically against an opponent sequentially and concurrently in the most effective and most efficient manner.³³

Given Canada's recent deployment history as well as her current International Policy Statement, it is reasonable to assume that the CF will be participating in coalition operations for the foreseeable future. That said, Boomer and Gimblett both argue that the Canadian focus should be on combined operations in these coalitions.³⁴ Boomer asserts that interoperability is the key, suggesting that a preoccupation with all things joint would be to the detriment of interoperability with Canada's allies. Gimblett contends that the CF's historical strength lies in combined operations and that it has never "...had to operate in battle jointly as an independent force..."³⁵

At the risk of engaging in a circular argument, it is interoperability with Canada's allies that drives the CF to being more joint in coalition operations. Rather than being mutually exclusive, as suggested by Boomer, the concepts are inexorably linked. In the aftermath of Goldwater-Nichols, post-Cold War fiscal restraint and the many hard lessons learned throughout the nineties (especially Desert Storm and Allied Force), the U.S. Forces have made great strides in joint warfare. 36 If the CF expects to function effectively in coalitions led by the U.S., then it too must advance its skill set in joint

³³ Department of National Defence, B-GJ-005-500/FP-000 CF Operational Planning Process (Ottawa: DND Canada, 6 November 2002), 2-8.

³⁴ Colonel M.F. Boomer, "Joint or Combined Doctrine: The Right Choice for Canada" (Toronto: Canadian Forces College Advanced Military Studies Course Paper, 1998), 11. See also Richard Gimblett, "The Canadian Way of War: Experiences and Principles." From Intervention and Engagement: A Maritime Perspective (Halifax: Centre for Foreign Policy Studies, Dalhousie University, 2003), 336.

 ³⁵ Gimblett, "The Canadian Way of War: Experiences and Principles," 336.
 ³⁶ Colonel T. Brandl, "Building a Joint Task Force Headquarters" (lecture, Canadian Forces College, Toronto, ON, September 16, 2005).

warfare. Even as part of a functional component within a larger U.S. force, the CF runs the risk of being marginalized from the operational level fight if it can't play in the joint arena. In the NATO context, Canada is counted among the countries capable of leadnation status in a coalition.³⁷ NATO joint doctrine is the default doctrine for these coalitions. 38 Thus if Canada wishes to maintain her lead nation status, she has the responsibility of advancing her joint capability. Coalitions by their very nature can impede the operational art and manoeuvre – disparate ROE, national caveats, capability gaps and language barriers are all potential sources of friction.³⁹ Joint operations are becoming more complex, as additional warfare capabilities, such as Information Operations and Special Operations evolve. A lack of expertise of how to employ the broad spectrum of capabilities synergistically, especially at the operational level, becomes another more fundamental source of friction that challenges the very success of a coalition. On a more basic level for Canada, if the army, navy, air force and special forces can't routinely work together, how can the CF expect to succeed in the complex world of coalition operations?

In the context within which Gimblett presents his argument – focusing historically on larger conflicts – he is correct in his assertion that the CF's participation has invariably been combined (though one could contend that OP DELIVERANCE in Somalia had the Canadian army, navy and air force working jointly, and to some degree independently, under Canadian command within a broader coalition context). In view of the DPS, with its focus on action in failed and failing states becoming the routine, it is a

-

³⁷ Commander C.D. Soule, "Joint Doctrine" (lecture, Canadian Forces College, Toronto, ON, September 12, 2005), slide 38.

³⁸ *Ibid.*, slide 38.

³⁹ Robert Ricassi, "Principles for Coalition Warfare," *Joint Forces Quarterly*, no.1 (Summer 1993), 62.

not a leap of logic to suggest that Canada will be acting independently in a joint context in the future. It is conceivable that the CF could operate as a subordinate Joint Task Force (JTF) within a larger coalition JTF framework.⁴⁰ This construct has already been accepted doctrinally and may well be the chosen command and control framework as the CF assumes its lead nation role in the multinational brigade in Afghanistan in February 2006. 41 The IPS also clearly states that Canada may have to go it alone, reinforcing the idea that elements of the army, navy and air force could be deployed independently under Canadian command. This, in fact, is the principle upon which the Standing Contingency Task Force (SCTF) - a new formation in the DPS – is based. 42 Arguably jointness is predominantly an operational level concept – an infantryman, for example, does not need to be conversant with how his unit's actions are being synchronized with an air strike to achieve the optimum effect. Much of what Gimblett refers to is combining forces at this tactical level. But given the potential breadth of the continuum between pure tactics and pure strategy, and the frequent blurring of the boundaries between each, it is incumbent upon the **commander** of that tactical unit, especially in a mission command scenario, to understand how his particular *part* affects the *whole*.

