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## CANADIAN FORCES COLLEGE/COLLÈGE DES FORCES CANADIENNES CSC 30/CCEM 30

#### MDS RESEARCH PROJECT/PROJET DE RECHERCHE DE LA MED

# THE FUTURE OF CANADIAN ARMY BRIGADE GROUPS: ARE THEY ON TRACK TO BE STRATEGICALLY RELEVANT AND TACTICALLY DECISIVE?

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## Acknowledgements

The author wishes to thank Major Craig Stone, PhD, for his assistance and guidance in the production of this research paper. Additionally, the author wishes to thank Lieutenant Colonel Tim Datchko for his steadfast proofreading and encouragement. And finally, the author wishes to also thank his wife, Dawn, and his four children for all their support and sacrifices made during the writing of this paper.

### Abstract

As early as the 1994 Defence White Paper, government policy stated that the US is our most important ally. The CF outlined in Strategy 2020 (1999) two of its key strategic objectives as the requirement to be Global Deployable and Interoperable (with the US as a priority). In the aftermath of 9/11, it is clear for Canada, the US and other western countries that the threat has changed. These countries may now be required to deploy their armed forces rapidly and bring the fight to the enemy where necessary. In terms of the future employment of LF brigade groups, The Army Strategy (2002), declared that the Army must generate, employ, and sustain strategically and tactically decisive medium-weight forces. It also stated the Army's centre of gravity is credibility. Ergo, in order to be credible, the Army must logically strive to be both strategically relevant and tactically decisive. This is just empty rhetoric and a moot point if the Government of Canada has no intention of sustaining and improving these brigades groups, which must be allocated the necessary financial commitment.

This paper examines both the LF and US Army's plans for the employment of similar US medium-weight brigades and ends with a brief comparison to demonstrate the thesis that in future, Canada could be well placed to employ strategically relevant and tactically decisive brigade groups.

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The Future of Canadian Army Brigade Groups:

<u>Are They On Track To Be Strategically Relevant and Tactically Decisive?</u>

Because of the difficulties in predicting exactly when and where future conflict will occur and the level of violence that will accompany it, armed forces will have to be capability-based. That is, they will have to be trained, structured and equipped to operate across the spectrum of conflict and continuum of operations ... Speed of response will be of the essence. Because of instantaneous information flows and the speed at which events will transpire, there will be decreased preparation time between the observation of and the response to a crisis ... Hence, there will be a requirement for rapid reaction forces, necessitating high levels of operational readiness, deployability, and self-sustainability.<sup>1</sup>

Canada's Army: We Stand on Guard for Thee.

## **Introduction**

Since the publication of the above quote from the Canadian Land Force (LF) capstone document, much has happened to reinforce the requirement for Canada to own rapidly deployable armed forces.

In the aftermath of the sudden and tragic occurrence of the events of 11 September 2001 (hereafter referred to as 9/11), the United States (US) Government produced a *National Security Strategy*, advocating the preemptive use of force against potential foes that are threats to American peace and security.<sup>2</sup> In particular, two major

<sup>&</sup>lt;sup>1</sup> Department of National Defence, B-GL 300-000/FP-000 Canada's Army: We Stand on Guard for Thee (Ottawa: DND Canada, April 1998), 115.

<sup>&</sup>lt;sup>2</sup> United States, Executive Office of the President of the United States. *National Security Strategy of the United States of America* (Washington, D.C.: U.S. Government Printing Office, September 2002), 15. [on-line]; available from <a href="http://www.whitehouse.gov/nsc/nss.pdf.html">http://www.whitehouse.gov/nsc/nss.pdf.html</a>; Internet: accessed 13 September 2003. Here it states "we must adapt the concept of imminent threat to the capabilities and objectives of today's adversaries."

wars<sup>3</sup> have occurred recently that provide examples of this national security policy in action. In military terms, the preemption aspects of the US security policy were codified by the Department of Defense (DoD) in its *Quadrennial Defense Review Report*, which listed four components to its paradigm shift in force-planning construct, two of which were to: deter forward; and to be able to conduct a limited number of smaller-scale contingency operations.<sup>4</sup> This is to say that the US military, in addition to being able to fight in a major theatre of war(s), continues to carefully pre-positioned its forces throughout the world, and is committed to enhancing its ability, preferably in concert with allies and friends, to move a joint force rapidly into theatre and employ it quickly to put an end to a small conflict or major threat, such as weapons of mass destruction (WMD).<sup>5</sup> The aim of this early (and perhaps forcible) entry concept is to eliminate the threat or to end the conflict quickly rather than arriving too late and missing the threat or being forced to engage in a protracted conflict over an extended period.

The US is currently the world's lone superpower by all measurable standards. Militarily, the country enjoys an overwhelming dominance and can expect no equal in conventional warfare for some decades to come.<sup>6</sup> That being said, 9/11 shook the

<sup>3</sup> The 'war on terrorism' in Afghanistan (2001-) is being conducted by a UN–sanctioned, NATO-manned coalition, and the Invasion of Iraq (2003-) is being conducted by a US-led, 'coalition of the willing.'

willing.'

<sup>4</sup> United States, Department of Defense, *Quadrennial Defense Review Report* (Washington, D.C.: U.S. Government Printing Office, September 30, 2001), 17-23. The US civilian and military force planners of this Report were "acutely aware of the need to provide over time, a richer set of military options across the operational spectrum than is available today and to ensure that the U.S. forces have the means to adapt in time to surprise."

<sup>&</sup>lt;sup>5</sup> *Ibid.*, 6-7, 18. On page 18 the Report states: "The United States is not abandoning planning for two (major theatre) conflicts to plan for fewer than two. On the contrary, DoD (Department of Defense) is changing the concept altogether by planning for victory across the spectrum of possible conflict."

<sup>&</sup>lt;sup>6</sup> Lieutenant-General R.J. Hillier, "Strategic Capability Investment Plan-Land Effect" (NDHQ Ottawa: file 3136-5 (CLS), 26 June 2003), 3.

country enough to realize that their national survival was being threatened by a new and extremely dangerous threat. In other words, there was a new understanding that the traditional inter-state form of warfare had changed; and Carl von Clausewitz's "trinitarian war" involving the people, the government and the armed forces had now been altered to a "non-trinitarian war," including the threats to western civilization of radical rogue states, transnational terrorists and WMD. <sup>7</sup>

Indeed much academic effort has been directed towards exploring the military options available to address the asymmetrical nature of these threats. Some would perhaps argue that asymmetric or unexpected warfare is not new, and they would have a valid point. The difference with the present threat, however, is that regardless of its capacity to wage high or low intensity warfare, the threat enjoys unprecedented access to modern information technology. Essentially, the threat can now conduct major acts of terror or violence in the shadows at a lightning pace; or more precisely, as the American *National Security Strategy* points out: "America is threatened less by conquering states than we are by failing ones, we are menaced less by fleets and armies than by catastrophic technologies in the hands of an embittered few." Clearly, the ability to

<sup>&</sup>lt;sup>7</sup> Martin van Creveld, *The Transformation of War* (New York: The Free Press, 1991), 35-62. As early as 1991, van Creveld debated that the future threat was one of non-state actors and advanced technology. He argued that these threats have largely replaced von Clausewitz's "universe" or state model for war.

<sup>&</sup>lt;sup>8</sup> For a LF perspective on the threat in the future security environment, see the Directorate of Land Strategic Concepts publications: *Concepts Report 99-2, The Future Security Environment (1999)* and *Concepts Report 01-01, Future Army Capabilities (2001)*.

<sup>&</sup>lt;sup>9</sup> United States, National Security Strategy (2002)..., 1.

have excellent intelligence and situational awareness and to be "light and lethal" will be paramount when trying to defeat such a shadowy enemy.<sup>10</sup>

In an effort to counter these threats and to bring the fight to the enemy, rapidly deployable and capable armed forces (or as defined below "strategically relevant" and "tactically decisive" armed forces) must be available to find, contain and if necessary, destroy these threats before they can be allowed to further threaten western security and values.

Douglas Bland argues that, from a narrow American viewpoint, the US is a neighbour that expects Canada to be a helpful western ally in the so-called war on terrorism and to secure the US's long Northern border from these threats. Bland goes on to state that if Canada cannot do this, then the US, arguably, could enter Canada and do it for us. If the US were to do this, Canadian sovereignty would be nonexistent, and such a US action would make a total mockery of Canadian sovereignty. This would be the worst-case scenario for Canada's foreign and defence policy.

So why the fixation on US defence and security policy and what does this all mean to Canada and, in particular, the future employment options for its LF?

Due to the US's immense might and ability to dominate the full spectrum of conflict, major military operations are often US-led, joint and usually involve a coalition

<sup>&</sup>lt;sup>10</sup> *Ibid.*, 27.

<sup>&</sup>lt;sup>11</sup> Douglas Bland, "Canada and Military Coalitions: Where, How and with Whom?" *Policy Matters* 3, no. 3 (February 2002): 26-27.

<sup>&</sup>lt;sup>12</sup> *Ibid.*, 27.

of some form.<sup>13</sup> The coalition, ostensibly, can show resolve and can also reassure other nations that the lone superpower is not unilaterally imposing its will on others. Bland states that the challenge is really for participating nations "to shape coalitions in ways that serve partner's interests, needs and constraints."<sup>14</sup> With this in mind, Canada must now make some hard foreign and defence decisions of its own. The US is an important ally and our largest trading partner. While Canada does not have to blindly follow US foreign and defence policy in all situations, it is very important that the CF is militarily interoperable with the lone and dominant superpower. This would allow Canada to choose to contribute to the operations of its choosing. Therefore, should it choose to do so, it would be in Canada's interest to make every effort to be relevant, capable and interoperable with the US to be in a position to make a credible contribution and to have influence inside a US-led coalition.

The good news for Canada's LF is twofold. First, in an effort to modernize, transform and eliminate extra layers of unnecessary headquarters, brigade-sized formations are very much in vogue in the US Army as the future joint land force of choice. And second, Canada's LF has just such a capability in its three, existing Canadian Mechanized Brigade Groups (CMBG). That is, of course, if there is the political will and commitment to use them.

<sup>&</sup>lt;sup>13</sup> Hillier, *Strategic Capability Investment Plan-Land Effect...*, 3-4. He adds "this (US) dominance will ensure secure lines of communication for delivery of forces to any Theatre and their freedom of use during subsequent operations."

<sup>&</sup>lt;sup>14</sup> Bland, *Canada and Military Coalition...*, 16. Bland is critical of plans in place within the CF to build 'light and lethal' armed forces "without the benefit of any national security strategy."

<sup>&</sup>lt;sup>15</sup> Douglas A. Macgregor, *Breaking the Phalanx: A New Design for Landpower in the 21<sup>st</sup> Century* (Westport, Connecticut: Praeger, 1997), 5. See the section of this paper on "The Future of the US Army Brigades" for additional substantiation on this point.

If employed, the brigade groups should be fully interoperable with the US Army who would most likely lead the coalition. The bad news is that this deployable and interoperable military capability would come with a significant and ongoing price tag. This cost could be mitigated, however, with the use of managed readiness under the new Army Training and Operational Framework (ATOF). This would enable the brigade groups to be maintained so that, arguably, one of the three force generation CMBGs is always fully trained and operationally capable to deploy in a given year on a joint and combined operation.

