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STRATEGIC FORESIGHT IN CANADIAN FORCES FORCE DEVELOPMENT OF ARMOUR CAPABILITIES: PURSUING THE HORIZON?

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ABSTRACT

The domain of Strategic Foresight is one which seeks to examine an organization's aim and objectives in light of possible future scenarios in order to make informed decisions about the direction of the organization. While Strategic Foresight processes have been largely examined in the context of private sector companies, little has been written about the applicability of these processes in a defence related domain. This paper will seek to examine the use of Strategic Foresight in Canadian Forces (CF) force development and procurement, specifically examining the evolution of attitudes and policies surrounding the main battle tank between 1994 and 2007.

This paper provides an overview of the theory of Strategic Foresight as well as procurement and force development processes, identifying specifically the challenges of producing strategic direction in the absence of continually updated government defence policy to drive force structure and capability requirements. It reviews CF policies and the employment of tanks from the end of the Cold War to the decision to replace the tank with a wheeled Mobile Gun System in 2003, concluding that the decisions were made more as a result of fiscal and political constraints than through Strategic Foresight processes such as scenario building. The requirement to deploy Canadian main battle tanks to Afghanistan in 2006 is demonstrated to have been potentially foreseeable had scenario building been employed. Finally, the decision to obtain German and Dutch Leopard 2 tanks for the CF is shown to have been more of an immediate reaction to events in the Afghan theatre of operations at the time than a product of Strategic Foresight processes.

This paper concludes that Strategic Foresight processes are applicable to defence planning, but suffer from more constraints than when applied in a private sector context.

**STRATEGIC FORESIGHT IN CANADIAN FORCES
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INRODUCTION

I saw a man pursuing the horizon;
Round and round they sped.
I was disturbed at this;
I accosted the man.
"It is futile," I said,
"You can never -"
"You lie," he cried,
And ran on.

-Stephen Crane

The ability to predict the future is something which is sought by business and industry throughout the world. Organizations which are able to foresee upcoming changes are better able to meet new challenges than those who simply react to them. The factors which influence the future are numerous and many are not easily identified in advance, however this has not stopped the development of theories to better foresee changes which may impact organizations. Conflict is one constant within the world, however the nature and means of prosecuting defence operations has constantly evolved as a result of changes in society, politics and advances in science and technology. Armed forces the world over, therefore, seek to predict what future conflicts may affect them in order to better prepare and equip their forces to face them. While it has often been said that "militaries tend to transform slowly, or not at all, because they like to 'refight the last war,' rather than preparing for the next one,"¹ there has been considerable effort dedicated to

¹ Antulio J. Echevarria, "Transformation's Uncontested Truths," : 2;
<http://www.strategicstudiesinstitute.army.mil/pdffiles/pub739.pdf>; Internet; accessed 20 Jan 2012.

changing this paradigm. The field of Strategic Foresight (SF) is a discipline, with roots in the French *La Prospective* of the 1950s, which seeks “enlightened anticipation by clarifying actions made in the present through thoughtful examination of both possible and desirable futures.”² While SF was not designed for a military context, this paper will seek to explore the field of SF and its applicability to Canadian Forces (CF) strategy. It will examine the decreasing emphasis on tanks in CF force development beginning in 1996, through the decision to reinvest in heavy armour by procuring Leopard 2 main battle tanks in 2007, in order to determine the appropriateness of SF in a specific defence context.

While it is impossible to predict the future, SF is a potentially useful tool to analyze the future security environment and inform capability development in order to respond to future challenges. Could the requirement for heavy armour have been foreseen as possible through the application using SF? This paper will argue that the 2007 acquisition of Leopard 2 for the CF was the result of over a decade in which the tenets of Strategic Foresight were not applied, resulting in a hastily acquired capability based more on opportunity than forward thinking.

This paper will be organized in four chapters, beginning with an overview of the theory of Strategic Foresight and a review of procurement and force development processes, focusing on the challenges of producing strategic direction to drive force structure and capability requirements. It will subsequently review CF policies and the

² Michel Godet, “Strategic Foresight La Prospective: Use and Misuse of Scenario Building,” LIPSOR Working Paper, no. 10 (2008): 7; http://innovbfa.viabloga.com/files/LIPSOR__Strategic_Foresight.pdf; Internet; accessed 27 January 2012.

employment of tanks from the end of the Cold War to the decision to replace the tank with a wheeled Mobile Gun System (MGS) in 2003. The following chapter will explore the indications that Strategic Foresight could have capitalized on in order to identify the potential need for deployment of Leopard C2 main battle tanks to Afghanistan in 2006. It will then analyze the decision to lease German Leopard 2A6M tanks for immediate use in Afghanistan as well as to purchase Leopard 2A4 tanks from the Netherlands, in order to determine whether the latter was part of a well thought out strategy based on foresight or an immediate reaction to events in the theatre of operations at that time. Finally, force development will be explored in light of the 2008 Canada First Defence Strategy in order to demonstrate the limits of Strategic Foresight with respect to procurement realities.

CHAPTER 1 - STRATEGIC FORESIGHT IN FORCE DEVELOPMENT

Regardless of the nature of an organization, be it in the business world, defence, government or other domains, there is generally a desire to improve effectiveness and efficiency in the face of a changing environment. While some organizations seek to maintain the status quo for simplicity or due to reluctance to embrace change, others change frequently due to differing management teams with different viewpoints or outlooks. This chapter will explore the discipline of Strategic Foresight in order to fully understand the concept, processes and considerations. It will then review the CF domains of procurement and force development in order to identify trends and shortfalls in the development of strategic policy since the mid-1990s. This chapter will demonstrate that despite recent improvements in stating clear defence policy, the Government of Canada and DND have historically struggled to develop and clearly outline a coherent strategy capable of guiding force development and procurement.

STRATEGIC FORESIGHT DEFINED

In order to determine whether or not Strategic Foresight (SF) can play a role in the CF procurement process, it is important to fully understand the concept. As previously mentioned, the theories which make up SF are originated in the 1950s. The Australian scholar Richard Slaughter defines the discipline as follows:

Strategic Foresight (SF) is the ability to create and maintain a high-quality, coherent and functional forward view and to use the insights arising in organisationally useful ways; for example: to detect adverse conditions, guide policy, shape strategy; to explore new markets, products and

services. It represents a fusion of futures methods with those of strategic management.³

This definition's example of markets and products clearly indicates the origins of SF in the business world, where there exists the possibility of gaining a competitive advantage, but its application is not limited to the private sector. Other SF proponents, such as Harvard's Andrew Leigh, include broader perspectives which apply more aptly to government. He describes how SF "involves broadening the menu of policy options, and taking into account future scenarios that might affect today's decisions. In one sense, it is merely an extension of good policy making."⁴ Such a broad view of SF describes the aim of the discipline, but fails to provide a concrete process in order to make the concept useful. One framework, drawing on the common themes of several proponents, will now be outlined in order to serve as a basis for discussion.