There are other reasons why Canada needs to focus on jointness. As discussed in the introduction, Canada seeks to increase and strengthen her influence on the world scene. Notwithstanding her position as a middle power, she must be capable of assuming command roles and lead nation status where possible in order to generate and maximize

-

⁴⁰ Department of National Defence, *Defence Policy Statement*. See also Colonel K.D. Dickson,

[&]quot;Multinational Operations" (lecture, Canadian Forces College, Toronto, ON, September 14, 2005), slide

⁴¹ Department of National Defence, B-GJ-005-300/FP-000 Canadian Forces Operations (Ottawa: DND Canada, 15 August 2005), 1-7.

⁴² Department of National Defence, *Defence Policy Statement*.

this influence – merely providing forces to a component command within the Combined Joint Task Force structure, while of some use on the diplomatic front, is potentially of a lower order of magnitude from an influence standpoint. Thus the CF must be conversant with, and expert in, joint operations; otherwise it risks not being offered command roles and potentially failing as a lead nation. Both of these outcomes would serve to erode Canada's influence and invariably marginalize her. As observed by Desjardin:

...not being proficient at joint operations could very well consign the CF to minor roles, as small single-element components in coalitions led by other nations, or to operations at the low-end of the conflict spectrum. Driving towards more jointness would appear to be a vital concern if the CF is to retain a substantial measure of autonomy and remain a worthy partner on the international military scene.⁴³

If the CF is incapable of assuming these leadership roles, it also risks losing influence on a more fundamental level – that of shaping the conduct of operations by the JTF as a whole. The CF's ability to influence the decision making process would be relegated to a nationally sanctioned veto, which by its very nature would have an erosive effect on the JTF, as it is based not on integration but on de-confliction. 44

While there are obvious and compelling arguments for the CF adopting jointness as its modus operendi (which is clearly where the new CF Vision is heading), at some point the question must be asked as to what is truly achievable, given the resource constraints of time, money and trained personnel. Notwithstanding the advances it has made, General Hillier notes that the CF is still fundamentally structured along service lines to fight the Cold War. 45 There is a significant cost to doing jointness right, as the CF is realizing with the standup of two new operational level headquarters – Canada

⁴³ Colonel B. Desjardin, "Joint Doctrine for the Canadian Forces: Vital Concern or Hindrance?" (Toronto: Canadian Forces College Advanced Military Studies Course Paper, 1999), 18.

⁴⁴ Dickson, "Multinational Operations."

⁴⁵ Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces."

Command (Canada COM) and the Canada Expeditionary Force Command (CEFCOM) – as well as the six regional JTF headquarters. 46 From an organizational theory perspective, it is achieving what MCCRT missed – that is, constructing the new organization, populating it and getting it up and running before deconstructing the old organization. This has introduced an interesting paradox. While the reorganization is designed to increase operational output and effectiveness, much of the manpower to stand up these organizations is being initially drawn from the tactical level. Thus there will ultimately have to be offsets elsewhere in the old organization at the operational and strategic levels. The CDS has stated that the CF needs to be "ruthless" and that there will be casualties along the way. 47 But this represents a huge cultural shift for the CF – a cultural shift that, history has demonstrated, it has heretofore been unable to achieve.

ENABLERS/IMPEDIMENTS OF JOINTNESS?

So how will Canada fare on her journey to jointness? While the issues of interservice rivalry, bureaucratic drag and political ambivalence appear to have been (or are being) resolved, one must expand the analysis to include any additional factors that might serve to enable or impede the move to jointness, before any reasonable conclusions can be drawn. While not an exhaustive list, five key areas of concern are leadership, doctrine, training, command and control (C2) and procurement.

Leadership

...the absence of a single commanding voice may spell the difference between success or failure in any matter of joint concern to the three Services 48

Department of National Defence, *Defence Policy Statement*.
 Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces."

⁴⁸ The Glassco Report as quoted in Kronenberg, All Together Now: The Organization of the Department of National Defence in Canada 1964-1972, 24.