Some positive signs of support to its military have been given recently by the Government of Canada (hereafter referred to as the Government), which has promised a complete defence review as part of a coordinated international policy review (IPR). <sup>16</sup> Further, some significant Canadian Forces' (CF) projects have been announced in the Government's *Budget 2004/05* and confirmed recently by the Prime Minister following a line-by-line audit of proposed capital spending. <sup>17</sup> Also, a new security policy entitled *Securing an Open Society: Canada's National Security Policy* has been published that reinforces the "three-D approach" to Canada's foreign and defence policy. <sup>18</sup> This approach allows for a great synergistic effect for Canada's foreign policy and interests to

<sup>&</sup>lt;sup>16</sup> Department of National Defence, "Keynote Speech – Defence Minister David Pratt Speaks at 20<sup>th</sup> Annual CDAI Seminar," *News Room* (Ottawa: DND Canada, 26 February 2004), 11. [on-line]; available from <a href="http://www.dnd.ca/site/newsroom/view\_news\_e.asp?id=1312">http://www.dnd.ca/site/newsroom/view\_news\_e.asp?id=1312</a>; Internet; accessed 28 February 2004.

<sup>&</sup>lt;sup>17</sup> Department of Finance, *Budget 2004, Budget Plan, Chapter 4 - Moving Forward on the Priorities of Canadians - The Importance of Canada's Relationship to the World* [on-line]; available from <a href="http://www.fin.gc.ca/budget04/bp/bpc4ee.htm">http://www.fin.gc.ca/budget04/bp/bpc4ee.htm</a>; Internet; accessed 24 March 2004.

Privy Council Office, *Securing an Open Society: Canada's National Security Policy* (Ottawa: Canada Communication Group, 2004), 47 [on-line]; available from <a href="http://wps.cfc.dnd.ca/index\_e.html">http://wps.cfc.dnd.ca/index\_e.html</a>; Internet; accessed 28 April 2004.

be achieved by deploying a credible *defence* organization, combined with committed *diplomatic* efforts and extensive *development* efforts to a given mission.

A pessimist would say that this is just another election year in Canada, and that these government announcements are quite familiar. The optimist, however, would say that the future looks bright for the both the CF and LF in terms of updating and transforming old capabilities, doctrine and structures to ensure that Canada could be a real global contributor in military terms and could continue to "punch above our weight."<sup>19</sup>

It is the author's contention that due to the nature of the changed threat to Canada's peace and security, military capabilities such as tactical effectiveness, rapid deployability and interoperability with the world's dominant superpower ultimately equates to the credibility of Canada's armed forces. Canada is in good position to have such an armed force simply by transforming its existing CF. The LF, more than likely, would benefit most from such a transformation, as it has been the main contributor to recent operations in terms of sheer numbers. The Chief of Defence Staff's *Annual Report of 2001-2002* stated that the Army has "borne the brunt of the high operational tempo over the past decade." If the trend to deploy LF troops continues, the Government needs to provide the CF with a stated expeditionary policy and provide Canada's military with planned and sustained commitment of resources in order to conduct this transformation effectively.

<sup>19</sup> Lieutenant-General R.J. Hillier, "Army Transformation: Punching Above Our Weight," Insert Message in *The Maple Leaf* 6, no. 42 (Ottawa: DND Canada, 12 November 2003), n.p.

<sup>&</sup>lt;sup>20</sup> Hillier, Strategic Capability Investment Plan-Land Effect..., 3-4.

The LF has three CMBGs that could combine resources if necessary to provide a very usable force employment brigade group on a yearly rotational basis. In order for this to occur, Canada has to have the will and commitment to maintain and deploy such a brigade-sized force. Moreover, the CF would have to have adequate sea or airlift dedicated to get the brigade group to the designated mission in order to be strategically relevant, and it would have to be tactically decisive to deter or defeat the threat. As such, the thesis of this paper is to demonstrate that in future, Canada could be well placed to employ strategically relevant and tactically decisive brigade groups.

In order to show that Canada is indeed well placed to employ such brigade groups, this paper will examine Canada's historical background to determine the country's comfort and consistency with expeditionary land force deployments. This will be followed by a consideration of the current political will and commitment to employ strategically relevant and tactically decisive brigade groups. Next, the paper will look at the advantages of deploying a brigade-sized organization to a major operation as opposed to a battle group or smaller commitment. The CF employment concept for the brigade groups in the Army of Tomorrow will be discussed before looking at some examples of possible US Army future brigade organizations. Finally, a comparison of the future brigade organizations will be made between the two countries in an effort to confirm that in future, LF brigade groups could be well placed to be employed as strategically relevant and tactically decisive organizations.

Within the context of the LF, two major military definitions are not included in *The Army Strategy*, or hitherto formally in any place in Canadian defence terminology, and must be clarified. The first term to be defined is "strategic relevance," which was

mentioned in October 2000 from a LF perspective by then Chief of Land Staff (CLS), Lieutenant-General Mike Jeffery who stated that he wanted to be able to move the Army quickly to regional hotspots. He claimed that:

Moving a capable force quickly, strategically, into a theatre and employing it strategically, to bring an end to whatever the conflict is early, is far preferable than dealing with it on slower time and then having to go in and pay the high price of real, serious combat ....<sup>21</sup>

Furthermore, according to a draft force employment paper entitled "How the Canadian Army Will Fight," in order for strategic relevance to be achieved:

... the Army must at all times provide the nation with decisive land power as a vital element of the joint team. It must make a recognized, meaningful and timely contribution to Canadians, as well as to likeminded allies and coalition partners.<sup>22</sup>

Given the above words as guidance and including the central themes of force timeliness and effectiveness, the author therefore defines strategic relevance as *the ability to* rapidly deploy a significant armed force contribution in order to participate in the deterrence or defeat of a threat at home or abroad.

The second major term to be defined is "tactically decisive." Again the draft of "How the Canadian Army Will Fight" provides some guidance. It states: "To operate in the volatile, lethal and complex environment of today and tomorrow, our Army will need to be agile, knowledge-based, robust and combat-capable." It also explains: "Tactical decisiveness, as part of the joint team, will come from a flexible organizational

<sup>&</sup>lt;sup>21</sup> Lieutenant-General Mike Jeffery, interviewed by Sharon Hobson, *Janes Defence Weekly* (18 October 2000), 48.

<sup>&</sup>lt;sup>22</sup> Department of National Defence, "How the Canadian Army Will Fight: A Force Employment Concept Paper (Draft)" (Kingston: DND Canada, 15 January 2004), i, 3. The term strategic relevance also implies that the LF will be knowledge-based, sustainable and the have the ability to deploy over both operational and strategic distances.

<sup>&</sup>lt;sup>23</sup> *Ibid.*, 3.

structure that will enable forces to be tailored to the mission ...."<sup>24</sup> As such and keeping the need for flexible, effective combat power in mind, the author therefore defines tactical decisiveness as *the ability to employ the requisite combat powering order to deter or defeat the threat either alone or in conjunction with other joint and combined assets*.

The first sentence of the CLS's vision, as stated in *The Army Strategy*, declared that we must generate, employ, and sustain strategically and tactically decisive mediumweight forces.<sup>25</sup> It also stated that the Army's centre of gravity is credibility, both as perceived from within and outside of the institution. Ergo, in the opinion of the author, in order to be credible, the Army, if the above definitions are accepted, must logically strive to be both strategically relevant and tactically decisive.

As a final comment, it should be mentioned here that for the purposes of this paper, the author assumes that both of the military requirements of strategic relevance and tactical decisiveness are mutually supporting. In other words, you cannot have one without the other. If, for example, you arrive in theatre fast with an ineffective or unsuitable force, you are just as militarily stymied, as you are if you were to arrive too late with a superb tactical force.

The next section of this paper will now examine the historical basis for expeditionary forces and the opportunity for strategic relevance and tactical decisiveness in Canada's past.

<sup>&</sup>lt;sup>24</sup> *Ibid.*, 7.

<sup>&</sup>lt;sup>25</sup> Department of National Defence, *Advancing With Purpose: The Army Strategy* (Ottawa: DND Canada, May 2002), 13.

## **Historical Background**

Historically speaking, Canada is no stranger to the strategic policy of expeditionary warfare as a means of avoiding wars on Canadian soil. Indeed as Sean Maloney points out, since the 1880s, arguably, Canada has taken an unassuming approach to "forward security" as a method of foreign policy. To make his case, he cites the expeditionary South African (Boer) War and the two world wars fought in the first half of the Twentieth Century as good examples of forward security. As further testimony to this security policy, he emphasizes Canada's long-standing, post-Second World War commitment of troops in Europe as a member of the North Atlantic Treaty Organization (NATO). The author of this paper believes that it is safe to assume that a majority of Canadians would seek to avoid war altogether; but, if forced, would wish to wage war and deterrence outside of Canada. Recent confirmation of this supposition was stated in *Canada's National Security Policy (2004)*, which noted that the CF must "be able to defend Canada, help secure North America, and address threats to our national security as far away from our borders as possible." 28

In terms of rapid deployment policy, *The 1964 White Paper on Defence* outlined the Government's requirements for mobile forces within Canada and for the North Atlantic Treaty Organization (NATO). Specifically, within Canada, the two brigades were optimized for deployment to NATO or to other United Nations (UN) peacekeeping

<sup>26</sup> Sean M. Maloney, "Helpful Fixer or Hired Gun? Why Canada Goes Overseas," *Policy Options* 22, no. 1 (January-February 2001): 59.

<sup>&</sup>lt;sup>27</sup> *Ibid.*, 60-61.

<sup>&</sup>lt;sup>28</sup> Privy Council Office, *Canada's National Security Policy...*, 49.

commitments, and a special service force, which was smaller than a conventional brigade, was formed and was to be both air-portable and air-droppable.<sup>29</sup> With respect to NATO, Canada was asked to provide a battalion for rapid deployment as part of the Supreme Allied Commander Europe's land mobile force.<sup>30</sup>

1971 White Paper - Defence in the 70s continued the trend for rapid deployment policy and announced that the land force would be "reconfigured to give it a high degree of mobility needed for tactical reconnaissance missions in a (NATO) Central Region reserve role." The plan at the time was to replace the venerable Centurion tanks with a light, tracked, direct-fire support vehicle, which was air-portable. This all sounds very familiar to the present LF situation where the plan is to replace the aging Leopard medium tank with a direct-fire support vehicle built by London Ontario's own General Dynamics Land Systems (GDLS). The Mobile Gun System (MGS) is a wheeled light armoured vehicle (LAV) equipped with a 105-millimetre gun. It is a key part of the US Stryker Brigade Combat Team (SBCT) Interim Army concept and should make Canada much more interoperable with these organizations. More on this subject will be discussed later in the paper.

In addition to the historical policy basis for expeditionary warfare, Canada also has some noteworthy historical background with respect to the desire for interoperability

<sup>&</sup>lt;sup>29</sup> Department of National Defence, *The 1964 White Paper on Defence* (Ottawa: Queen's Printer, 1964), 22.

<sup>&</sup>lt;sup>30</sup> Ibid.

<sup>&</sup>lt;sup>31</sup> Department of National Defence, 1971 White Paper – Defence in the 70s (Ottawa: Information Canada, 1971), 35.