In order for the broad definition of SF to be practical rather than simply theoretical, a process will be outlined based on Godet's work. Godet outlines "5 Fundamental Questions for Strategic Foresight" as follows:

The dichotomy between exploring and preparing for proactive course of action implies the following five questions: (Q1), what could happen? (scenarios) (Q2), what can I do? (strategic options) (Q3), what will I do? (strategic decisions) (Q4), how will I do it (actions and operational plans) and an essential prerequisite question (Q0), who am I?⁵

³ Richard A. Slaughter, "Developing and Applying Strategic Foresight," 1; http://www.forschungsnetzwerk.at/downloadpub/2002slaughter_Strategic_Foresight.pdf; Internet; accessed 28 January 2012.

⁴ Andrew Leigh, "Thinking Ahead: Strategic Foresight and Government," *Australian Journal of Public Administration* 62, no. 2 (June 2003): 3; <http://people.anu.edu.au/andrew.leigh/pdf/Thinking%20Ahead%20-%20Strategic%20foresight.pdf>; Internet; accessed 26 January 2012.

⁵ Godet, "La Prospective...", 25.

These questions provide a useful yet simple path for moving from analysis of the environment, through possible alternatives to a strategic vision for the future. They will be further expanded upon in order to provide a framework for later examining whether or not SF could be effectively used in the CF.

The prerequisite question, ‘who am I?,’ is essential to defining what the organization stands for and what they aim to do. It essentially involves ensuring that the vision and mission of the organization are clear and appropriate. As University of Houston futures studies professor Andy Hines relates, “Like any organizational activity, Strategic Foresight must demonstrate a link to the mission, purpose, effectiveness, performance, and bottom line.”⁶ As times change, so may the organization’s purpose and therefore this step is essential to designing strategy which conforms to the aim.

The next question, ‘what could happen?,’ involves the development of possible scenarios for the future. This is done by first scanning the environment in order to discern patterns and trends. Boisot and McKelvey describe the fundamental nature of scanning: “Any living creature survives by first scanning its environment for data on the threats and opportunities that confront it. It must then extract the relevant information from such data and interpret it according to its prior experience before acting on it.”⁷ From the scan of the environment, possible scenarios are built which attempt to determine the external environment of the future. Robbins advocates the development of

⁶ Andy Hines, “Strategic Foresight; The State of the Art,” *Futurist* 40, no. 5 (September/October 2006): 21; <http://search.proquest.com/docview/218603803/fulltextPDF?accountid=9867>; Internet; accessed 25 January 2012.

⁷ Max Boisot and Bill McKelvey, “Speeding Up Strategic Foresight in a Dangerous and Complex World: A Complexity Approach,” Chap. 3 in *Corporate Strategies Under International Terrorism and Adversity* (Cheltenham & Northampton: Edward Elger, 2006), 27.

two to three scenarios, based on the focal issue at hand, the internal and external driving forces involved, the predetermined elements, and the critical uncertainties.⁸ For example, the focal issue could be whether or not tanks will be required in the future; the driving forces could be the need for strategic deployability (internal) and the threat from enemy tanks (external); the predetermined elements could be the certainty that conflict of one form will continue in the future; and the critical uncertainty could be whether or not the CF will be required to conduct high-intensity inter-state conflict against opponents with tanks.

The question of ‘what can I do?’ will lead to the development of strategic options. Slaughter describes the use of scenario building as the most successful of the iterative and exploratory methods:

After a painstaking process of enquiry, ‘scenario logics’ are defined and a basis for specific scenarios is derived. These make it possible to construct internally coherent accounts of divergent future states. In turn, the latter are used to consider a variety of possible organizational responses.⁹

The options which are derived from the scenario building should not initially be limited, and Hines suggests selecting up to six based upon established criterion in order to distinctly challenge the assumptions from the previous stage.¹⁰ It is important to include a broad range of options from which to select in the next phase, where strategic decisions are made.

⁸ Gordon C. Robbins, “Scenario Planning: A Strategic Alternative,” *Public Management* 77, no. 3 (Mar 1995): 2.

⁹ Slaughter, “Developing and Applying Strategic Foresight,” 7.

¹⁰ Hines, “Strategic Foresight...,” 21.

The question ‘what should I do?’ is the last one which will be examined here with regards to Strategic Foresight, for it is at this point that the option is selected. Hines describes this as the visioning phase, which “focuses attention back on the present, because now we must ask ‘So what?’ Given the future possibilities outlined, what does the organization want (or need) to do?”¹¹ Once the strategy is determined, plans to implement the strategy will be determined in the following phase, which transitions the vision and selected option into action.

The SF process described is focused not on making routine daily decisions but rather on long-term strategic decisions. Fabrice Roubelat’s description of what comprises a strategic decision is useful to determining where this process should be applied: “A strategic decision is either one that creates an irreversible situation for the entire organization or one that anticipates an environmental change apt to provoke such an irreversible situation.”¹² In light of this definition, the SF process could be considered for use with defence policy, force development and procurement: all three could stem from a doctrinal departure from the status quo which will not be easily undone. An analysis of some limitations or considerations when considering SF, namely ambiguity, reluctance to change, unwillingness to objectively view reality, and risk, will help frame the concept and its usefulness before attempting to apply it.

One of the first considerations when dealing with SF is the ambiguity of the process and the future environment. As Hines describes, “Strategic Foresight is different from the typical business challenge. There are no cut-and-dried, right-and-wrong

¹¹ Ibid., 21.

¹² Godet, “La Prospective...,” 22.

answers in Strategic Foresight, and it is not always clear if the organization is on the right path as the activity proceeds.”¹³ It is this ambiguity which is likely to cause doubt about the usefulness of the process; however, situational awareness and consideration of the future, even if it does not yield a single concrete way-ahead, will enable organizations to be more aware of environmental changes and be prepared to react to indications more rapidly.

Resistance to change is another consideration which organizations must take into account when contemplating SF processes. Change resistance exists as a result of human nature, of man as a creature of habit. Godet describes the reluctance to abandon the status quo as a question of self-interest: “Current generations will always place their own interests before those of future generations, and are therefore reluctant to make sacrifices which would change the status quo, even if they understand that they are simply transferring burdens to future generations.”¹⁴ Overcoming this hurdle is likely to be difficult and will require determination from the upper echelons of an organization in order to gain buy-in from the remainder – not an easy task with the previously mentioned ambiguity inherent in SF. Accepting that this tendency exists, however, is critical to addressing it during the process and acquiring unbiased potential outcomes.