Part of the difficulty Canada has had on the road to jointness is a lack, up until now, of clear leadership driving her in that direction. Unlike the U.S., where the Goldwater-Nichols Act mandated their four services towards jointness, the CF underwent unification and misconstrued it as joint. The *CF Operations Manual*, a less joint successor to the 1995 *Joint Doctrine for Canadian Forces Joint and Combined Operations*, 49 encapsulates this schizophrenic viewpoint:

The CF is a unified force and, as a matter of routine, conducts operations involving elements of at least two environments. Notwithstanding the legal aspects of the NDA, which describe the CF as a single service, when elements of two or more environments of the CF are required to cooperate, they will do so under a joint structure, using internationally recognized joint terminology. ⁵⁰

This might help explain the lack of priority afforded the advancement of the joint cause at the strategic level. While there have been champions who have, by force of personality, been able to move the yardstick forward (Vice Admiral Garnett, in his capacity as the Vice Chief of Defence Staff (VCDS), comes immediately to mind), and while the term joint (notwithstanding the "unified" argument presented above) has permeated much of the strategic level guidance documentation, the collective level of effort applied to the problem remains wanting. ⁵¹ Fueled by the downsizing of the nineties, the protectionist instincts of the three environments served to further dilute this effort as each struggled to survive. ⁵²

_

⁵⁰ Department of National Defence, B-GJ-005-300/FP-000 Canadian Forces Operations, 1-6.

⁴⁹ Bailey, "Integration and Unification Equals Jointness in 21st Century Canadian Forces," 4.

⁵¹ Vice Admiral Garnett, in his capacity as VCDS, implemented the Capability Initiatives Database (CID), the Canadian Joint Task List (CJTL), the Joint Capabilities Requirements Board (JCRB) and Capability Based Planning (CBP). See also Soule, "Joint Doctrine," slide 14.

⁵² Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," 4. See also Canadian Forces College, "The Evolution of Post-Cold War Command and Control in the CF," 6.

Leadership is the one factor to which all others must be subordinated if the CF is ever to move out of the domain of ad hocery in coalitions. The current CDS, by virtue of the length of his mandate, has a very narrow window in which to effect unprecedented organizational change and refocus the CF on operations. To effect a culture change of this magnitude, the new structure must become more familiar than the status quo. 53 Otherwise, regardless of how dysfunctional the status quo may be, the CF will inevitably revert to it, as it has repeatedly done in the past. Given the narrow window, there is a requirement for acceptance and support at all levels: leadership throughout the CF needs to be on board otherwise the friction will be insurmountable. However, does the CF possess sufficient depth in transformational leadership for this transformation to truly occur?⁵⁴

Doctrine

In generic terms, doctrine is a set of commonly held, concisely stated, and authoritatively expressed beliefs, fundamental principles, organizational tenets, and methods of combat force employment intended to guide the planning, preparation and combat employment of one's forces to accomplish given military objectives.⁵⁵

What is doctrine? From the definition above, one can see that doctrine is the conceptual framework upon which a military is based. It provides an organizational foundation and a philosophical structure to guide fundamental military activities such as force generation, force employment, procurement, and command and control. It covers the spectrum from strategic to tactical and is the basis for tactics, techniques and

⁵³ B.H. Liddell Hart as quoted in Colonel J.G.G Simard, "Jointness – It's a Matter of Attitude" (Toronto: Canadian Forces College Advanced Military Studies Course Paper, 2001), 14. "The only thing harder than getting a new idea into the military mind is getting the old one out."

54 Peter G. Northouse, *Leadership Theory and Practice*, 3rd ed. (Thousand Oaks, California: Sage

Publications, 2004), 169.

⁵⁵ Milan Vego, "New Doctrine Must be Flexible and Dynamic," United States Naval Institute Proceedings vol. 129, no. 5 (May 2003), 77.

procedures (TTPs) as well as Standard Operating Procedures (SOPs). Joint doctrine is merely a superset of guiding principles that focuses on the synthesis of the capabilities of more than one environment to produce an effect that is greater than the sum. Doctrine is a shield against its mortal enemy – ad hocery.