<sup>&</sup>lt;sup>32</sup> Martin Shadwick, "The Tank and Asymmetric Choices: A Commentary," *Canadian Military Journal* 4, no. 1 (Spring 2003): 57

with the US Army. The first notice of this requirement came through the formation of the American – British – Canadian – Australia (ABCA) Armies organization. ABCA was formed in 1949 in an effort to retain the interoperability gleaned during the Second World War. This group of like-minded, English-speaking armies now includes New Zealand as an associate member under Australia's sponsorship. ABCA initially sought technical agreements on equipment and ammunition but more recently, has been involved with ensuring a common understanding to the use of changing doctrine and technology.<sup>33</sup> There is no doubt within ABCA who is the lead nation as the US Army is the only one currently capable of conducting operations on a corps level. The United Kingdom is capable of conducting land force operations at the division level, while Australia and Canada are able to conduct land force operations at the brigade level. As all doctrine tends to flow downwards in order to ensure common intent and purpose, the superpower leads the way. This is not to say that other ABCA armies blindly follow. Far from it. Each army has is own unique situation and methods. However, that being said, when the US Army makes significant changes, such as for its Transformation, the other ABCA members must take note to ensure a common understanding of doctrine.<sup>34</sup>

ABCA is becoming more and more prominent as NATO expands to an unwieldy 26 member countries. Consensus is often first reached between the ABCA member armies before approaching NATO to seek agreement on an issue. ABCA countries have successfully joined together and participated in many expeditionary operations of late,

<sup>&</sup>lt;sup>33</sup> American-British-Canadian-Australian (ABCA) Armies Program, *ABCA Website* [on-line]; available from <a href="http://www.abca.hqda.pentagon.mil/Public/ABCA%20Background.htm">http://www.abca.hqda.pentagon.mil/Public/ABCA%20Background.htm</a>; Internet; assessed 25 May 2004.

<sup>&</sup>lt;sup>34</sup> The author spent four years as a member of ABCA's Quadripartite Working Group for Manoeuvre. These comments are based upon the Working Group's comprehensive contributions to the ABCA Coalition Handbook (now used by NATO), urban operations and thermobaric weapons.

such as Bosnia, East Timor and Afghanistan. Of particular interest, Canada was the only ABCA army not to participate in the Invasion of Iraq, the military ramifications of which remain unclear. Nevertheless, the LF can re-establish valuable ties with the US Army by emphasizing Canada's co-operation over the past few years, such as the LF contribution and co-operation gained during the 3rd Princess Patricia's Canadian Light Infantry (PPCLI) Battle Group deployment to Operation Enduring Freedom in Afghanistan in 2001.

For the CF, the answer to the question of the importance of close cooperation with the Americans was emphasized in official policy in 1994. The Department of National Defence's (DND) 1994 Defence White Paper cited the US as Canada's "most important ally," enjoying "the world's largest bilateral trading relationship," and having "trust" and "shared beliefs." The publication of the CF's Shaping the Future of Canadian Defence: A Strategy for 2020 further emphasized this theme. By no means considered as war-fighting doctrine, Strategy 2020 listed eight key strategic objectives of which "Global Deployable" and "Interoperable" were two. Furthermore, as five-year targets for these objectives, Strategy 2020 stated that CF strategic airlift and sealift were to be enhanced and land forces were to be designed such that the vanguard and main contingency force (MCF) could be fully deployable to an offshore theatre within

<sup>&</sup>lt;sup>35</sup> Department of National Defence. *1994 Defence White Paper* (Ottawa: Canada Communications Group, 1994), 20.

<sup>&</sup>lt;sup>36</sup> Department of National Defence, *Shaping the Future of Canadian Defence: A Strategy for 2020* (Ottawa: DND Canada, June 1999), 10.

<sup>&</sup>lt;sup>37</sup> Paul T. Mitchell, "A Transformation Agenda For The Canadian Forces: Full Spectrum Influence," *Canadian Military Journal* 4, no. 4 (Winter 2003-2004): 56. Page 12 of *Strategy 2020* demonstrates that the publication is not doctrine based but rather more a business like guide that is "an achievable and pragmatic roadmap for the future of Canadian defence ...."

21 days and 90 days respectively. In terms of interoperability, *Strategy 2020* called to "Manage our interoperability relationship with the US and other allies to permit seamless operational integration at short notice."<sup>39</sup> Additionally, the CF was to expand the joint and combined exercise program, including inter-service and exchanges with the US.<sup>40</sup>

The LF continued with this vein of US interoperability and, in 2002, then CLS,
Lieutenant-General Jeffrey, and his staff produced a strategy for the LF. *Advancing*With Purpose: The Army Strategy incorporated the strategic objectives of Strategy 2020

and, prominent to this paper, outlined the CLS's vision for building the Army of

Tomorrow. This vision was boTj12 0 0 12 229.9 229.99103 460.55995591was boTj12 0d 0 12writtee

In his vision, Lieutenant-General Jeffrey emphasized the following themes with respect to capability, deployability and interoperability in his vision statement as follows:

The Army will generate, employ and sustain strategically relevant and tactically decisive medium-weight forces. Using progressive doctrine, realistic training and leading-edge technologies, the Army will be a knowledge-based and command-centric institution capable of continuous adaptation and task tailoring across the spectrum of conflict .... The Army will synchronize force development to achieve joint integration and combined interoperability with the ground forces of the United States, other ABCA countries and selected NATO allies ....<sup>44</sup>

Specific to the question of LF being interoperable with US Army organizations, he further stated that:

The annual DND *Strategic Overview* series highlight the trend among our allies towards developing a greater capacity to intervene rapidly in smaller contingencies: the most prominent perhaps is the more deployable Interim Brigade Combat Team (now SBCT) of the U.S. Army. <sup>45</sup>

It is abundantly clear that this vision statement, with its emphasis on relevance, decisiveness and interoperability with the US Army, serves to set a new agenda for the LF. It was a "marking of territory" message that was intended for two audiences: first the LF soldiers; and second, the politicians and other CF environments. <sup>46</sup> Moreover, it can be used for educational purposes and "can be seen as a way of informing others of what the Army should be about."

<sup>&</sup>lt;sup>44</sup> DND, Advancing With Purpose: The Army Strategy ..., 13.

<sup>&</sup>lt;sup>45</sup> *Ibid.*, 11.

<sup>&</sup>lt;sup>46</sup> Christopher Ankersen, "Seeing What's Not There: Questioning The Army Vision," *The Canadian Institute of Strategic Studies Strategic Datalink* 102, (February 2002): 1. [on-line]; available from <a href="http://www.ciss.ca/datalinkexcerpts.htm##102">http://www.ciss.ca/datalinkexcerpts.htm##102</a>; Internet; accessed 8 January 2004.

<sup>&</sup>lt;sup>47</sup> Ibid.

The words in the vision are very commendable. Experience has shown, however, that words in Canadian defence policy, double-barrelled or otherwise, often are just empty rhetoric and conveniently forgotten when it comes to prioritizing scarce taxpayer dollars.<sup>48</sup>

## **Canadian Political Will and Commitment**

Canada must possess the political will and allocate the necessary resources if it wishes to be credible in future defence and security environments. It must have these commitments, or strategic relevancy and tactical decisiveness for the LF within a joint context is a moot point. Otherwise, Canada's LF will be relegated at best to a minimal army that provides a niche capability or capabilities, or at worse, to a technologically impotent army unable to "fight alongside the best, against the best" as was intended in the *1994 Defence White Paper*. <sup>49</sup>

DND finds itself in a cloudy transformational period and is once again at the proverbial crossroads of credibility. The Government must follow through on its commitment to confirm "whether it wants its forces to remain interoperable warriors – which implies heavy investments in hardware in order to conduct joint operations ... or occupy a niche role as peacekeepers." <sup>50</sup> Prior to 9/11, programmes such as healthcare

<sup>&</sup>lt;sup>48</sup> Bland, *Canada and Military Coalitions* ..., 16. Bland estimates that there has been a reduction of some 30 percent in the defence budgets over the past 10 years.

<sup>&</sup>lt;sup>49</sup> DND, 1994 Defence White Paper ..., 14.

 $<sup>^{50}</sup>$  Professor Donna Winslow, "Canadian Society and Its Army," Canadian Military Journal 4, no. 4 (Winter 2003-2004): 13.

received the lion's share of the Government's resources. Perhaps with changing defence and security issues, the Government will see fit to allocate additional funds to the CF.

In the LF's case, it is abundantly clear that it cannot have all of the capabilities that it wants and must make a conscious effort to live within its means. Projects will continue to be carefully prioritized and screened through the LF Capability

Development Model, which will be discussed later in this paper. The LF realizes that it must rely heavily on coalition forces, particularly the US superpower, to provide many war-fighting capabilities, such as joint fire effects. In order to stay "relevant" and be "decisive" in battle, this means the Government must have the political will and commitment to afford the LF core competencies and "the selective leveraging of new technologies" needed to be effective across the spectrum of conflict.

The cynics in the group, as then Brigadier-General Leslie identifies in reference to *Strategy 2020*, are used to defence promises that can mean many things to many people. Over the years, many followers of defence issues have recognized the "intellectual compromise" between such promising phrases as "modern, globally deployable combat capable forces" when balanced against the more familiar statements that the "force structure must be viable, achievable and affordable." Still others will argue that "big brother" (the US) will always conduct our security for us if necessary, and that Canada could simply make minimal, niche capability contributions to the US and NATO when absolutely required.

<sup>&</sup>lt;sup>51</sup> *Ibid.*, 11.

<sup>&</sup>lt;sup>52</sup> Brigadier-General Andrew Leslie, "Strategy 2020 and Some 'Facts of National Life'" (Toronto: Canadian Forces College National Security Studies Course Paper, 2000), 9.

The optimists would say, however, that we have the opportunity to continue to "punch above our weight" internationally in a war-fighting, forward deterrence scenario, while still maintaining a capability to conduct Peace Support Operations (PSO) as well as homeland security and domestic operations.

In times of rapidly changing technology and the so-called Revolution in Military Affairs (RMA), smaller countries feel great pressure to keep up with the US. Some writers advocate that such countries co-operate to develop a "focused tool, specialized in niche capabilities." While others describe the niche option as a method of "mutual cooperation and division of labour." These ideas are particularly attractive to smaller countries that want to contribute somehow to get the political prestige of having their flag placed on a coalition list.

For Canada, this niche approach to LF force capability planning is dangerous and wrong. It is wrong because, relatively speaking, Canada is not a poor country and enjoys membership in the exclusive "Group of Eight" of the richest nations in the world. It should be able to afford incremental improvements in its small armed forces of less than 60,000 personnel.

The niche capability approach is dangerous for force planners because if one puts all of their resources into a niche capability, one can easily run the risk of not being employed or quickly outdated. In other words, your nation faces the danger of selecting the wrong niche capability and wasting precious resources. This approach is also very

<sup>&</sup>lt;sup>53</sup> Rob de Wijk, "The Implications for Force Transformation: The Small Country Perspective," in *Transatlantic Transformations: Equipping NATO for the 21<sup>st</sup> Century*, ed. Daniel S. Hamilton (Washington, D.C.: Center for Transatlantic Relations, 2004), 115-139, [on-line]; available from <a href="http://transatlantic.sais-jhu.edu">http://transatlantic.sais-jhu.edu</a>; Internet; accessed 8 January 2004.

<sup>&</sup>lt;sup>54</sup> Colonel D.W. Read, "The Revolution in Military

problematic for Canada because it is a large country and must maintain a requisite number of soldiers or, more colloquially, "boots on the ground" to be flexible enough to conduct tasks across the spectrum of conflict, such as PSO and humanitarian tasks. Having a small military that is specialized and trained for only a niche capability or capabilities does not usually assist one's efforts when assigned with a myriad of tasks.

What is preferable and more affordable in the case of the LF is an employment organization, such as a brigade group, that has most, if not all, of the close combat core capabilities. The CF, with its three force generation CMBGs could technically have the option of organizing into either its current structure of three medium-weight brigades, each with an integral light battalion, or into two medium weight brigades and one light brigade. This gives added flexibility for the Army of Tomorrow's tasks. Although light and medium weight may be specialized roles, these brigades are not considered as niche capabilities and still maintain enough of the core competencies to produce sufficient combat power to be decisive at the tactical level against a near-peer enemy. Also, they are not, as many Canadians believe, peacekeeping specific organizations and are still designed to conduct certain war fighting tasks up to and including the medium-intensity level of war. From there, CF experience has generally shown that the transition to PSO and other operations other than war (OOTW) with some mission specific training is straightforward. In other words, one can make a warrior into a peacekeeper, but one cannot always make a peacekeeper into a warrior without significant training.