A tendency to mistake desirability for reality is another consideration which organizations are likely to encounter in their SF processes. Gordon Robbins describes this with respect to scenario planning, and advises avoiding “the temptation to become attached to a particular scenario outcome because it appeals emotionally, financially, or

¹³ Hines, “Strategic Foresight...,” 19.

¹⁴ Godet, “La Prospective...,” 19.

for some other reason. In scenario planning, it is vital to consider any likely course of events and to put predetermined notions aside.”¹⁵ Due to internal pressures to conform to budgets, it may be very difficult to maintain perspective and objectivity in this domain. Decisions to compromise, however, should be made only later, once possible future scenarios have been distilled.

A final consideration in SF is the acceptance of risk. Ambiguity makes committing to a vision a difficult decision. Godet explains how the element of risk should be considered and embraced as a reality of the SF process:

Risk is permissible because unlike short-term decisions whose consequences unfold in the near future - and are thus irreversible and require a greater degree of prudence - long-term decisions can be continually updated depending upon unfolding circumstances. Risk-taking is also required in a world which is becoming less and less predictable. In such a world, organizations must innovate; and provoking change requires a high degree of risk.¹⁶

Since SF aims to provide long-range planning options and a strategy for the organization, the element of risk will be present but can be mitigated through continued analysis of external and internal conditions in order to revise the strategic direction. With a basic understanding of an SF process and some of its considerations and limitations in mind, the processes of procurement and force development will now be examined in order to determine whether or not SF is useful in shaping the process.

¹⁵ Robbins, “Scenario Planning...,” 4.

¹⁶ Godet, “La Prospective...,” 13.

FORCE DEVELOPMENT & PROCUREMENT: AN OVERVIEW

Prior to discussing what equipment a force should procure, it is important to understand where the process begins. In order for the military to prioritize procurement needs, it requires government direction through defence policy. The CF needs to understand which future tasks the government sees as most critical, in order to determine what force structure and equipment are required. This assessment of force structure and equipment requirements are the domain of force development, which therefore will be explained as a logical precursor to procurement.

Force development in the CF is under the purview of the Chief of Force Development (CFD). Former CFD from 2008-2010, then Major-General Stuart Beare, described the role of his organization as “the means, the lenses, the analytics, the decision support and the vernacular for departmental and Canadian Forces’ leaders to make difficult but informed choices about the CF of tomorrow.”¹⁷ The provision of advice to DND, based on the CF perspective, is the key role which force development plays, and this advice is based on experimentation and analysis of what the future might hold. As CF officer and military historian Andrew Godefroy notes of CFD:

These activities include an ongoing consideration of the future security environment (FSE) and the creation of various planning scenarios, based upon that environment, the analysis of capabilities required to operate successfully in that environment, and the development of future concepts to deliver those needed capabilities to the Canadian Forces.¹⁸

¹⁷ Stuart Beare, “Developing the Future, Capturing the Present,” *Vanguard Magazine* (2006); <http://www.vanguardcanada.com/ForceDevelopmentBeare>; Internet; accessed 2 February 2012.

¹⁸ Andrew B. Godefroy, “Chasing the Silver Bullet: The Evolution of Capability Development in the Canadian Army.” *Canadian Military Journal* 8, no. 1 (2008); <http://www.journal.forces.gc.ca/vo8/no1/godefroy-eng.asp>; Internet; accessed 10 Feb 2012.

While CFD analysis and advice serves as guidance to the government from the military perspective, there is a mutual dependency: defence policy must also drive the force development process in order to ensure that the capabilities the military pursues are in line with established government priorities. General Beare himself described the role of CFD as “a force-developing institution, providing inputs to inform policy and strategy as well as to drive concepts and capability-based planning to inform our investment plan. It’s all about future concepts, matched against the Canada First Defence Strategy (CFDS).”¹⁹ As noted, force development requires policy direction as a driving force, and must also maintain harmony with this policy; while CFDS currently provides this defence policy, a more in-depth look at procurement will demonstrate that this has not been the case.

The procurement process is a complex set of checks and balances designed to ensure that regulations and policies are respected when procuring equipment for the CF. The process is best described visually, as seen in former DND Assistant Deputy Minister (Materiel) (ADM(Mat)) Alan William’s table at Figure 1.1 - Legislative and Regulatory Framework of Procurement²⁰:

¹⁹ Beare, “Developing the Future....”

²⁰ Alan S. Williams, *Reinventing Canadian Defence Procurement* (Montreal & Kingston: McGill-Queen’s University Press, 2006), 3.



Figure 1 – Legislative and Regulatory Framework of Procurement

While this is a process whereby the military procures equipment, most of the process is out of their hands. The issues that arise with procurements therefore logically stem from somewhere other than the CF, falling primarily at the strategic level within DND.

The DND procurement process has been the target of some condemnation over the past two decades. David Bercuson gives several examples of criticisms concerning the process, including politicization of projects, cost over-runs, bureaucracy and project delays.²¹ These issues have received public attention because they point to inefficiency within government, a popular media topic. The most important criticism, however, which has received less coverage but is more detrimental to the procurement process, is the lack of clear strategic direction or policy. The initial step in the procurement process,

²¹ David J. Bercuson, "Time To Wake Up On Procurement," *Legion Magazine* (November 2011); <http://www.legionmagazine.com/en/index.php/2005/11/time-to-wake-up-on-procurement/>; Internet; accessed 2 Feb 2012

where the military prioritizes its needs, requires some preliminary basis for determining these priorities. As already noted, this should be accomplished by the force development work which is informed through clear defence policy direction from the government; in the absence of such direction, the CF may prioritize based on its understanding of the future security environment, but these are not likely to accurately reflect national priorities.

The failure of the government to provide clear and timely policy direction is in fact one of the primary criticisms which, while not part of the procurement process itself, will be shown to greatly impact the outcomes. Policy allows industry to direct their efforts towards producing required goods as well as giving the CF the ability to frame their future requirements for equipment. A November 2009 report which outlined the results of consultations held with the defence industry across Canada indicates the lack of strategy as a major obstacle in the procurement process. As one participant noted:

Too many decisions are made too low down. If there's no strategy and no stated objectives you get somebody at a fairly low level or a Major level or even a Colonel level who are sunning [*sic*] the place on a day to day basis who can make gigantic turns because there's no policy structure for them to operate in.²²

Evidently, it is much easier to have unity of effort and common messaging if there is a published policy with which both DND and the public are familiar. Failure to provide this policy, as will be seen, is not a new issue within Canada.

²² Canadian Association of Defence and Security Industries, *Improving Canadian Defence Procurement: Feedback From Industry Consultations on the Opportunities and Challenges Facing the Defence Industry and Military Procurement*: 7; <https://www.defenceandsecurity.ca/UserFiles/File/IE/Annex%20E%20-%20Consultation%20Summary.pdf>; Internet; accessed 2 February 2012.