What is the current state of Canadian doctrine? The navy's doctrinal focus has been at the tactical level, possessing nothing of substance at the operational and strategic levels. 56 They rely heavily on the NATO Allied Tactical Publication (ATP) series, which have varying degrees of jointness, as well as the Maritime Tactical Instructions. While much of it could be construed as doctrine, there is also a heavy overlay of TTPs and SOPs. The air force is not much better off. While the recently released vision documents contain many strategic doctrinal precepts, doctrine below this level is sparse at best. Worse still, much of the tactical level doctrine resides only in the realm of oral memory. 57 The army has traditionally placed much greater emphasis on doctrine because of the necessity to keep disparate entities within the army order of battle working together as a cohesive (and coherent) unit. Much of their doctrine was based on the corps model and is currently in transition.⁵⁸

With the state of disrepair of the environmental doctrine, it is not surprising that joint doctrine is faring no better. Little exists at the tactical level, so ad hocery becomes the joint SOP on the battlefield as well as fodder for the lessons learned. Operational level joint doctrine has progressed significantly over the past decade and a half, but is still an incomplete, eclectic mix of doctrine and SOPs with strategic and tactical overlap.⁵⁹

 ⁵⁶ *Ibid.*, 75.
 57 Colonel J. Cottingham, conversation with author, 26 September 2005.

⁵⁸ Colonel F. Lewis, conversation with author, 28 September 2005.

⁵⁹ See http://barker.cfcacad.net/Admin/jointdocs/cdnpubs.html.

While there is a significant body of strategic documentation that makes reference to jointness, it is extremely difficult to compartmentalize this as doctrine. A lack of staff being dedicated to the problem (and an underlying lack of priority), as well as a lack of a centre of excellence (Joint Warfare Centre) dedicated to developing joint doctrine, will impede the CF's progress towards true integration. This lack of a "doctrinal template" to guide it provides the CF no bulwark against *ad hocery*.

Training

Joint application of force is not possible without the support of sound joint doctrine and training. ⁶³

Coalition operations have historically been commenced with very little lead time. From this one can derive the deduction that either joint training must be completed in the short window before arriving in theatre or that a certain baseline of joint capability needs to be permanently maintained, in order to meet the time constraints. Learning the joint bit on the job during a coalition operation is not a sound way of doing business.

From a joint headquarters perspective, the U.S. maintains a core cadre of trained joint staff.⁶⁴ Annual joint exercises serve to increase the baseline understanding of joint headquarters operations. Theatre specific pre-deployment training is also conducted for identified joint headquarters staff as well as in-theatre staff assist visits (SAVs) designed to provide timely advice and feedback. Canada, in its own modest way, also maintains a core cadre of trained joint staff. The deployable component – the Joint Operations Group

⁶² Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," 4.

⁶⁰ See http://www.vcds.forces.gc.ca/pubs/subject/key-doc_e.asp.

⁶¹ Soule, "Joint Doctrine," slide 44.

⁶³ Brian G. Weston, "The Joint Application of Force," in *The Future Battlefield*, ed. J. Mohan Malik, 127-138 (Geelong, Australia: Deakin University Press, 1997), 134.

⁶⁴ Brandl, "Building a Joint Task Force Headquarters," slide 9.

(JOG) – trains in a manner similar to the U.S., though on a much smaller scale. Joint headquarters training beyond the JOG is sparse at best and theatre specific predeployment training for identified joint headquarters staff is inconsistent and improvised. With the stand up of Canada COM, CEFCOM and the six regional JTF headquarters, the baseline joint headquarters capability should expand. However, the CF will be challenged to man these organizations effectively given the forces wide lack of training and experience in joint operations. 66

From a joint warfare perspective, there has been a desperate lack of joint

Canadian exercises in the past decade. While the Maritime Command Operational

Training (MARCOT) exercises provided a glimmer of hope on the joint exercise front –

culminating with the MARCOT 98 and the involvement of "more than 15,000 personnel

and hundreds of Canadian, American and Allied ships and aircraft" – they fell victim to

budgetary constraints and real world operations. Even the most modest of recent joint

exercises, such as OSPREY STRIKE and NARWHAL, resurrected many longstanding

issues of own force interoperability that, in the absence of joint doctrine and TTPs, had to

be resolved in the field. The infrequency with which joint exercises are conducted

condemns the CF to relearning the same lessons and restricts it from advancing its

_

⁶⁵ Colonel F. Lewis, conversation with author, 28 September 2005.