The Government should show its support for the CF's transformational goals, which are geared towards increasing the lethality, situational awareness, mobility, and

force protection. This transformational commitment can be expensive to pursue and once started, has to be completed. For, as Lieutenant-General Hillier points out:

In a partially transformed state, the Army structure will be off-balance and unsustainable. Investments already made in personnel, operations and maintenance, and capital will not realize the intended capability objectives and, in some cases will be a wasted effort <sup>55</sup>

Probably the most expensive and difficult area in which to maintain currency is in the area of digital and shared communications. Many NATO countries, including Canada, are trying to digitize their armies in an effort to be compatible and share a Common Operating Picture with the US Army. The LF is currently in the throes of digitizing but is not yet compatible with the US Army in this regard. Obviously, for fratricide issues and for the overall co-ordination of joint fires, such a system is paramount.

The CF, as a whole, is far from transformed, but with several key projects online, the force is making incremental change. It must continue along this transformation track or risk becoming irrelevant. With the ongoing "race to keep up with technology, the CF is facing the current budgetary pressures and the threat of operational irrelevance looms large." So what is the Government doing about the CF's transformational problem?

To their recent credit, the Government is showing the needed will and commitment. On 16 April 2004, Canada made a major capital defence project announcement for the acquisition of three Joint Support Ships (JSS). These ships, in addition to their maritime resupply duties, will be capable of transporting significant

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<sup>&</sup>lt;sup>55</sup> Hillier, Strategic Capability Investment Plan-Land Effect ..., 3.

<sup>&</sup>lt;sup>56</sup> Paul T. Mitchell, A Transformation Agenda ..., 56.

amounts of equipment. Subject to design confirmation, a single JSS will have approximately 2,500 lane meters available for lift. This equates in LF terms to lifting roughly an infantry company complete with equipment. All three JSS working together would theoretically, as three companies approximately equates to a small battalion or battle group, "be able to deploy the 'lion's share' of the equipment of an army battle group to any port in the world."<sup>57</sup>

The price for this capability is not cheap; these three ships, scheduled to start delivery in 2001, will cost approximately \$ 2.1 billion.<sup>58</sup> By this acquisition, Canada is choosing to have a joint rapid deployable capability and is obviously taking the issue of strategic lift very seriously.

From a rapid deployability and tactical decisiveness standpoint, this purchase is extremely important to the CF. This capability will allow the CF "to take part in a wide range of missions, from high-threat coalition actions, to stability and security operations." This integral strategic lift capability will allow approximately a small battle group, a small tactical hospital and a forward joint headquarters (JHQ) capability to be sailed into theatre in a relatively short time. Short of renting, borrowing or buying a lot of expensive strategic airlift, this would potentially be the fastest and cheapest means available to deploy the LF's vehicles and equipment.

<sup>&</sup>lt;sup>57</sup> Department of National Defence, "Notes for The Honourable David Pratt, P.C., M.P. Minister of National Defence For a Press Conference on the Acquisition of New Support Ships," *News Room* (Ottawa: DND Canada, 16 April 2004) [on-line]; available from <a href="http://www.dnd.ca/site/newsroom/view\_news\_e.asp?id=1349">http://www.dnd.ca/site/newsroom/view\_news\_e.asp?id=1349</a>; Internet; accessed 22 April 2004.

<sup>&</sup>lt;sup>58</sup> Ibid.

<sup>&</sup>lt;sup>59</sup> Ibid.

If not the lead nation, it is hoped that the deployable JHQ would eventually have the capability to directly plug into a higher headquarters to enjoy digital access to combat multipliers, such as joint fires and added situational awareness. This JSS acquisition is outstanding news and shows will and commitment on the part of the Government.

In addition to this announcement, the Government is in the process of conducting an IPR, which includes a formal defence review that will consider the necessary updates required to the *1994 Defence White Paper*. Hopefully, the Government will continue its renewed emphasis on defence matters and provide real departmental guidance in the post-9/11 world. The IPR is also a real opportunity to afford some CF planning for potential joint force package options. These options will obviously take into account the JSS specifications and homeport rotation(s) once these factors become clear. Under its whole fleet management concept, the LF has a current plan to pre-position a battle group's worth of operational stock equipment in Montreal for ease and consistency of rapid deployment.<sup>60</sup> While this is a very good step towards achieving the LF's aim to of rapid deployability, the LF may wish to reconsider the suitability of Montreal as a site for this pre-positioned equipment once the home harbors and rotation plans for the three JSS are confirmed.

Hints given about the content of the review sound very promising. Lately, the Minister of National Defence (MND) has announced his priorities. In general terms, he stated, "the defence review will look at the Canadian Forces through four lenses. First: capability .... Second: deployability .... Third: sustainability .... And Fourth:

<sup>&</sup>lt;sup>60</sup> Hillier, Army Transformation: Punching Above Our Weight ..., n.p.

usability.... Together they will ensure continued credibility ... and Canadians want and need credible Canadian Forces." He also stated under usability, "if we haven't used the capability over the past 10 years, we must now ask ourselves whether that capability will be needed in the coming decade." Perhaps this will be an opportunity to trade in equipment, bases and facilities that are kept more for political reasons than operational necessity. In any case, the IPR and its corresponding defence review appear like the Government will be committed towards the overall effort in becoming more strategically relevant and tactically decisive.

The MND's announcement stated that the JSS employed together would be able to lift "the lion's share of a battle group." This, however, will have to be done in a layered or sequential approach, as, in the author's opinion, the likelihood of all three JSS being grouped together on one coast of Canada is remote. A three-tiered deployment strategy for the LF is discussed in *The Future Army Capabilities Report 01/01* and the report outlined a concept based upon theatre-opening forces, vanguard forces (normally based upon a battle group organization) and main contingency forces (normally based upon a brigade group organization). What is the optimal LF deployment force? Will extra shipping and/or strategic airlift be needed to move a brigade group? These questions will be addressed in the next section of the paper, which will look at the preferred LF organization for major deployments.

<sup>&</sup>lt;sup>61</sup> DND, News Room, Defence Minister David Pratt Speaks ..., 2-3.

<sup>&</sup>lt;sup>62</sup> *Ibid.*, 3.

<sup>&</sup>lt;sup>63</sup> Department of National Defence, *Directorate of Land Strategic Concepts Report 01-01, Future Army Capabilities* (Kingston: DND Canada, January 2001), 41.

## LF Brigade Group Versus Battle Group Deployment

As early as the South African (Boer) War, Canada established a requirement to retain national command of its deployed troops. This was evident during the great victory of the Canadian Corps at Vimy Ridge in 1917 when the four Canadian divisions were grouped together for the first time as a corps yet still were under command of a British commander. The question of retaining national command is not in dispute in this paper as CF doctrine has now firmly embedded the requirement for a national command structure for all deployed Canadian troops. What will be discussed is the optimal LF organizational level at which you should deploy in order to conduct major ground tactical operations. Also, the potential LF contribution to the NATO Rapid Reaction Force (NRF) will be considered, as its land element contribution is planned to be brigade-sized and on a six-month, rotational basis.

When considering the size required for an expeditionary land force, it is useful to consider the principle of self-containment or self-sufficiency, and the principle of critical mass. Critical mass implies that a force has enough combat power to be a credible and tactically decisive. *Canada's Army* addresses these principles and states that it is:

Of particular importance to the CF will be the capability to conduct independent and self-contained operations. Without this capability, Canadian units participating in multi-lateral operations risk being broken up haphazardly among other forces involved ....<sup>66</sup>

<sup>&</sup>lt;sup>64</sup> This is not to imply that then Lieutenant-General Sir Julian Byng was not a great commander. It is the Canadian imperative to retain the national command of its troops that is being emphasized.

<sup>&</sup>lt;sup>65</sup> Department of National Defence, B-GG-005-004/AF-000 *Canadian Forces Operations* (Ottawa: DND Canada, 18 December 2000), 2-5 – 2-8.

<sup>66</sup> DND, Canada's Army ..., 116.

Additionally, Future Army doctrine states: "As a general rule, ... (in war fighting operations), multi-national integration should not take place at brigade-group or below." 67

Now that the CF has learned officially that it will be getting JSS in approximately seven years, why not become solely a battle group army and get rid of brigades? The CF would certainly save money by doing this. The answer why not to is threefold.

First, the operation always should be task-tailored for the requisite troop contribution and command and control requirements. The UN mission in Eritrea, for example, only saw a company group deploy that was equipped with the new LAV III. This was seen as a chance to assist the Netherlands as the lead nation and to test the new vehicle under a specific environment and harsh conditions. As it turned out, the mission was fairly benign and featured a UN zone of separation between the two warring factions. For major operations, however, a brigade-sized organization is preferred for reasons of command and control and national prestige. For example, two Canadian Multinational Brigades, which were based upon the headquarters and select units of a CMBG, deployed for six months each during the NATO Implementation Force (IFOR) deployment to Bosnia-Herzegovina in 1996-1997. These deployments were very good examples of this reasoning as, in NATO's eyes, Canada made an outstanding contribution to IFOR and was responsible for a large Area of Operations (AO) that

<sup>&</sup>lt;sup>67</sup> DND, Future Army Capabilities Report 01/01 ..., 43.

included members of all three of the major Bosnian ethnic groups. 68 Using what has become to be known as "three-D" approach, the brigade conducted, defence operations, assisted with diplomacy, and supervised local development and reconstruction as required.<sup>69</sup> Once the warring factions were separated and all major weapons were placed into cantonment sites, the multinational brigades provided oversight for sizable reconstruction efforts on behalf of the Canadian International Development Agency and, in the author's opinion, were seen to be making a real difference. There is no doubt that this work can also be done at the battle group level, however, the expandable and more robust brigade headquarters is much better suited for the sheer volume of work and coordination involved. Also, given all of the political dealings that occur during most missions, it often is more advantageous and prestigious to have a top-level officer in a command position. By having a top-level commander in an operation, you essentially gain a relevant seat at the table in diplomatic and military circles. Sending a lone battle group usually does not achieve this form of recognition. At the moment, Canada enjoys significant prestige from having two very prominent commanders deployed in the International Security Assistance Force (ISAF). The commander of the Kabul Multinational Brigade (KMNB) is Brigadier-General Lacroix and he holds this position largely because Canada is committing the most soldiers to this mission, approximately 2,200 personnel. Canada is also providing the overall ISAF Commander, Lieutenant-General Hillier. These appointments are particularly noteworthy as ISAF is NATO's

<sup>&</sup>lt;sup>68</sup> The author served in Bosnia first as an UN Military Observer in the 'Bihac Pocket' during July-December 1995 and later as the Senior Liaison Officer to 2 Canadian Multinational Brigade for the first IFOR rotation during January–June 1996.

<sup>&</sup>lt;sup>69</sup> Privy Council Office, *Canada's National Security Policy...*, 47. Although this approach to foreign policy is not new, it is very refreshing to see it embedded in the *National Security Policy* to emphasize the team approach to PSO.

first expeditionary mission far outside of the Alliance's collective boundaries. As such, the Alliance's credibility is invested in this mission. It is significant that two Canadian officers were selected to lead based upon Canada's brigade-sized commitment. This is a great example of the LF "punching above its weight." <sup>70</sup>

Second, the operational functions (e.g. Command, Sense, Act, Protection and Sustain<sup>71</sup>) integral to a brigade are usually enough to be decisive at the tactical level against a near-peer enemy. Again, the battle group normally does not have these integral capabilities and usually is under the command or control of a higher formation that does. This was the case for the 3 PPCLI Battle Group that deployed with a brigade from the 101<sup>st</sup> Airborne Division to Afghanistan in 2001 during Operation Enduring Freedom.