The lack of a stated defence policy is a problem which has plagued the procurement process, and DND as a whole, for decades. Defence economist Craig Stone aptly noted that the *1994 Defence White Paper* was still the only official government policy guidance in 2004, despite major changes in the security environment post 9/11; the additional document that DND published in 1999 *Shaping the Future for Canadian Defence: A Strategy for 2020*, was only an internal document which therefore could not be relied upon by industry as representing the party line.²³ The absence of official defence policy between 1994 and the 2005 defence portion of Canada's International Policy Statement created a vacuum which the military attempted to fill through their own analysis of the future security environment: *Strategy 2020*.²⁴ Official direction must be issued as often as necessary to remain current in view of significant changes in the defence landscape, for it is more than just words; policy provides direction to the CF in order to allow them to develop appropriate forces based on the government's priorities and to procure equipment which they are lacking for these forces.

Defence policy drives force development; analysis of capability requirements to support these forces drives procurement. So where could SF play the greatest role? Defence policy should certainly consider the future security environment and strategic direction for the country, but is SF too much of a long-term concept for governments who experience frequent turn-over of leadership and about-turns when elections see a new

²³ J. Craig Stone, "Planning Defence Budget Allocations for Canada's Strategy 2020," *Defence and Peace Economics* 16, no. 3 (2005), 224.

²⁴ Department of National Defence, *Canada's International Policy Statement: A Role of Pride and Influence in the World – Defence*, (Ottawa: Minister of National Defence, 2005).

political party take power? Is SF best applied in the force development process in order to foresee future challenges and envision structures which can respond to them? Is SF or any other process able to negate the need for Urgent Operational Requirements (UOR)²⁵ which has driven many recent procurements such as the Chinook and the Leopard 2 tank? Conversely, should the CF simply wait to see what the next conflict brings in order to rapidly acquire whatever technology is available and required through UOR rather than through long-term force development and procurement processes? These questions will be dealt with over the coming chapters.

The next chapter will deal with the post-Cold War period up until 2003, when the CF announced its intention to procure MGS as a tank-replacement, in order to determine several things. First, whether or not defence policy was realistic and supported such a decision. Second, whether SF in any form was used to determine the suitability of MGS to respond to threats in the future security environment. And finally, what internal and external factors caused the tank to be eschewed for a wheeled mobile direct fire support vehicle.

²⁵ The term Urgent Operational Requirement describes an item or piece of equipment, generally unanticipated, that must be rapidly acquired in order to complete an assigned or anticipated mission.

CHAPTER 2 – THE EVOLUTION OF POLICY AND ATTITUDES

This chapter will focus on the evolution of CF attitude and policy, related to defence in general and more specifically tanks. It will cover the period from the end of the Cold War to the 2003 decision to replace the tank with a wheeled Mobile Gun System (MGS) for direct fire support. It will seek to demonstrate that defence policy beginning with the 1994 White Paper on Defence (WP) lacked clear tasks for the CF, and began a decade of decisions based on budgetary considerations rather than operational effectiveness. Secondly, it will demonstrate that the tank began a decline in popularity in 1996, based on unsupported claims that the tank could be easily replaced by lighter vehicles, which culminated in the 2003 announcement of the MGS purchase. Throughout, it will be demonstrated that some elements of Strategic Foresight were employed, but that fiscal realities and lack of political leadership caused these efforts to be symbolic at best.

THE POLICY – THE 1994 WHITE PAPER ON DEFENCE

The post-Cold War period was characterized by a lack of certainty, the absence of a clear and identifiable adversary and, consequently, with very general policy guidance on defence procurement priorities. The Government of Canada readily admitted to this in the 1994 WP,

Several years after the fall of the Berlin Wall and the collapse of the Soviet empire, Canada finds itself in a world fundamentally transformed, characterized by considerable turbulence and uncertainty... In these circumstances, ensuring Canada's security and defining an appropriate role for our armed forces is more than ever a challenge for all Canadians.²⁶

²⁶ Department of National Defence, *1994 Defence White Paper*, (Ottawa: Canada Communications Group, 1994).

Further complicating the issue was the pressure to reduce defence spending as part of the so-called peace dividend, which manifested itself in the WP as projected cuts to planned capital projects of 15 billion dollars over the next 15 years.²⁷ The combination of uncertainty and fiscal restraint caused the policy in the white paper to be very broadly and vaguely defined, focusing on the retention of “multi-purpose combat-capable force”, re-affirming that the CF could not simply be relegated to the status of a constabulary force for peace support and international policing operations.²⁸

While policy should not be so prescriptive as to limit the ability of DND to appropriately structure and equip forces, it does need to provide priorities and direction in order to be beneficial. The WP was broadly criticized in this regard, as noted by Sean Maloney:

The 1994 White Paper on defence was a vague policy document which could be interpreted in many ways. Based on a superficial and dubious analysis of the world situation of the day, and without detailed force structure guidance to accompany it, the White Paper was so flexible that it could be used as a basis for status quo maintenance rather than dynamic or even transformational change to accompany the new era in international affairs that emerged after the Cold War in the 1990s.²⁹

This criticism was echoed by other defence analysts, who noted that the desire to retain combat-capable forces was unrealistic given the lack of budgetary resources to support

²⁷ DND, 1994 Defence White Paper, Executive Summary para 57.

²⁸ Ibid., para 24.

²⁹ Maloney, Sean M. “Force Structure or Forced Structure: The 1994 White Paper on Defence and the Canadian Forces in the 1990s.” *Choices* 10, no. 5 (2004): Executive Summary; <http://www.irpp.org/choices/archive/vol10no5.pdf>; Internet; accessed 5 February 2012.

the building of CF capabilities.³⁰ Given the noted shortfalls in the 1994 WP, it is useful to determine how the policy was determined and whether or not Strategic Foresight was used in any form in order to guide the future defence strategy and policy.

Very little attempt was made to employ the process or principles of SF when developing the 1994 WP. Political scientist Joel Sokolsky reflected in 1995 that “As with previous White Papers, the 1994 document very much reflects the global trends that preceded its writing.”³¹ This statement implies that there was more of a rearward-scanning approach to the future than a forward looking one. This is consistent with the characterization from the WP which states that “It is impossible to predict what will emerge from the current period of transition.”³² Maloney acknowledges that some scanning occurred in the form of canvassing of public opinion on the future and that specialist advice was solicited in the process of determining the future security environment. He posits, however, that the bureaucracy which resulted when the Department of Foreign Affairs and International Trade (DFAIT) and DND collaborated in the writing of the WP resulted in a softening of the document and the removal of critical force structure elements.³³ Maloney further criticizes the unwillingness of the government to commit to SF processes, deciding instead to stand behind the excuse that

³⁰ David J. Bercuson, “Eye On Defence: Time for a New Vision,” *Legion Magazine* (September 2001); <http://publications.gc.ca/collections/Collection/D12-9-4-4E.pdf>; Internet; accessed 12 February 2012.