⁶⁶ Lloyd Campbell, "2002 Air Symposium," Toronto, 28 March 2002: as quoted in Bailey, "Integration and Unification Equals Jointness in 21st Century Canadian Forces," 49. Citing Campbell's address, Bailey states that "…the CF's lack of both professional experience and training in jointness, especially if it intends to engage fully in coalition operations, is seen to be a significant obstacle."

⁶⁷ Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," 5.

⁶⁸ OSPREY STRIKE was a recent east coast maritime counter-terrorism exercise and NARWHAL was a northern sovereignty exercise.

collective skill set. To paraphrase the old maxim, one cannot fight jointly if one does not train jointly.⁶⁹

Command and Control

Leadership, doctrine and training all come together institutionally in the manifestation of command and control. Given the state of each of these factors outlined above, it is not surprising that command and control in the CF has been convoluted and confused for some time. In the Atlantic Region alone there are nineteen chains of command all trying to exert some measure of control and influence on the operational outputs of the CF - an organizational arrangement that is arguably the antithesis of jointness. 70 This has lead to situations where tactical level commanders in the region receive separate rules of engagement (ROE) from three different chains of command. Force generators have taken on force employment roles and vice versa, further blurring the lines as to who should be providing deployed operations support. It has become all too common that issues get resolved not by following the chain of command, but by emailing one's counterpart back home. Worse still, this vague accountability framework has resulted in units deploying as part of the NATO Standing Naval Maritime Group (SNMG 1) with no Operations Order and minimal Deputy Chief of Defence Staff (DCDS - the *de facto* force employer for the CF) involvement. ⁷¹ This ambiguous structure, unsupported by relevant doctrine, training and a common infrastructure, has lead to a chronic lack of trust in the system, which in turn has resulted in the strategic

-

⁶⁹ The maxim of fight as you train and train as you fight

⁷⁰ Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces," slide 11.

⁷¹ Gleaned from the author's experience as both the 12 Wing Operations Officer as well as the Commanding Officer of 423 Maritime Helicopter (MH) Squadron. It is the mandate of the Wing in general, and the Squadron specifically, to provide helicopter air detachment support to the SNMG 1 commitment.

micromanagement of deployed operations.⁷² For deployed commanders, this has significantly added to the challenges faced in the field during coalition operations.

The command and control structure being implemented as part of the DPS are designed specifically to address these known shortfalls. This represent a fundamental shift in how the CF will generate, support, deploy and employ forces – lofty aims that, if fulfilled, should enhance its ability to contribute jointly to coalition operations. A lack of organizational doctrine upon which to base the new structures (the SCTF, for example) and a lack of trained personnel add elements of risk to this endeavour. Unless these risks are addressed, the CF may find itself reverting to the old way of business in the new construct, as has happened with previous attempts at reorganization. There is an unquantifiable amount of short term pain the institution will have to endure in order to provide the CDS with his "one dog to kick around," but the long term gain should be greater relevance, responsiveness, capability and effectiveness in deployed joint operations, coalition or otherwise. The command of the command of

Procurement

Procurement represents the last great bastion of inter-service rivalry, as each ECS vies for their piece of the Long Term Capital Plan (LCTP). The current bottom up approach to procurement along service lines serves has tended to provide own force interoperability by coincidence only, as well as contributing to wasteful (and

⁷² Gleaned from the author's experience as both the 12 Wing Operations Officer as well as the Commanding Officer of 423 Maritime Helicopter (MH) Squadron.

⁷³ General R.J. Hillier, *Concept of Operations: CF Strategic Command*, draft (National Defence Headquarters: file 1950-2-4 (CFTT/DTP), September 2005), 1.

⁷⁴ Department of National Defence, Chief of Defence Staff, "The Way Ahead for Our Canadian Forces."

unnecessary) duplication of capabilities.⁷⁵ Invariably this is felt hardest at the tactical level, where *work arounds* become the norm in order to function jointly in coalition operations – hardly an ideal situation to optimize the synergies of jointness. Such was the case in Somalia where Sea King crews had to land to talk to the army for lack of a common radio frequency capability (a situation that was repeated 12 years later in EX NARWHAL). The renaming of the Senior Management Oversight Committee (SMOC) to the Joint Capability Requirements Board (JCRB) did little initially to address the issue, as it came at a time when the ECSs were fighting hard to protect their respective environments against further cuts. Though the development of joint requirements is vested in the DCDS, he is given co-equal status with ECSs. As noted by Vice Admiral Garnett, "[w]ith four 'requirements czars' at work in the same headquarters, overlap and redundancy are inevitable."⁷⁶