And finally, brigade groups can out perform battle groups during deployments on humanitarian or domestic operations, such as the Manitoba Floods of 1997 and the Eastern Canadian Ice Storm of 1998, simply due to the critical mass of soldiers or so called "boots on the ground" available to accomplish the mission.

There is, of course, a definite down side to the employment of brigade versus battle groups and that is the obvious requirement for greater sustainment when brigade groups are used. That being said, experience has shown that there is a certain unavoidable baseline CF sustainment requirement for any sized organization that is sent on an international deployment. Surprisingly, the National Support Element (NSE)

<sup>&</sup>lt;sup>70</sup> Hillier, *Army Transformation: Punching Above Our Weight ...*, n.p. It appears as though Lieutenant-General Hillier, as Commana33a5

required for a company group deployed to Eritrea will have many of the same baseline personnel that a brigade group requires in Bosnia. Many of the NSE and combat service support positions are unfortunately redundant simply due to the deployment and multilateral aspects of the operation.

An added consideration to the brigade versus battle group debate is the consideration of the new NRF. This initiative, agreed to at NATO's 2002 Prague Summit, was a direct result of the Alliance having little requirement to respond to collective defence issues under NATO Charter, Article 5, and desiring more of an international role in the post-Cold War environment. The US greatly encouraged this initiative, particularly following the events of 9/11, and would encourage NATO to conduct more out of area expeditionary missions, such as ISAF, to maintain the Alliance's relevancy. The NRF is to be operational as soon as possible with a full capability in place by October 2006. Additionally, NATO is examining the possibility of a permanent leasing of approximately 12 Ukrainian Antonov AN-124 strategic lift aircraft to assist with the rapid deployability of the NRF. The NRF concept is to have a six-month rotational joint force consisting of volunteer forces from member countries with a land component of a brigade-sized formation of "about 5,000-6,000 personnel ready to deploy in 5-6 days with at least 30 days of staying power."

<sup>&</sup>lt;sup>72</sup> Harlan Ullman, "From Prague to Prague," *The Washington Times*, 4 February 2004, [on-line]; available from <a href="http://nl.newsbank.com/nl-search/we/Archives?p\_action=list&p\_topdoc=11">http://nl.newsbank.com/nl-search/we/Archives?p\_action=list&p\_topdoc=11</a>; Internet: assessed 28 February 2004.

<sup>&</sup>lt;sup>73</sup> The author was briefed on the subject of the NRF during his Command and Staff Course's Field Study Exercise to various NATO strategic and operational-level headquarters in Europe in February 2004.

<sup>&</sup>lt;sup>74</sup> Ullman, From Prague to Prague ..., n.p.

The main problem with this concept from a land-centric perspective is that most European forces are "in-place" forces. Excluding the recent seven member-state additions, the remaining countries of NATO's integrated military structure can provide a total of 238 combat brigades. Less than 80 of these are considered deployable, including 29 US brigades. 75 It is often said that NATO has approximately 1.4 million troops under command in Europe but only approximately 50,000 of them are capable of rapid deployment. The Alliance, including Canada, needs to be better and faster to be effective in the new security environment. Canada is ahead of most European countries in this regard simply due to the nature of its medium and light-weight land forces. The NRF would be an excellent opportunity for Canada to take a leading role in this initiative. Depending on the forecasted tempo and commitments of the day, Canada could choose to contribute either a small niche capability, a battle group as part of another lead nation's brigade, or a brigade-sized lead organization (probably in the mould of the LF IFOR and ISAF commitments). In order to take a major lead during an NRF rotation, Canada must be committed to maintaining a strategically relevant and tactically decisive LF. Like IFOR and ISAF, Canada stands to gain significant national prestige by leading such a force.

For the next seven years until the projected delivery of

ISAF, then so be it. Indeed, should the nation be committed, there are many attractive reasons to maintain the option to deploy a rapidly deployable and tactically decisive brigade group. As mentioned above, effective command and control, combat effectiveness, national influence, and the sheer numbers of soldiers available to task are a few key reasons to do so. As a final consideration, the birth of NATO's NRF has given Canada a new opportunity to choose to take a key lead role in a multinational brigade-sized organization. So how does one get there from here? A look at of our current force employment plan and its supporting factors is now in order.

## The Current Force Employment Plan for LF Brigade Groups

In order to ensure the future relevance, tactical effectiveness, and sustainability of future brigade groups, many supporting factors are needed to ensure success. This paper will now examine the force employment concept, the fielding of capability projects, and the training, sustainability and doctrine issues, including joint and land effects, necessary for a future brigade group to be strategically relevant and tactically decisive.

In terms of brigade group force employment, the CF has established a modular force employment concept of deploying land, maritime and/or air tactical self-sufficient units (TSSU).<sup>76</sup> Essentially, a TSSU is a modular sub-unit, unit or formation that has a generic headquarters that is able to communicate and "plug and play" with all of its

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<sup>&</sup>lt;sup>76</sup> Department of National Defence, *Strategic Capability Planning for the Canadian Forces*. (Ottawa: DND Canada, 13 June 2000), Chapter 4, Section 3 [on-line]; available from <a href="http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/strat/intro\_e.asp">http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/strat/intro\_e.asp</a> Internet; accessed 8 January 2004. This acronym is pronounced "tissue" and is most unmilitary and must be reconsidered.

assigned subordinate units. A TSSU can be based on any CF element. For example, a single ship sent on a mission could act as a sub-unit TSSU while technically the Air Division in Winnipeg could be tasked to act as a formation TSSU headquarters. In addition to the flexible mission packaging aspect, a TSSU must be capable of integrating with other international and national headquarters in joint and combined operations. As noted in the Vice Chief of Defence Staff's *Strategic Capability Planning for the Canadian Forces (2000)*, "The most likely coalition leader for CF TSSUs is the US, which leads to the emphasis placed on interoperability with US forces by CF leaders." Once again US interoperability is emphasized in doctrine, this time at the joint level.

In the case of the land component overseas deployment, there is the option to deploy a company group, battle group (either alone or as a vanguard for a Main Contingency Force (MCF) brigade group), or a MCF brigade group (MCF brigade group will be used hereafter instead of MCF TSSU) as required for the operation.

Through its efforts to digitize and because of managed readiness, the LF is in the process of designing 12 generic TSSU headquarters based upon the headquarters of the 12 manoeuvre arms infantry battalions (9) and armoured regiments (3). Once the units are issued the complete Land Force Command and Control Information System (LFC2IS), this generic land unit-sized digital headquarters capability should be achievable. Based upon experimentation done by Land Force Doctrine and Training System (LFDTS),<sup>79</sup> headquarters vehicles and staff have been standardized. For

<sup>&</sup>lt;sup>77</sup> *Ibid*.

<sup>78</sup> Ihid

<sup>&</sup>lt;sup>79</sup> The author participated in Army Experiments 6A – digitized battle group headquarters (2000) and 6B – digitized brigade group headquarters (2002), The main directorates involved were Directorate of Army Doctrine, Army Digitization Office Kingston and the Army Experimentation Centre.

example, the baseline intelligence staff dedicated to managing the enemy situational awareness will be the same for all LF unit-sized TSSUs. Moreover, an infantry battle group headquarters could command an LF TSSU consisting of the three following subunits: a reconnaissance squadron, an armoured squadron and a tactical aviation squadron. While the example is probably unlikely, in theory, a common LFC2IS package could conceivably make it a reality in the near future. All future LF TSSU commanders will have to be well versed in the doctrine and Tactics, Techniques and Procedures (TTP) of all of their attached assets.

The MCF brigade group has a digital, LF-compatible plug and play headquarters with reach back CF capability to gain added intelligence and situational awareness as required. Additionally, the MCF brigade group could have under its command or control, CF or international joint units and/or LF or international ground units as required. There is an obvious requirement for interoperability in order to ensure common understanding and intent, and compatible digital communications for effective C2 and combat identification to help prevent fratricide.

The LF has recently added some needed formality to its capability development process and now uses a *Conceive – Design – Build - Manage* model to add clarity, prioritization and discipline to the process (see Figure 1 below).

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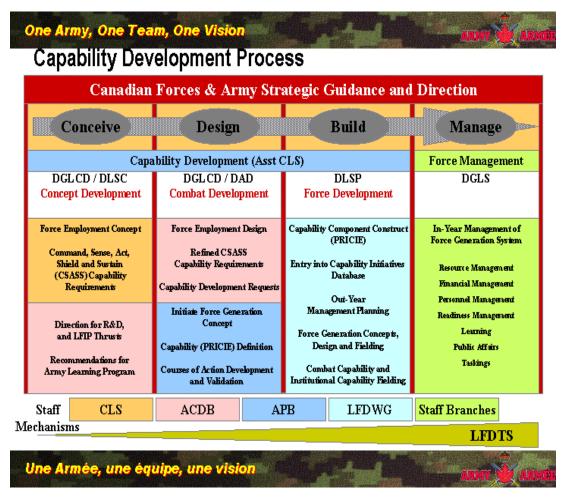


Figure 1 – The LF Capability Development Process Model.<sup>80</sup>

In simpler terms, the LF *Conceive* staff directorates develop concepts and conduct capability experimentation, mostly for the Future Army. *Design* staffs conduct combat development, force employment organizational design and write doctrine and TTPs, mostly for the Army of Tomorrow. This period of time includes the Interim Army. *Build* staffs run the approved LF projects to be fielded into the Interim Army and control the two to five year budget plans. And last but not least, *Manage* staffs generate

<sup>&</sup>lt;sup>80</sup> Figure 1 is cited with permission from a presentation given to the Army Syndicates of CSC 30 by the Director General Land Staff (DGLS), Brigadier-General M.G. Macdonald, on 28 January 2004.

and employ existing LF organizations in The Army of Today within the current fiscal year.

As a direct result of this capability development process, the limited money available for LF projects is being spent based upon stated priorities. Transformation projects in particular are starting to be programmed in an effort to ensure that the Interim Army is tactically decisive. Some of the more significant of these projects are: the LF Intelligence, Surveillance, Target Acquisition, Reconnaissance (ISTAR), which includes the planned procurement of tactical unmanned aerial vehicles (UAV), target acquisition radar, high capacity data radios, improved ground surveillance sensors, and improved electronic warfare (EW) sensors;<sup>81</sup> the medium indirect fire system (MIFS), the wheeled replacement for the tracked 155 millimetre self propelled howitzer; the MGS to replace the Leopard C2 tank that was described earlier; the multi-mission effects vehicle version 1 (MMEV-V1), which is a LAV wheeled version of the existing Air Defence Anti-Tank System (ADATS); the advanced light-weight anti-armour weapons system (ALAAWS); the close area support weapon (CASW), a grenade launcher; the individual soldier systems; and the next version of the LFC2IS.82 Two further points are worthy of mention. First, these projects are spread over several years and are at the mercy of yearto-year budget adjustments; and second, these types of projects, with the exception of the MGS and the MMEV-V1 project are currently being fielded in the SBCTs of US

<sup>&</sup>lt;sup>81</sup> Hillier, *Army Transformation: Punching Above Our Weight ...*, n.p. In his section on Information Dominance, Lieutenant-General Hillier discusses these ISTAR capabilities that the LF is "bringing into service."