³¹ Joel Sokolsky, “Canada, Getting It Right This Time: The 1994 Defence White Paper,” *Strategic Studies Institute* (May 1995): 30; <http://www.dtic.mil/doctrine/doctrine/research/canada.pdf>; Internet; accessed 15 February 2012.

³² DND, 1994 Defence White Paper, Introduction.

³³ Maloney, “Force Structure...,” 3.

the future was unclear and therefore policy should remain vague, rather than employing proven SF methods such as used by Royal Dutch Shell to provide “clear strategic objectives to shape a coherent national security vision.”³⁴ The conclusion that can be drawn from this is that no real SF process was employed in order to develop the 1994 WP. It will be demonstrated that this shortfall caused impacts on defence planning for the next decade, as DND attempted to align force development and procurement with vaguely defined objectives and vision.

A ROLE FOR TANKS? – THE 1996 “ARMY 2000 CAMPAIGN PLAN”

The 1994 WP failed to provide concrete direction on the requirement for tanks in the future security environment. While it covered procurement only perfunctorily, the lack of mention of the Leopard tank in the 1994 WP and the ambiguous descriptors used in reference to the Armoured Vehicle General Purpose (AVGP) Cougar, led to confusion about the future requirements for an army direct fire support capability. The WP referred to the Cougar as both a training and operational vehicle: “The fleet of Cougar armoured training vehicles that are part of the army's close-combat, direct-fire capability in peace and stability operations will eventually have to be replaced.”³⁵ This ambiguity caused confusion as to whether it was only the Cougar that was to be retained, or if tanks and Cougars should remain in the inventory. The question was somewhat addressed in 1996 with the issuance of the “Army 2000 Campaign Plan”. It stated that “the Leopard would

³⁴ Maloney, "Force Structure...", 14.

³⁵ DND, 1994 Defence White Paper, chapter 7.

not be replaced with a heavy tracked tank. Instead, the MBT would be replaced with ‘a modern, mobile, armoured direct fire vehicle to complement the wheeled APC and COYOTE.’ This statement suggested that the army was considering a single DFSV that would be employed across the full spectrum of conflict.”³⁶ In the absence of clear priorities established by government policy, the 1994 WP, the Army formulated its own strategies in the spirit of establishing multi-purpose combat capable forces in a financially constrained environment.

The “Army 2000 Campaign Plan” concept of replacing two distinct capabilities, the operational main-battle tank (MBT) Leopard and the Cougar training vehicle, with a single direct fire-support vehicle (DFSV) was met with opposition from defence analysts and some within the Army. The new vehicle which would come to be known as the armoured combat vehicle or ACV, was originally envisioned in 1992 as a replacement for the Cougar for Operations Other Than War (OOTW) tasks only; the Leopard 1 at that time was scheduled for upgrades, as it was deemed still essential for warfighting tasks.³⁷ The 1996 decision by the Army to amalgamate the two requirements into a single vehicle, therefore, is of questionable logic and unknown reasoning. As indicated by Hammond, the original Statement of Requirements (SOR) for the ACV did not support the Army’s decision: “In reviewing the draft SOR of the ACV, it should be stated categorically that this vehicle was not envisioned to replace the tank; however, with the decision to not replace the Leopard with another tank, the ACV could become the de

³⁶ Department of National Defence, *Quarre de Fer: Analysis of the ACV in Warfighting Tasks*, (Ottawa: Directorate of Operational Research (Joint & Land), December 1998), ii.

³⁷ *Ibid.*, ii.

facto tank in the Canadian Army at some point in the future.”³⁸ What supported the Army’s decision to eliminate the tank’s capabilities from their inventory? Was the ACV the all-in-one answer? It will be shown that SF was not employed, as testing of the ACV in both high intensity warfighting roles and OOTW tasks was only completed after the 1996 decision to not purchase another MBT.

QUARRÉ DE FER – DEBUNKING THE ACV MYTH

As a result of the 1996 Army Campaign Direction, an experiment titled *Quarré de fer* was launched by the Directorate of Operational Research (Joint & Land) (DOR(J&L)) in March 1997 in order to determine the effectiveness of the ACV in operations across the spectrum of conflict. It was conducted using a Rooikat eight-wheeled combat vehicle with a 105mm stabilized main gun as representative of the ACV, which was then subjected to the same tasks as an M1A1 Abrams MBT.³⁹ The aim of the experiment was to test the assumptions that had been made about the suitability of the ACV in both low and high-intensity conflict. As noted by Canadian armour officer Don Senft :
 “Proponents of the wheeled, 105mm gunned ACV have based their arguments by showcasing the wheeled ACV’s capability in peace support operations, which have clearly become the focus of armed forces worldwide. Their position is that a wheeled ACV is ideal for such operations.”⁴⁰ The experiment challenged this assumption and

³⁸ Lee J. Hammond, “Tank: The Canadian Army’s Four Letter Word,” *The Army Doctrine and Training Bulletin* 4, no. 4 (Winter 2001): 79; <http://publications.gc.ca/collections/Collection/D12-9-4-4E.pdf>; Internet; accessed 15 February 2012.

³⁹ DND, *Quarré de fer*, A – 1/2.

⁴⁰ Don Senft, “Leopards in Kosovo: The Solution for an Armoured Combat Vehicle,” *The Army Doctrine and Training Bulletin* 3, no. 1 (2000): 56; http://www.army.forces.gc.ca/caj/documents/vol_03/iss_1/CAJ_vol3.1_11_e.pdf; Internet; accessed 10 Feb 2012.

discovered that the MBT was in fact better suited than the ACV for the majority of tasks in both warfighting and OOTW:

The study found that the firepower and protection limitations of the ACV made it ineffective in offensive and intimate support roles and marginally effective in defensive and flank guard roles. The ACV could not manoeuvre in the presence of the enemy which severely restricted its tactical deployment and flexibility. For OOTW, the MBT was found to be superior in the majority of tasks analyzed. The study recommends that the ACV not replace the MBT in armoured regiments for warfighting tasks.⁴¹

The results of the experiment, published in December 1998, demonstrate that in the search for the panacea solution to the direct-fire support needs of a multi-purpose combat capable force, the ACV as defined above was not the answer. The exact definition of multi-purpose combat capable remained hazy since the 1994 WP; SF could have played a role in better defining the term at that time, since a lack of clarity caused force development uncertainty in the years that followed.