Though slow to evolve over the last half decade, capability based planning may provide the necessary convergence and joint focus for procurement that the current system lacks. The Canadian Joint Task List transcends environmental biases by breaking the outputs of the CF down into core tasks at the tactical, operational and strategic levels. These core tasks are measured against the departmentally endorsed force planning scenarios, which are in turn used to "assess risk; describe operational considerations, resource requirements, and other influencing factors; and **rationalize**

_

⁷⁵ For example, the ship local area network (Ship LAN) project proceeded with no air force input, despite the fact that air force helicopter air detachments are routinely part of the ship's complement. The air force did no better with their introduction of the air force command and control information system (AFCCIS), where no input was sought from the navy as to how to provide the capability on board the navy's ships for the air detachment.

⁷⁶ Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," 8.

⁷⁷ Department of National Defence, "Canadian Joint Task List v1.4," http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/cjtl/cjtl14/intro_e.asp; Internet; accessed 1 October 2005.

capability requirements (emphasis added)."⁷⁸ The assignment of the responsibilities for the change initiatives for each capability program is captured in the Capability Initiatives Database.⁷⁹ This top down approach will help move the CF away from the environmentally driven platform-centric procurement methodology that has tended to impede any concerted moves towards jointness. The ECSs, by virtue of their membership in the JCRB, still have the ability to influence the decision process which is why, even though capability based planning has been around for several years, vestiges of the old system remain. If the CF is unable to move to the *Canada First* philosophy in procurement it may, as Vice Admiral Garnett suggests, have to move to "a single joint requirements staff" as a means by which to finally resolve the deleterious effects of interservice rivalry.⁸⁰

CONCLUSION

Canada faces many challenges on the road to jointness. History has demonstrated, time and again, that the CF's capacity to change has been inconsistent at best and stunted at worst. While some institutional change has been proactive in an attempt to improve the way the CF does business, much of it has been reactive in response to budget and personnel cuts. The former has been impeded by inter-service rivalry, bureaucratic drag and political ambivalence. The latter, imposed by forces external to the military, has had difficulty generating any broad level of acceptance internally, resulting in a perceptible drift back to the status quo.

_

⁷⁸ Department of National Defence, "Descriptions – Departmental Force Planning Scenarios (FPS)," http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/scen/intro_e.asp; Internet; accessed 1 October 2005. ⁷⁹ Department of National Defence, "Defence Plan On-Line,"

http://www.vcds.forces.gc.ca/DPOnline/Structure_e.Asp?StructureID=13&SelectedDPMenu=2; Internet; accessed 1 October 2005.

⁸⁰ Garnett, "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level," 8.

If the CF is to effect its current mandate and provide its political masters with the global influence they seek, then dramatic change is required, for "[s]low evolutionary progress will no longer satisfy the urgency of the need." While the Government of Canada has not ruled out unilateral action, participation in multinational coalitions will be the predominant means by which they will apply the military. In either case, the CF must be capable of leading, both to ensure the success of the mission and to optimize (maximize?) the level of influence garnered. Unquestionably the CF must move towards greater jointness if it is to fulfill its current NATO lead nation status and to maintain interoperability with its most important partner, the U.S.

There are some outstanding issues that continue to stand in the way of jointness. Leadership at all levels must transcend the colour of their respective uniforms and adopt this new joint culture – a *Canada First* culture – that seeks not to replace but to harmonize the respective environmental cultures. The best defence against a repeat of the nineties decade of *ad hocery* is sound, relevant and up-to-date joint doctrine. The leadership must understand the fundamental necessity of this doctrine and commit to resourcing it properly, Joint Warfare Centre and all. Joint doctrine without joint training is useless – the CF must train to fight as a team and take advantage of the multiplicative effect jointness can elicit. It must build a command and control system that is clear and unambiguous – one that fosters trust, not suspicion. Finally, the CF must break with its tradition of platform-centric, service oriented procurement and focus on what joint capabilities it needs to bring to the fight. Only with this change will the CF truly overcome the internal friction that threatens not just its relevance but its very survival.

⁸¹ *Ibid.*, 8.