<sup>&</sup>lt;sup>82</sup> Department of National Defence, "The Interim Army: A Force Employment Discussion Paper (Draft)" (Kingston: DND Canada, 2 September 2003), 32-38. Also, the status of these LF projects was included in the DGLS briefing to CSC 30 Army Syndicates, 28 January 2004.

Army. There is great scope for bi-lateral co-operation in this area through the auspices of ABCA or the annual Canadian Army/US Army staff talks.

The LF is prioritizing its equipment acquisition plan and, with continued funding, it appears that it is well on its way towards incremental transformation change. Furthermore, these projects on the whole add lethality, situational awareness and mobility to the Interim Army brigade group model, keeping them well on track to be strategically relevant and tactically decisive in the future. So the LF is managing to incrementally equip its brigade groups, now what about training them?

The new ATOF cycle of managed readiness and whole fleet management has been in effect for almost two years. The CMBG rotational training model was designed because there was simply not enough vehicles and equipment to fill all the CMBGs and deploy on operations, and the pooling of scarce resources was required. Also, from a quality of life perspective, the operational tempo was so high that soldiers were at risk of burnout and operation stress disorder. ATOF, in theory, allowed for programmed reconstitution and personal development for a CMBG one year in every three.<sup>83</sup>

In short, the ATOF cycle has the approximate equivalent of one CMBG trained and ready for operations, a second CMBG conducting training in preparation for operations, and one in support and reconstitution, allowing for individual courses and professional development. This cycle becomes very problematic, however, when the Government over-commits the CF and, consequently, the LF receives additional missions. For the LF to be effective over the long-term, our CF leaders must make the Government realize that ATOF is a workable, cost-saving measure but only if one

<sup>&</sup>lt;sup>83</sup> Hillier, *Army Transformation: Punching Above Our Weight ...*, n.p. Also DGLS briefing to CSC 30 Army Syndicates, 28 January 2004.

adheres to the plan. Short of wartime or emergency mobilization, only the equivalent of one CMBG can be deployed once during a year. If the "operational" CMBG is deployed overseas, the second "training" CMBG can be conducting domestic operations tasks (homeland defence, aid to the civil power, disaster relief, humanitarian assistance, or otherwise) as required. The future adherence by our CF leaders, and consequently by the Government, to the ATOF cycle is very critical to maintaining the effectiveness and credibility of the LF.

The success of producing highly trained soldiers as part of the ATOF model will soon be supported by the stand up of the Canadian Manoeuvre Training Centre (CMTC) in Wainwright, Alberta. CMTC is being designed to be approximately the Canadian equivalent of the US National Training Center (NTC) at Fort Irwin, California. All US Army brigade-sized formations are rotated through NTC on a rotational basis and are trained using weapons' effect simulation under a variety of scenarios within in the spectrum of conflict (e.g. war fighting and OOTW, including PSO). CMTC is scheduled to be operational by 2005 and will greatly add to training effectiveness and quality. It should also increase the opportunity for US training and instructor exchanges to enhance doctrinal interoperability, particularly of medium-weight forces.

The LF's BG-L 321 series of publications for brigade and battle group operations are currently being revised.<sup>86</sup> To support this effort, the Directorate of Army Doctrine (DAD) as part of the *Design* staff is conducting a series of experiments to design the

<sup>84</sup> Ibid.

<sup>85</sup> DND, How the Canadian Army Will Fight..., 23.

<sup>&</sup>lt;sup>86</sup> DND, The *Interim Army* ..., 10.

force employment organizations of the Interim Army. These experiments examine tactical decisiveness simultaneously in all spectrums of conflict, or what General (retired) Charles Krulak, a former Commandant of the US Marine Corps, would term as "the three block war." Krulak's three-block war includes the modern requirement for soldiers to conduct war fighting operations, PSO and humanitarian assistance operations all in the same AO, all at the same time. In addition to Krulak's list of three, the LF adds non-combatant evacuation operations (NEO) in a permissive threat environment as the fourth type of operation to be experimented and conducted. In Canadian LF doctrine, this simultaneous operations construct is known as the "four corner war" 88

As part of this rewrite of brigade and battle group publications, if we are truly serious about interoperability, an incorporation, where practicable, of the SBCT specific roles, missions and tasks, its medium-weight TTPs, and any operational lessons would make the LF well placed to work side by side with the SBCTs in the tradition of "fight alongside the best, against the best."

Another aspect that has to be included in the update of doctrine if brigade groups are to be well placed for the future is that of jointness. The LF must make a better effort to include aspects of joint doctrine in their publications and exercises. The author sees no reason why the final exercise of the annual Brigade Training Event could not be based upon a joint scenario and deployment, if the CF could afford it. This would allow for the CF environments to train together in accordance with established joint doctrine.

<sup>87</sup> Charles C. Krulak, "The Three Block War," *Vital Speeches of the Day* 64, no. 5 (15 December 1997).

<sup>&</sup>lt;sup>88</sup> The authour believes that Brigadier General Glenn Nordick, Acting Commander of LFDTS, coined the phrase 'four corner war.'

Moreover, other organizations such as the CFJHQ could glean the training synergies and potential savings of a yearly forecasted event where resources can be shared. Short of that, simulation exercises could be conducted on a regular basis between applicable brigade group and CF headquarters. One does not have to actually send troops on ships or planes in order to conduct joint interoperability amongst the CF environments.

With respect to the joint issue, in a perfect world there would be enough available resources for every CF element's equipment priorities. However, in an effort to retain focus during fiscal restraint, Lieutenant-General Hillier responded to the funding of the CF's Strategic Capability Investment Plan and spoke of the land effect still having primacy in CF joint war-fighting operations. In order to remain true to the eight objectives in *Strategy 2020*, our joint transformation spending priority should be "capable of operating from littoral areas and focused on land effects." The Air Force and Navy are not yet able to win the war alone and:

... the reality of the emerging security environment suggests that it is unlikely that the CF will be called upon to fight in 'blue skies or blue waters,' and the overall value to our country of equipping to do so would be minimal compared to the impact of providing land precision effects.<sup>90</sup>

Therefore, in the future, the CF must focus on *Strategy 2020* objectives to be global deployable and interoperable for international peace and security missions to ensure success. The CF cannot allow itself to get side sidetracked on lesser priorities.

<sup>&</sup>lt;sup>89</sup> Hillier, Strategic Capability Investment Plan-Land Effect ..., 4.

<sup>90</sup> Ibid.

Within the context of interoperability, it would be prudent to understand what the Americans are doing with respect to their future brigade organizations. Do they even know the path down which they will proceed?

## **The Future of US Army Brigades**

This section will briefly examine the brigade-sized organizations, both real and conceptual, that the US Army is considering for their future employment.

In 1995, General John M. Shalikashvili, The Chairman of the Joint Chiefs of Staff, produced a joint war-fighting doctrine for the US military that is, for the most part, still valid today. In *Joint Vision 2010 (1995)*, he recognized the impact of the information revolution and the resulting enablers for the US Armed Forces. In short, he listed four operational concepts that aided by technology, would provide "full spectrum dominance" for the US military. The concepts are: Dominant Manoeuvre, Precision Engagement, Focused Logistics and Full-dimensional Protection. These four became known as the core concepts of the template to guide the US military's transformation.

Two additional factors were added for *Joint Vision 2020 (2000)*. They were: Information Superiority and Innovation. With clear guidance from his superior,

<sup>&</sup>lt;sup>91</sup> United States, Department of Defense, *Joint Vision 2010* (Washington, D.C.: U.S. Government Printing Office, June 1995), 19-26.

<sup>&</sup>lt;sup>92</sup> United States, Department of Defense, *Joint Vision 2020* (Washington, D.C.: U.S. Government Printing Office, June 2000), 3-12.

General Eric K. Shinseki, the Chief of Army Staff, launched his Army Vision and Army Transformation in October 1999. 93

General Shinseki announce a three-pronged effort that would see the continued upgrade of the heavy "legacy force" (now called the "current force"), the development and fielding of an "interim force" of Interim Brigade Combat Teams (now called SBCT) that was to be the basis of experimentation and organizational development, and the "objective force" that would be the Future Army based upon the concepts and factors promulgated in *Joint Vision 2020* (see Figure 2 below).

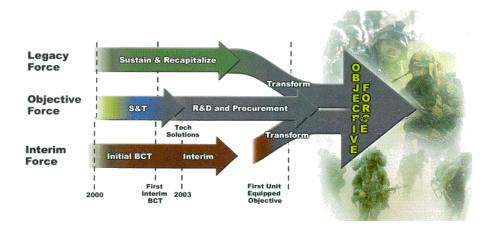


Figure 2 – The US Army Transformation Trident. 94

General Shinseki managed to get his transformation embedded into the minds and the culture of US Army prior to his departure in October 2003. In terms of the SBCTs, there are six planned to be operational during the 2003-2010 timeframe. Of

<sup>&</sup>lt;sup>93</sup> United States, Department of Defense, *Army Vision: Soldier's on Point for the Nation ... Persuasive in Peace, Invincible in War* (Washington, D.C.: U.S. Government Printing Office, 12 October 1999), 1-3.

<sup>&</sup>lt;sup>94</sup> United States, Department of Defense, *The US Army Transformation Roadmap* (Washington, D.C.: U.S. Government Printing Office, June 2002), 6.

these, five are to be infantry brigades and one is to be an armoured cavalry brigade, which will act as the 18 Airborne Corps' armoured cavalry regiment.<sup>95</sup>

The logic behind the formation of these SBCTs was twofold. First, General Shinseki, after personally witnessing the vulnerable situation of the 82<sup>nd</sup> Airborne Division at the beginning of Operation Desert Shield, realized how vulnerable the US Army's light forces were in that situation. Also, he witnessed how the heavy forces were unable to cross the bridges of Kosovo in 1999, as part of Task Force Hawk, due to restrictive weight classifications. Essentially, he desired a small, brigade-sized force that could have the rapid mobility of the light forces, yet the lethality and the survivability of the heavy forces. <sup>96</sup>

The first SBCT became operational in October 2003 and deployed to Iraq shortly thereafter. On 12 April 2004, the SBCT Task Force assumed control of a divisional sector in Mosul in Northern Iraq and, by preliminary reports, is performing well.<sup>97</sup>

So if this is the case, then it seems reasonable that Canada's LF should look to the SBCTs as an example medium-weight force to which to aspire.

However, there is currently a serious debate going on within the US Army as to the way ahead for brigades. With the departure of General Shinseki, General Peter Schoomaker, became the new Chief of Army Staff. Recently, he has made some

<sup>&</sup>lt;sup>95</sup> This SBCT information is cited with permission from US Army exchange personnel from a presentation promulgated throughout the US Army by Deputy Chief of Army Staff personnel in November 2002.

<sup>&</sup>lt;sup>96</sup> General Eric K. Shinseki, television interview with Public Broadcast Station [on-line]; available from <a href="http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/shinseki.html">http://www.pbs.org/wgbh/pages/frontline/shows/future/interviews/shinseki.html</a>; Internet: accessed 24 February 2004.

<sup>&</sup>lt;sup>97</sup> Brigadier General Carter F. Ham, Defense Department special briefing with Commander Task Force Olympia, Multinational Division North (Mosul, Iraq), 9 March 2004. *Coalition Provisional Authority Website* [on-line]; available from <a href="http://www.cpa-iraq.org/transcripts/20040310">http://www.cpa-iraq.org/transcripts/20040310</a> Mar9 Ham.html; Internet; accessed 25 May 2004.

announcements that make adjustments to General Shinseki's US Army transformation plan. Basically, he advocates the immediate advancement of technology gleaned in the Objective Force's Future Combat System (FCS) project to those forces that need them, legacy equipment or not. As he stated in a *Defense News* interview, "Since we're an Army at war, we don't want to wait to get capabilities to the combatant commander." This approach again seems reasonable; however, many in the US Army feel that General Schoomaker may take the future brigade development in another direction.