The results of the experiment led the DOR(J&L) to recommend strongly against the ACV as the replacement for both the Leopard and the Cougar. They noted in the report that, “Being aware of the ACV’s limitations and deliberately purchasing it as an alternative to the MBT in warfighting would be morally and ethically wrong and courts defeat.”⁴² This statement, coming from a DND organization, should have caused a thorough review of the 1996 Army Campaign Plan. As noted in the 2001 report by the Conference of Defence Associations Institute, the government has a responsibility to give the CF the right equipment to conduct the types of tasks it will assign to them:

⁴¹ DND, *Quarré de Fer*, i.

⁴² *Ibid.*, iv.

The unlimited liability of the sailor, soldier and airman must, however be matched by an unlimited responsibility on the part of the government to ensure that members of the CF, if placed in harms way, can achieve their mission at as low a risk as possible. This demands the right tools in terms of modern equipment and high levels of training to carry out justifiable missions directed by the Canadian political authorities.⁴³

The ACV was shown to not be the best tool for the CF's range of possible tasks, therefore the government ought to have reconsidered the decision to replace the Cougar and Leopard with the ACV alone. Operational effectiveness, however, was only one of the considerations involved. Besides budgetary considerations, the desire to have medium or light-weight forces which could strategically deploy and public opinion which saw the CF as peacekeepers rather than warfighters all played a role in the continued move towards abandoning the tank. For five years after the experiment which demonstrated that the ACV was not the panacea, the tank saw decreased popularity in spite of world events.

KOSOVO 1999 – LEOPARDS ON THE MOVE ABROAD

In June of 1999, the Canadian government decided that the contribution of forces to Kosovo should include tanks. Their role in the mission to create a secure environment and enforce cease-fire agreements was to assist in addressing gaps in the capabilities of the mechanized infantry battalion: "The Leopard I tanks will provide enhanced force protection and mine clearance capability."⁴⁴ It is clear from this that there were certain

⁴³ Conference of Defence Associations Institute, *Caught in the Middle: An Assessment of the Operational Readiness of the Canadian Forces*, (Ottawa, 2001), 1

⁴⁴ Department of National Defence, "Canada Increases Contribution to Kosovo International Peace Implementation Force," News Release NR-99.050 (11 June 1999); <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=726>; Internet; accessed 20 Feb 2011.

tasks which the wheeled battle-group could not accomplish without heavy armour. The small tank force, only five tanks, was not the only tank force in Kosovo; the Italian forces also deployed Leopard 1 alongside their Centauro ACV. Anecdotal evidence of this deployment of the two side-by-side validates the results of the 1998 (DOR(J&L) report: “The [Centauro] operated well during the summer months, but as winter set in, the Italians handed over many of their Centauro’s routes and areas of responsibility to their Leopard 1A5s.”⁴⁵ Even in OOTW, the ACV was unable to complete some assigned tasks due to poor mobility; the Canadian and Italian tanks therefore fulfilled a crucial role. Failure of the ACV to complete these tasks may not have led to mission failure, but their lack of mobility limited the employment of wheeled force elements while overburdening those with tracks. With experimental and operational evidence that the ACV was not an adequate tank replacement for mobility reasons, even in OOTW, the decision of government to scrap the tank capability for the CF should have been called into question. The DND review of strategy in 1999, *Shaping The Future Of Canadian Defence: A Strategy for 2020 (Strategy 2020)*, demonstrated that the clear direction on defence priorities and projects lacking in the 1994 WP remained elusive.

STRATEGY 2020 – SF IN ACTION?

In 1999, DND attempted to update the defence strategy in light of world developments since the 1994 WP. There were elements contained within which

⁴⁵ Senft, Don. “Leopards in Kosovo: The Solution for an Armoured Combat Vehicle.” *The Army Doctrine and Training Bulletin* 3, no. 1 (2000): 58; http://www.army.forces.gc.ca/caj/documents/vol_03/iss_1/CAJ_vol3.1_11_e.pdf; Internet; accessed 10 Feb 2012.

demonstrate that DND understood the requirement for more predictive methods than the government had employed in the ‘unpredictable’ context of 1994. As noted by Maloney, this was one of the key shortfalls in the 1994 WP: “In theory, some process by which interests are identified, threats to those interests evaluated and resources applied to deal with those threats should dominate. The 1994 White Paper provided the barest of bones and shied away from projecting into the future, its authors claiming that it was impossible to do so.”⁴⁶ In contrast, Strategy 2020 defined “proactivity” as one of its priorities: “Attribute: Proactivity Strategic Direction: Think and act on the basis of forward-looking analysis and active scenario-based planning.”⁴⁷ The inclusion of scenarios in the development of strategy was identified previously as a useful tool, however these scenarios must be analyzed and strategy followed if they are to be useful; *Strategy 2020* faced several challenges in this regard.

Strategy 2020 was a DND document rather than government policy, therefore the strategy defined within was still constrained by the policy of the 1994 WP. In building *Strategy 2020*, a clear SF methodology was outlined. It included the use of future scan, SWOT analysis and strategic options based on future threats, and the undertaking of a gap analysis to determine gaps between current and future capabilities. Its aim was then to refer “to the strategic imperatives and a description of the preferred future option, define a set of longer term "strategic objectives" to provide overall direction toward 2020; drawing on the gap analysis, define five-year goals for each of the strategic objectives as

⁴⁶ Maloney, “Force Structure...,” 4.

⁴⁷ Department of National Defence, *Shaping the Future of the Canadian Forces: A Strategy for 2020*, (Ottawa: Deputy Minister of National Defence, 1999), 6.

a basis for tangible actions to be taken.”⁴⁸ The concept and process of SF outlined were solid, however the thinking remained constrained by political reality: *Strategy 2020* stayed within stated policy, and was therefore limited in possible outcomes.⁴⁹ The result is another document that lists some priorities for capital equipment projects but which is constrained in its ability to deliver as a result of budgetary constraint. In terms of strategic direction regarding force development, *Strategy 2020* maintained the status quo: “Move towards an adaptable, multi-purpose, combat-capable force structure that makes the best mix of capital to produce desired tactical and operational level capabilities.”⁵⁰ As government policy and budgets drive DND strategy, this statement is realistic. The key element which was absent, however, was a clear definition of the threat which the multi-purpose combat capable force should be able to defeat – for example a state-actor equipped with tanks or anti-armour capability. The fact that it was produced by DND rather than the government accounts in part for this lack of clarity, and also caused it to receive criticism: *Strategy 2020* did not provide anything more revolutionary than a proposed DND solution to what it perceived as minor questions left unresolved or changed since 1994 defence policy.