Then and only then will the CF be able to achieve what the CDS has articulated in his intent:

I expect CF operations to be characterized by rapid decision-making and the focused and effective execution of missions by very capable, dynamic and highly adaptive CF units and formations.⁸²

-

⁸² Hillier, Concept of Operations: CF Strategic Command, 2.

BIBLIOGRAPHY

- Bailey, K.W. "Integration and Unification Equals Jointness in 21st Century Canadian Forces." Toronto: Canadian Forces College Command and Staff Course New Horizons Paper, 2002.
- Barry, Major General John L. and James Blaker. "After the Storm: The Growing Convergence of the Air Force and Navy." *Navy War College Review* vol. LIV, no. 4 (Autumn 2001). Journal online; available from http://www.nwc.navy.mil/press/Review/2001/Autumn/pdfs/art6-au1.pdf; Internet, accessed 12 September 2005.
- Bland, Douglas. "Canada and Military Coalitions: Where, How and with Whom?" *Policy Matters* vol. 3, no. 3 (February 2002).
- Bland, Douglas, ed. *Canada's National Defence Volume 2: Defence Organization*. Kingston: School of Policy Studies, Queen's University, 1998.
- Boomer, F.M. "Joint or Combined Doctrine? The Right Choice for Canada." Toronto: Canadian Forces College Advanced Military Studies Course Paper, 1998.
- Brandl, Colonel T. "Building a Joint Task Force Headquarters." Lecture, Canadian Forces College, Toronto, ON, September 16, 2005.
- Campbell, Lloyd. "2002 Air Symposium." Toronto, 28 March 2002.
- Canada. Department of Foreign Affairs and International Trade. *International Policy Statement*. http://www.dfait-maeci.gc.ca/cip-pic/ips/ips-overview3-en.asp; Internet; accessed 16 October 16, 2005.
- Canada. Department of National Defence, Chief of Defence Staff. "The Way Ahead for Our Canadian Forces." Briefing, Canadian Forces Base Halifax, Halifax, NS, February 4, 2005.
- Canada. Department of National Defence. B-GJ-005-500/FP-000 *CF Operational Planning Process*. Ottawa: DND Canada, 6 November 2002.
- Canada. Department of National Defence. B-GJ-005-300/FP-000 *Canadian Forces Operations*. Ottawa: DND Canada, 15 August 2005.
- Canada. Department of National Defence. "Canadian Joint Task List v1.4." http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/cjtl/cjtl14/intro_e.asp; Internet; accessed 1 October 2005.

- Canada. Department of National Defence. "Defence Plan On-Line."

 http://www.vcds.forces.gc.ca/DPOnline/Structure_e.Asp?StructureID=13&SelectedDPM_enu=2; Internet; accessed 1 October 2005.
- Canada. Department of National Defence. "Descriptions Departmental Force Planning Scenarios (FPS)." http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/scen/intro_e.asp; Internet; accessed 1 October 2005.
- Canada. Department of National Defence. *Defence Policy Statement*. http://www.forces.gc.ca/site/reports/dps/main/intro_e.asp; Internet; accessed 16 October 2005.
- Canada. Department of National Defence. *Strategic Operating Concept, Draft 4.4*. Ottawa: Deputy Chief of Defence Staff, 21 May 2004.
- Canada. Office of the Auditor General of Canada. *November1996 Report*. http://www.oag-bvg.gc.ca/domino/reports.nsf/html/9634ce.html#0.2.Q3O5J2.O25UY6.RJTLQE.101; Internet; accessed 18 September 2005.
- Canada. Office of the Auditor General of Canada. *April 2002 Report*. http://www.oag-bvg.gc.ca/domino/reports.nsf/html/0205ce.html; Internet; accessed 16 October 2005.
- Canadian Forces College. "The Evolution of Post-Cold War Command and Control in the CF" (Advanced Military Studies Course Activity Package A/OF/COM 401/DI-1 Annex B, 2005).
- Desjardin, B. "Joint Doctrine for the Canadian Forces: Vital Concern or Hindrance?" Toronto: Canadian Forces College Advanced Military Studies Course Paper, 1999.
- Dickson, Colonel K.D. "Multinational Operations." Lecture, Canadian Forces College, Toronto, ON, September 14, 2005.
- Garnett, G.L. "The Canadian Forces and the Revolution in Military Affairs: A time for Change." *Canadian Military Journal* 2, no. 2 (Spring 2001): 5-10.
- Garnett, G.L. "The Evolution of the Canadian Approach to Joint and Combined Operations at the Strategic and Operational Level." *Canadian Military Journal* 3, no.4 (Winter 2002-2003): 3-8.
- Gimblett, Richard. "The Canadian Way of War: Experiences and Principles." *From Intervention and Engagement: A Maritime Perspective*. Halifax: The Centre for Foreign Policy Studies, Dalhousie University, 2003.
- Hellyer, Paul. *Damn the Torpedoes: My Fight to Unify Canada's Armed Forces*. Toronto: McClelland & Stewart, 1990.