In 1997, Colonel (Retired) Macgregor advocated that, by the use of technology, it is possible to "flatten the organization" by "reducing the number of administrative layers in organizations and placing decisions closer to the action." Within the context of the US Army, he recommended to get rid of unnecessary layers of command and replace the US Army's divisional structure with smaller "highly mobile, self-contained, independent 'all-arms' combat forces in being" He lists different examples of these brigade-sized organizations, and in fine Pattonist tradition, he calls the heavy option of M1A2 tanks and M-2 Bradley vehicles "combat groups." For example, he lists four main groupings of brigade-sized organizations as follows: Heavy Combat Group, Airborne-Air Assault Group, and both a Heavy and a Light Reconnaissance Strike Group (LRSG). All of these options have traditional corps and division-level troops, such as artillery and attack aviation, allotted to the brigade groups as permanent integral units. Of these options, of particular interest to Canada, is the LRSG, which is medium-

<sup>&</sup>lt;sup>98</sup> Vago Muradian, "U.S. Army Chief: Rethink FCS," *Defense News* (6 October 2003), 1.

<sup>&</sup>lt;sup>99</sup> Macgregor, *Breaking the Phalanx* ..., 34.

<sup>&</sup>lt;sup>100</sup> *Ibid.*, 5.

<sup>&</sup>lt;sup>101</sup> *Ibid.*, 80, 197.

weight and is the only Macgregor brigade-sized organization based upon the LAV family of wheeled vehicles.

Another initiative that seems to echo Macgregor's intent is General Schoomaker's plan to increase the overall number of US Army brigades. Basically, he wants to revamp the Army from 33 brigades to 42 brigades in order to have more of them available for deployment rotations to places such as Iraq and Afghanistan.

Recently, 3rd Infantry Division, as the first division to conduct this initiative, has started the process of converting from the traditional three brigades to five. In all, the US Army plans to restructure from its current 33 brigades to 42 brigades that are modularly tailored. <sup>102</sup>

So based upon the transformational initiatives of Generals Shinseki and Schoomaker, what if anything is the LF supposed to do in the future to be interoperable with the US Army in a medium-weight role? The next section will look at a brief comparison between the medium-weight brigade force employment options for the US Army and the LF.

## A Medium-Weight Brigade Comparison Between the US Army and the LF

Essentially, the LF's official conversion to medium-weight status can be tracked to the 1996 announcement that stated that the Leopard medium tank would not be

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<sup>&</sup>lt;sup>102</sup> Department of National Defence, *Canadian Forces Military Attaché Washington Report*, (Washington D.C.: DND Canada, November 2003 and February 2004).

replaced by a heavy tracked tank.<sup>103</sup> Many cynics at the time argued that with the loss of the tank, the LF was doomed to be nothing but a "constabulary force." The events of 9/11 have changed that situation significantly, and now, arguably by default, we find the LF currently comprised of three medium-weight brigades. These brigades, given proper lift, potentially have very good strategic and operational mobility and, through incremental technological advances, the LF intends for them to become strategically relevant and tactically decisive.

By way of a *grosso motto* comparison within the scope of this paper, an examination of the two potential US Army medium-weight, brigade-sized options (the LRSG and the SBCT) will be listed beside the best-case example of a LF MCF brigade group (see Figure 3 below). A comparison of the options and their major capabilities will then be analyzed.

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<sup>&</sup>lt;sup>103</sup> M.K. Ormrod, P.R.S. Bender, Maj J.J.L.C. Noel de Tilly, *Quarré de Fer: Analysis of the ACV in Warfighting Tasks*, ORD Project Report PR 9817 DOR (J & L), (Ottawa: DND Canada, 1998), p ii.

| Capabilities<br>by      | Macgregor's<br>Proposed LRSG   | MCF Medium-Weight Brigade<br>Group  | US Army Interim<br>Force SBCT   |
|-------------------------|--|---|---|
| Operational<br>Function |  | (Best Case Proposed MCF<br>TSSU)  |   |
| COMMAND                 | Digitized<br>Headquarters/C4I<br>Squadron/Battalion,<br>(700)//9 X MLRS  | Digitized Headquarters Staff and<br>Command Support Battalion,<br>(400)   | Digitized Headquarters Company (116); Signals Company (86) (202)//Lightweight Command Post.   |
|                         | ((700))  | ((388))   | ((202))   |
| SENSE                   | SENSE AND ACT  3 X Reconnaissance Squadron/Battalion, (2400)//160 X LAV, 126 X MGS, 27 X 120mm Mortar;  Air Attack Squadron/Battalion, (500)//30 X Reconnaissance Attack Helicopters, 25 X Utility Helicopters (15 X Missile/Rocket capability). | 1 X Reconnaissance Squadron with Assault Troop, (137)//6 X COYOYE MAST, 6 X COYOTE REMOTE, 5 X LAV III;  1 X Target Acquisition Troop, (40)//4 X TUAV-SPERWER;  1 X Locating Battery, (60);  1 X CF Electronic Warfare Troop, (70).  ((307))  | RSTA Squadron/Battalion (499), 3 X RSTA Troops/Companies, 1 X Surveillance Troop/Company; Military Intelligence Coy in SBCT Headquarters (68)  ((567))//144 X MAV-Recce, 4 X MAV-NBC* or FOX vehicles, 6 X 120mm Mortars, 4 X TUAV, 8 X EW Ground Sensors, 52 X Counter Intelligence Personnel. |
| ACT                     | ((2000))   | 3 X LAV Infantry Battalions (2,046)//135 X LAV III-INF), 36 X JAVELIN Posts*, 6 X Sniper Teams;  1 X Direct Fire Regiment* (approximately 458)// 36 X MGS,* 8 X LAV-TOW*, 8 X MMEV-V1*;  1 X Artillery Close Support Regiment (503)//18 X MIFS*or 12 X 105mm Light Guns and 6 X 120mm Mortars;  1 X Tactical Aviation Squadron, (421)// 8 X ERSTA* Helicopters, 16 X Utility Helicopters. | 3 X Infantry Battalions (2,167)//160 X MAV (135 X MAV-INF), 27 X MGS* or TOW wheeled, 22 X 120mm Mortars, 81 X JAVELIN Posts, 11 Sniper Teams; 1 X Anti-tank Company, (69)//9 X TOW ATGM; 1 X Artillery Battalion, (78)//18 X 155mm Towed Howitzers.  |
|                         | ((2900))   | ((3,428))   | ((2,311))   |

SHIELD Combat Mobility Battalion, (550)

((5

With some major equipment purchases or grouping with another nation's capability, Canada could in future adjust to form a LRSG if required.

On the other hand, if we look to the smaller and more agile SBCT option on the right-hand portion of Figure 3 (an SBCT averages 3,587 personnel as opposed to the LRSG's 4,850 personnel), the MCF brigade group is much closer in organization. When the LF projects are factored in (see \* on Figure 3), one can see that there exists more similarity in terms of organization, equipment and overall capabilities between the MCF brigade group and the SBCT in comparison with those of the LRSG.

If one can accept that one cannot adopt the Macgregor LRSG model in the midterm based primarily upon the requirement to have an integral attack helicopter battalion, it is useful to examine the broad capability difference between a MCF brigade group and an SBCT.

At first glance, there are some rather obvious differences. The author intends to address these differences through a comparison using the LF Operational Functions. With respect to *Command*, the digitized battlefield should make you more aware of your surroundings.

The headquarters of the two organizations are both digitized except the SBCT has a well-advanced version of both their higher and lower tactical internet and digital battle tracking systems, Army Battle Command System (ABCS) and Force XXI Battle Command Brigade and Below (FBCB2) respectively.<sup>105</sup>

digital command systems on in the future battlespace in order to have interoperability in terms of access to joint fires and shared situational awareness. This is the major area for improvement for the LF to work on.

As far as *Sense* is concerned, the striking difference is that the SBCT has an integral Reconnaissance-Surveillance-Target-Acquisition (RSTA) Squadron/Battalion (remember that a US armour cavalry organizations are LF equivalent of: squadron (US)//regiment/battalion (CA), troop (US)//company/squadron/battery (CA). See Figure 3 for these distinctions in the LRSG and SBCT columns). This is due to the tremendous emphasis that the US Army is placing on situational awareness, especially for a medium-weight organization with less inherent protection and survivability. By emphasizing the strengths of a RSTA Squadron/Battalion, the US Army hopes to compensate for the medium-weight armour by allowing the SBCT to "see first, understand first, and act first." 106 As such, the RSTA Squadron has three Reconnaissance Troops (LF Squadron equivalent) and a Surveillance Squadron, which includes integral UAVs (four Shadow 200), a Prophet EW baseline, Q-36 and Q-37 locating radars, and a mounted NBC reconnaissance platoon. This organization is robust and has military intelligence personnel also acting as crewman throughout the reconnaissance platoon.

The CMBG Reconnaissance Squadron is equipped with the state of the art

Coyote surveillance vehicle. That said, the Squadron based upon a one to four sub-unit

comparison is approximately quarter of the size of the RSTA Squadron and must obtain

<sup>106</sup> Major D.J. Senft, "The Medium Gun System is Coming! ... Now What?" *Army Doctrine and Training Bulletin* 6, no. 3 (Fall/Winter 2003): 30. The MGS is now officially referred to as the 'Mobile' Gun System in both the US and Canada.

EW and NBC assets from CF joint organizations. In order to form a RSTA Squadron, the LF would have to group all three of its CMBG reconnaissance squadrons together to make a reconnaissance regiment equivalent. Even then, this regiment would need additional assets to be grouped from within the CF resources. As with *Command*, there also would be work to do in the *Sense* operational function in order to be compatible in terms of combat power.

On the other hand, the CMBG is very robust in the *Act* category. Every LAV III vehicle is turreted with a 25-millimetre canon. This weapon system, combined with the ALAAWS project (that will purchase Javelin missiles) will give the CMBG the firepower required for close combat. Moreover, the LF has announced the purchase of 66 MGS direct-fire support vehicles (the exact same vehicle that the SBCT is getting).

In terms of direct fire, the first point to be clarified is that the "MGS is not a tank, nor a tank killer replacement." <sup>107</sup> In short, it does not have the necessary armour or the required standoff range to be employed in this role. Canada, therefore, is taking a different approach by forming a direct fire squadron of project-designed capabilities consisting of the MGS, LAV TOW, and MMEV-V1 (or LAV ADATS). The systems approach to direct fire as advocated by the Armoured School at the Combat Training Centre is untested at this time. While the obvious synergies of the different and massed direct fire capabilities are seductive, there is a strong argument that the MGS, which is basically an infantry support vehicle that busts enemy bunkers and obstacles, should be grouped fulltime with the other combat systems of the SBCT Infantry Company. Maj

<sup>&</sup>lt;sup>107</sup> *Ibid.*, 28.

team" should be together as "Anything else would quickly expose the vulnerability of the individual systems when operated independently of each other." <sup>108</sup>

The "combined arms" approach is way that the SBCT's have been organized. The SBCT MGS platoons are situated inside each infantry Styker Company to maximize the combined-arms synergies. It will be interesting to see whose direct-fire approach is more effective for a medium-weight brigade. Also, both organizations can have sniper sections available at battalion or company as required.