Five years had elapsed between the 1994 WP and *Strategy 2020*, and the government ought reasonably to have issued a new policy in light of the evolving world situation. As noted by Bercuson in 2001:

⁴⁸ Department of National Defence, *Defence Strategy 2020: Formulating the DND/CF Statement of Strategy*, (Ottawa: Deputy Minister of National Defence, 1999), 3.

⁴⁹ DND, *Defence Strategy 2020: Formulating...*, 4. The document states: “It was clear that the strategy was to be developed within the boundaries of the 1994 White Paper.”

⁵⁰ DND, *Shaping the Future of the Canadian Forces...*, 6.

Although the June 1999 DND study *Shaping The Future Of Canadian Defence: A Strategy for 2020* was presumably not intended to substitute for a white paper, it did declare itself to be a “strategic framework for Defence planning and decision-making.” Thus it will become a white paper by proxy in the absence of any cabinet-level action to the contrary. Not only is Strategy 2020 completely inadequate as an overall security policy review, but it sets out the military’s priorities and not those of the civil authority which should be setting the strategic policy goals for the military.⁵¹

DND responded to this criticism in their 2001 response to the Standing Committee on National Defence and Veterans Affairs (SCONDVA) report, claiming that existing defence policy provided “by and large...appropriate guidance for the Department of National Defence and the Canadian Forces.”⁵² DND described Strategy 2020 as part of continuous review of defence, seeking to “strike the right balance between meeting current operational needs, and making the necessary long-term strategic investments that will enable the Canadian Forces to remain a modern and relevant military in the years to come.”⁵³ DND’s priorities should be guided by policy, however, and in the absence of direction, DND must give suggestions to government and request that policy be updated. Maloney identified this as a failure on the part of DND, particularly in the domain of procurement: “...the Canadian Forces must stop second-guessing what the policy makers want and instead present them with a professional view as to what equipment is required. The onus should be on the policy makers, not on the Canadian forces. The problems with

⁵¹ David J. Bercuson, “Eye On Defence: Time for a New Vision,” *Legion Magazine* (September 2001); <http://publications.gc.ca/collections/Collection/D12-9-4-4E.pdf>; Internet; accessed 12 February 2012.

⁵² House of Commons, Standing Committee on National Defence and Veterans’ Affairs, *Report of the Standing Committee on National Defence and Veterans Affairs – Procurement Study* (Ottawa: June 2000), 8.

⁵³ *Ibid.*, 8.

Main Battle Tank acquisition since 1970 are a case in point.”⁵⁴ The DND approach to lack of direction may well have been calculated, in order to maintain policy that failed to provide succinct plans and priorities but was at least known. Martin Shadwick noted in 2001 that an updated White Paper on Defence may have been feared in DND for the possible changes or cuts it could make to already reduced effectiveness of the CF: “...a comprehensive review could lead to a white paper on defence that jettisoned the “multi-purpose, combat-capable” mantra of its 1994 predecessor in favour of an unabashedly “constabulary” defence establishment.”⁵⁵ The effectiveness of conducting SF in an environment where policy was vague, outmoded and feared for what impacts it could have on defence was understandably limited. DND, the CF, and more specifically the Army, forged ahead with plans to remain effective in the budget constrained environment of the 21st century. The future of the tank in Canada remained grim despite the turbulent events and return of combat operations in Afghanistan and Iraq.

THE NEW CENTURY - CONVENTIONAL WAR OR INSURGENCY?

The September 11, 2001 attacks in the United States ushered in a new era where the presence of conflict was undisputed, but the nature of that conflict remained unclear. The CF deployed a light-infantry battle-group to Kandahar, Afghanistan in January 2002, with Coyote reconnaissance vehicles as the armour component.⁵⁶ The U.S. did not

⁵⁴ Maloney, “Force Structure...,” 23.

⁵⁵ Martin Shadwick, “White Paper Blues,” *Canadian Military Journal* 2, no. 4 (Winter 2001-2002): 65; <http://www.journal.dnd.ca/vo2/no4/doc/65-eng.pdf>; Internet; accessed 10 February 2012.

⁵⁶ Department of National Defence, “Canada Deploys Ground Forces to Afghanistan,” News Release NR-02.001 (7 January 2002); <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=351>; Internet; accessed 17 February 2012.

deploy tanks against the Taliban in Afghanistan, but did deploy them to Iraq in 2003 as part of Operation Iraqi Freedom, initially to counter the conventional tank forces of Saddam Hussein. Tanks remained in Iraq, however, as part of the counter-insurgency, where crews suffered the lowest casualty rates of any of the U.S. vehicles deployed despite frequent attacks by insurgents.⁵⁷ The success of the tank caused senior U.S. officers to warn against abandoning the tank, even against unconventional enemies: “Be wary of eliminating or reducing ... heavy armor” as the Army modernizes, the officers warn, arguing it is crucial against insurgents’ “crude but effective weapons.”⁵⁸ Alongside the tank, however, U.S. forces deployed the Stryker, with plans for an eventual version equipped with a 105mm main gun – the MGS.⁵⁹ It was this vehicle, which could be described as an ACV, which caused interest in Canada.

The use of wheeled combat vehicles by the U.S. in Iraq, along with their continued development of MGS despite possessing first-rate tanks, supported the Canadian Army’s shift in focus towards a more medium-weight future force. As Hammond noted, even prior to the Iraq war, “Another indicator that opponents of the tank are now using to justify their views is the recent American initiative of the interim brigade combat teams (IBCTs), which will be equipped with different versions of the LAV (light armoured vehicle) III, including a version armed with a 105 mm direct fire

⁵⁷ Steven Komarow, “Tanks Take a Beating in Iraq,” *USA Today*, 29 March 2005: 1; http://www.usatoday.com/news/world/iraq/2005-03-29-abrams-tank-a_x.htm; Internet; accessed 17 February 2012.

⁵⁸ *Ibid.*, 2.