- Hillier, General R.J. *Concept of Operations: CF Strategic Command*. Draft. National Defence Headquarters: file 1950-2-4 (CFTT/DTP), September 2005.
- Hincke, J.D.A. "Joint Doctrine and the Canadian Forces: Ready for the Next Decade?" Toronto: Canadian Forces College Advanced Military Studies Course Paper, 1999.
- Hunt, B.D. and R.G. Haycock, ed. *Canada's Defence: Perspectives on Policy in the Twentieth Century.* Toronto: Copp Clark Pitman Ltd, 1993.
- Kerr, A.J. "The Canadian Forces Joint Support Group Logistics Salvation or a Commitment Unfulfilled?" Toronto: Canadian Forces College Advanced Military Studies Course Paper, 2002.
- Kronenberg, Vernon J. *All Together Now: The Organization of the Department of National Defence in Canada 1964-1972*. Toronto: Canadian Institute of International Affairs, 1973.
- Mason, Lynn Gordon and Raymond Crabbe. *A Centralized Operational Level Headquarters*. Ottawa: Report for the Department of National Defence, December 2000.
- Menning, Bruce W. "Operational Art's Origins." *Military Review* vol. 77, no. 5 (September-October 1997): 32-47.
- Middlemiss, Danford W. and Denis Stairs. "The Canadian Forces and the Doctrine of Interoperability: The Issues." *Policy Matters* vol. 3, no. 7 (June 2002).
- Morton, Desmond. "Interoperability and Its Consequences." In *The Canadian Forces and Interoperability: Panacea or Perdition*, edited by Ann L. Griffiths, 159-165. Halifax, The Centre for Foreign Policy Studies, Dalhousie University, 2002.
- Northouse, Peter G. *Leadership Theory and Practice*. 3rd ed. Thousand Oaks, California: Sage Publications, 2004.
- Overton, M.K. "Leading the Willing: Canadian Command and Control in International Operations." Toronto: Canadian Forces College Advanced Military Studies Course Paper, 2003.
- Ricassi, Robert. "Principles for Coalition Warfare." *Joint Forces Quarterly*, no.1 (Summer 1993): 58-71.
- Simard, J.G.G. "Jointness It's a Matter of Attitude." Toronto: Canadian Forces College Advanced Military Studies Course Paper, 2001.
- Simpson, J.A. and E.S.C Weiner. *The Oxford English Dictionary*. Oxford: Clarendon Press, 1989.

- Sokolsky, Joel J. "Sailing in Concert: The Politics and Strategy of Canada-US Naval Interoperability." *Choices, National Security and Interoperability* 8, no.2 (April 2002): 1-28.
- Soule, Commander C.D. "Joint Doctrine." Lecture, Canadian Forces College, Toronto, ON, September 12, 2005.
- Taylor, R.K. "2020 Vision: Canadian Forces Operational-Level Doctrine." *Canadian Military Journal* 2, no2 (Autumn 2001): 35-42.
- Thomas, James P. *The Military Challenges of Transatlantic Coalitions*. Oxford: The International Institute for Strategic Studies, Oxford University Press, 2000.
- Vego, Milan. "New Doctrine Must be Flexible and Dynamic." *United States Naval Institute Proceedings* vol. 129, no. 5 (May 2003): 74-79.
- Walker, Daniel R. *The Organization and Training of Joint Task Forces*. Maxwell AFB: Air University Press, 1996.
- Weston, Brian G. "The Joint Application of Force." In *The Future Battlefield*, edited by J. Mohan Malik, 127-138. Geelong, Australia: Deakin University Press, 1997.
- Wynnyk, P.F. Jointness: The Need for the Canadian Forces to Go Farther." Toronto: Canadian Forces College Command and Staff Course New Horizons Paper, 1997.