In terms of indirect fire, The SBCTs have integral 60- and 81-millimetre mortars available at company, and 120-millimetre mortars available for use at battalion-level. This becomes problematic for the MCF brigade group as the close support artillery regiment holds a relatively small amount of 120-millimetre mortars for use. As for field artillery, the SBCT has an integral towed 155-millimetre battalion. The MCF brigade will have to wait for the mid-term, however, as this capability should eventually be funded as the MIFS project gets approval and funding. In the interim, the MCF brigade group would be forced to employ the 105-millimetre Light Gun as a substitute.

The actual infantry soldiers are similarly equipped. Once the LF fields its CASW (e.g. 40-millimetre grenade launcher) and its ALAAWS (e.g. Javelin anti-tank missile) projects, the two organizations will be roughly on par in terms of capability. Individual soldier systems, in particular the US Army's hand-held Commander's Digital Assistant (or more commonly referred to as "Blue-Force Tracker") will be an

<sup>&</sup>lt;sup>108</sup> *Ihid*.

technological area of development to be monitored and exploited by both nations as it comes available. 109

As far as *Protection* is concerned, the two brigades are approximately equal with the same integral engineer and overall air defence assets. However, the MCF brigade group has an integral military police platoon capability.

Finally, *Sustain* is a difficult operational function to glean performance measurement. Both Canada and the US are in the process of trying to protect their logistics personnel in armoured echelon vehicles and both countries have projects to this effect. Furthermore, both countries are attempting to reduce their "logistical footprint" and are far from effective in the area of total asset visibility. The US DoD has made this area a priority and appears to be dedicating more resources towards achieving this real-time tracking capability. <sup>110</sup>

In summary, it would seem advisable from the above analysis that the LF explore the option to become closer in task and purpose to a SBCT than a Macgregor LRSG.

This is due, for the most part, to cost involved with trying to build Macgregor's option.

The LF has made the decision to go wheeled and medium-weight and does not currently possess, in particular, the attack helicopters and the MLRS launchers that the US Army employs and the LRSG requires. In order to be employed in future as a LRSG, the LF

<sup>109</sup> Sandra I. Erwin, "Army to Upgrade Land Warrior System With Blue-Force Tracker," *National Defense Magazine*. February 2004 [on-line]; available from <a href="http://www.nationaldefensemagazine.org/article.cfm?Id=1339">http://www.nationaldefensemagazine.org/article.cfm?Id=1339</a>; Internet; accessed 25 May 2004. The US Army is still in development stage for this individual soldier system. The long-term plan is to integrate CDA (General Dynamics Decision Systems) with the vehicle-mounted FBCB2 (Northrop Grumman Tactical Systems).

<sup>&</sup>lt;sup>110</sup> United States, Department of Defense, *The US Army Transformation Roadmap* ..., G-7.

would have purchase or be grouped with another nation that is willing to provide this attack helicopter battalion capability to Canada.

On the other hand, the SBCT has comparatively more *Command* and *Sense* capability and the MCF brigade group has more *Act* capability. The other operational functions of *Protection* and *Sustainment* are relatively balanced. That said, in the functions of *Sense* and *Protection*, the MCF brigade group is required to have attached to them CF-centralized capabilities, such as EW and NBC respectively. Overall, however, the SBCT option would require much less adjustment by the MCF brigade group than is required to adopt the LRSG option.

In terms of employment doctrine for the US Army brigade organizations, the LRSG's mission profile is that of a "Versatile, Economy-of-Force Battlegroup [sic] designed to be delivered by air in order to conduct Close and Deep Maneuver Operations, Support Forced Entry Operations, Contingency Operations and OOTW as needed."

The LRSG employment concept is similar in content to that of the SBCT. The major difference is that in US Army doctrine, the employment of an SBCT is restricted during war fighting, depending on the spectrum of conflict. For OOTW and Small-scale Contingencies, the SBCT can be deployed and employed either alone as a brigade or in conjunction with other assets. However, during Major Theatre of War operations, there is no intent for an SBCT to operate as an independent brigade, but rather as an attached brigade within a combat division. This restriction may change over time as technology improves the precision strike and protection capabilities of the SBCT. Additionally, the SBCT will likely work in conjunction and not in competition

<sup>&</sup>lt;sup>111</sup> Macgregor, *Breaking the Phalanx* ..., 79.

with other US Army assets that have their own skill sets. For example, a recent Joint Readiness Training Center simulation exercise had Marine Corps forces conduct a feint landing, airborne forces seize key terrain and isolate enemy WMD sites, ranger forces seize an airfield to enable the early entry operations of the SBCT lead battalion, and the SBCT went on to capture the WMD sites once they had landed enough combat power to do so. <sup>112</sup> In other scenarios, the SBCT was landed in an adjacent country or place and was tasked with the seizing and/or securing of hostile airports and ports that were intended to be used by friendly forces. <sup>113</sup>

As a final comparison point, a Canadian Forces College (CFC) example is in order. In reviewing the wargaming data provided by CFC Toronto, the author's interest was twigged as the force equivalencies for a CMBG and a SBCT were listed as the same (at 3.8). However, the equivalencies for a LAV 3 Battalion (0.95) and a Stryker Battalion (0.8) were not listed as the same value. Are they equivalent? Does the enabling addition of the RSTA Squadron to the Infantry Stryker Battalions give the SBCT the added situational awareness and overall combat power to pull equal to the CMBG? To answer these questions, more detailed wargaming and operational research is required. The main point is that they are very close in force equivalency and this demonstrates that in future, Canada could make a CMBG into a SBCT if the national will and commitment were present.

<sup>&</sup>lt;sup>112</sup> Kasales and Gray, Leveraging Technology: The Stryker Brigade Combat Team ..., 7.

<sup>&</sup>lt;sup>113</sup> *Ibid* 

<sup>&</sup>lt;sup>114</sup> DND, CSC 30 Land Component Precis #5 ..., Part 3, Chapter 4, p.1.

## Conclusion

The events of 9/11 have changed significantly the way the US views its peace and security. The new and dangerous threat of the "unholy trinitarian" coupled with an access to modern-day technology to fight their wars, has forced the US Government to act in the interest of its national security. In 2002, the Government adopted an official preemption policy as an integral part of its *National Security Strategy*. Two major wars are being fought overseas today are examples of this policy.

With this in mind, Canada must now make some hard foreign and defence decisions of its own. The US is an important ally and our largest trading partner and while Canada does not have to blindly follow US foreign and defence policy in all situations, it is very important that the CF be militarily interoperable with the its superpower neighbour. This would allow Canada to choose to contribute when it so desires. Moreover, Canada by being an enabled neighbour would be able to shape foreign policy through its participation in US-led coalitions.

Recent announcements by the Canadian Government are encouraging. It appears that they are taking the issue of strategic lift very seriously with the acquisition of the three JSS. Additionally, the Government promises an IPR and the MND is espousing the future DND goals of: capability, deployability, sustainability, and usability.

Specific to the LF, Canada has had a tradition of sending its Army to fight wars far away from the Canadian homeland. More recently, however, *Strategy 2020* spoke of deploying a vanguard battle group in 21 days and an MCF brigade group in 90 days.

The pressure for faster deployment timings is greater post-9/11, but historically the

requirement for the deployment of a brigade group was listed in this CF publication as strategic guidance for the LF. Of recent historical import are the two brigade-sized deployments that have gained Canada significant international recognition.

First, two Canadian multi-national brigades deployed to Bosnia on two sixmonth IFOR rotations in 1996-1997. These Canadian-led multinational brigade groups, used the so-called "three-D approach" of defence, diplomacy and development that assisted in bringing peace, security and reconstruction to a very large and diverse AO in northwest Bosnia.

Second, the KMNB is an ongoing example of Canadian-led multinational brigade that is working as part of the NATO-led ISAF in Kabul, Afghanistan. This brigade group is also using the three-D approach and is working effectively in extremely harsh and challenging conditions. Canada certainly has an expeditionary tradition of fighting wars on the land of others and has two recent examples of very successful brigade group deployments as part of a multinational force for which Canada received great credit.

The current Force Employment Concept for the CF as outlined by the Deputy Chief of the Defence Staff is to deploy modular TSSUs. For the LF contribution to the joint force, this could mean a deployment of a company group, a battle group (alone or as a vanguard for the brigade), or an MCF brigade group deployment. This model is very flexible and well suited for the grouping and deployment of environmental and joint capabilities. There is now a need for rapid deployable and capable forces that could be both strategically relevant and tactically decisive to bring the fight to the enemy.

The MCF brigade group is very flexible in terms of command and control and has a digital, LF-compatible plug and play headquarters with a CF reach back capability to gain added intelligence and situational awareness as required. That being said, the MCF brigade group is not digitally compatible with the US Army. Remedying this problem area should be a high interoperability priority. Additionally, the MCF brigade could have under its command or control CF or international joint units and/or LF or international ground units as required. There is an obvious requirement for interoperability with these units as well in order to ensure common understanding and intent. The MCF brigade group needs compatible digital communications for effective command and control, linkage to joint fires and combat identification to help prevent fratricide.

In total, the projects the LF is currently developing, the new ATOF cycle of managed readiness and whole fleet management, and the stand up of CMTC will all combine to have a synergistic effect in making the brigade groups well trained and highly effective.

Brigade-sized organizations are tactically in vogue in the US Army as the future joint land force of choice and Canada currently has three of them. The question of the day is whether one should construct bigger or smaller brigades. The US Army conceptual medium-weight examples of Macgregor's LRSG that is approximately 4, 850 in strength and the General Shinseki's Interim Army SBCT that has approximately 3,587 personnel are the main future choices for the LF. With some adjustment and equipment purchases, the LF could reorganize to form either option. However, the main

deficiency with trying to form the LRSG is Canada's lack of attack helicopters that are an integral battalion to this organization.

On the other hand, the LF could form a SBCT will relatively minor adjustments. This is due in large part to the coming projects, which include many of the GDLS LAV family of combat vehicles and ancillary equipment that the SBCT also has or will have. The main addition would have to be additional RSTA assets to make up for the overall lack of Sense capability. Additionally, some specialize CF units, such as NBC and EW, will have to be attached or made integral to the MCF brigade group in order to have the SBCT capability. As the SBCT is not conceptual like Macgregor's organizations, actual training and exchange opportunities could be made available between the LF and US Army in order to foster and ensure interoperability. This would be especially applicable once the CMTC is established in 2005. Finally, an SBCT is currently deployed in Northern Iraq and the LF must track lessons learned from this organization in order to remain effective and adjust doctrine and TTPs as required.

Canada is well placed to employ its MCF brigade group in a future strategically relevant and tactically decisive role. For, as shown, Canada would be able to do this because there is an expeditionary tradition and there would be likely government will and commitment. The MCF brigade group would be the correct size for maximum military and political return for Canada's investment. The MCF brigade group could be also be rapidly deployable by sea and airlift; and continued incremental spending on projects and investment in training, doctrine and exchanges would ensure that the MCF brigade group would become interoperable with the US Army to maximize situational awareness, joint fire effects and overall tactical decisiveness.

A future deployment could take the form of a Macgregor LRSG with significant adjustment, or as an SBCT-like organization with minimum adjustments and for added interoperability with the US Army. Moreover, a strategically relevant and tactically decisive MCF brigade group capability would give the transformed LF credibility "with our friends and allies and capable of being overwhelmingly successful, no matter the mission given it, while reducing the risk to those soldiers actually executing the operation." Still capable of fighting in what General Krulak described as a "three block war" or the LF calls the "four corner war," the MCF brigade group would have the rough equivalency of a SBCT yet still have the troops necessary to transition to PSO or to domestic operations and to provide quality "boots on the ground," whatever the mission, whatever the place.

<sup>&</sup>lt;sup>115</sup> Hillier, Army Transformation: Punching Above Our Weight ..., n.p.

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