⁵⁹ “The MGS entered service with the US Army in May 2007, with the first operational deployment to Iraq with the 4th brigade, 2nd Division.” Army-Technology, “Stryker Eight-Wheel Drive Armoured Combat Vehicles, United States of America”; <http://www.army-technology.com/projects/stryker/>; Internet; accessed 12 April 2012.

cannon.”⁶⁰ The Canadian Army’s 2003 publication “Future Force: Concepts for Future Army Capabilities” clearly indicates the belief that the future battlespace would see the need for lighter rather than heavier forces: “Trends indicate the growing importance of light, more mobile, rapid reaction and special operations force capabilities...Moreover, capabilities designed to ensure rapid response and effective power projection will be essential.”⁶¹ The IBCT, or Stryker Brigade Combat Team (SBCT), was a niche tool which the U.S. employed in Iraq while maintaining a tank capability. In 2006, U.S. Army analysis showed that while useful organizations, the lack of adequate direct-fire support and protection caused an “imbalance between the IBCT/SBCTs' strategic deployability and their tactical lethality upon deployment.”⁶²

Despite the usefulness of the IBCT and SBCT in some operations, U.S. commanders draw on Iraq as proof that armour in providing protection and the ability for forces to close with and destroy the enemy. As U.S. Army Colonel Robert Killebrew wrote on Iraq:

Maneuver to close combat is still decisive in warfare...a major argument for lightening the force is that agility and superior intelligence can compensate for heavily armored vehicles, which are frequently derided as bulky and hard to deploy. In fact, though, the relatively low casualty rate of Army forces is due at least in part to thick armor, and, the close quarters nature of skirmishes thus far would probably negate the ability of even the

⁶⁰ Lee J. Hammond, “ Tank: The Canadian Army’s Four Letter Word,” *The Army Doctrine and Training Bulletin* 4, no. 4 (Winter 2001): 76; <http://publications.gc.ca/collections/Collection/D12-9-4-4E.pdf>; Internet; accessed 15 February 2012.

⁶¹ Department of National Defence, *Future Force: Concepts for Future Army Capabilities*, (Kingston: Directorate of Land Strategic Concepts, 2003), 19.

⁶² Ashley Roque, “Report: Army Combat Teams Lack Firepower,” *Inside Defense.com News Stand*, (17 May 2006); <http://www.military.com/features/0.15240.97505.00.html>; Internet; accessed 20 February 2012.

most sophisticated intelligence sources to avoid threats to thin skinned vehicles.⁶³

There may indeed be a role for the medium-weight 105mm wheeled vehicle in the U.S. Army, where the size and budget can permit such niche capabilities; this is much less appropriate for the budget constrained CF. As further noted by Canadian Lieutenant-Colonel J.A. Summerfield, the IBCT and SBCT were interim in their desire to deploy the wheeled 105mm platform once developed, and could afford to scrap them if they were found to be unsuitable. The CF, on the other hand, would be forced to use these vehicles for two or more decades due to the initial purchase cost of the vehicles.⁶⁴ Taking into account the problems identified with the ACV during CF experiments, combined with the continued requirement for U.S. tanks in Iraq, a CF decision to abandon tanks seems unsupportable. The issue of strategic mobility is a final element that will be examined in this regard.

Strategic mobility is defined NATO as “the capability to move forces and their sustainment in a timely and effective manner over long distances to the place of their intended employment.”⁶⁵ One of the arguments against the tank is that it is extremely heavy, and therefore less able to be rapidly deployed to a theatre of operations. The fault with this argument, based on the limited payload capacity of aircraft, is that CF

⁶³ Robert B. Killebrew, “Book Review ‘Yellow Smoke: The Future of Land Warfare for America’s Military,’” *Army Magazine* (May 2003); <http://www3.ansa.org/webpub/DeptArmyMagazine.nsf/byid/CCRN-6CCS8E>; Internet; accessed 20 February 2012.

⁶⁴ J.A. Summerfield, “The Integrated Fire Support Capability: An Opportunity for Innovation,” *The Army Doctrine and Training Bulletin* 6, no. 3 (Fall/Winter 2003): 22-23; http://www.army.forces.gc.ca/caj/documents/vol_06/iss_3/CAJ_vol6.3_08_e.pdf; Internet; accessed 20 February 2012.

⁶⁵ North Atlantic Treaty Organization, AJP-4(A) *Allied Joint Logistics Doctrine* (December 2003): 2-4; http://www.wckik.pl/pdf_prawo/ajp-4.pdf; Internet; accessed 1 February 2012.

equipment is generally taken to a theatre by sea and land rather than airlift. Hammond observes:

The first, and most common, argument against the tank is that it is heavy and difficult to transport. No Canadian battle group has ever had its vehicles airlifted into theatre, nor is this likely to happen since this capability is beyond even the biggest air forces. Moreover, if the normal mode of transport is sealift, then the difference in weight between a fully capable MBT and the ACV is not a factor at all. Indeed, the main lesson here is that our sealift capabilities should be improved, not that we need an air transportable vehicle.⁶⁶

The ability to arrive rapidly in theatre should not compromise the ability of the forces to complete their tasks once they arrive. Further, within the guidance provided by Strategy 2020, the timelines for deployment do not necessitate full deployment by airlift: “Design land forces such that the vanguard and main contingency forces are fully deployable to an offshore theatre of operations within 21 and 90 days respectively.”⁶⁷ In light of this direction, more lightweight vehicles and troops could be moved rapidly by airlift as part of the vanguard, while heavier vehicles and support equipment could follow by sea within assigned timelines. The rationale for failing to replace the Leopard 1 tank for the CF has been clearly demonstrated to have some flaws. Nonetheless, the CF forged ahead with plans for the ACV rather than the tank.

2003 – THE MGS PURCHASE BECOMES OFFICIAL

The Minister of National Defence, John McCallum, announced the purchase of the MGS on October 29th, 2003. DND stated in a news release at that time that “A

⁶⁶ Hammond, “Tank: The Canadian Army’s Four Letter Word,” 76.

⁶⁷ DND, *Shaping the Future of the Canadian Forces...*, p. 10

mobile gun system will provide the Army with a direct-fire capability consistent with its vision to transform into a medium-weight, information age force as outlined in the Army Strategy.”⁶⁸ It is telling that the basis for the decision was not government policy but rather an internal DND strategy document, and that force development work did not drive this decision. Had doctrine changed which necessitated the change in force structure and therefore the need for the new equipment? The Conference of Defence Associates Institute aptly described the relationship between force structure and doctrine: “Force structure and doctrine should evolve in a complementary and iterative fashion. Force structure refers to the organization of CF entities. It comprises a combination of people, weapon systems, and other equipment. Once doctrine is adopted, it is necessary to develop force structures to apply it to achieve success in operations.”⁶⁹ Without doctrine which supported the use of the MGS, the cart had been placed in front of the proverbial horse. This, however, was not without precedent in the recent history of the CF. As Senft observes:

The issue at hand is why did it take almost seven years to come to the stunning realization that the Coyote recce vehicle was best employed as a surveillance vehicle? The answer is clear: the vehicle was acquired and introduced without the supporting doctrine that would form the framework for its tactical employment. Using the Coyote as our yardstick, we are close to repeating this same mistake as we move to retire our venerable Leopard tank and replace it with a wheeled 105 mm medium gun system (MGS).⁷⁰

⁶⁸ Department of National Defence. “Minister of National Defence Announces Acquisition of a Mobile Gun System.” News Release NR-03.124 (October 29, 2003); <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=1238>; Internet; accessed 20 January 2012.

⁶⁹ Conference of Defence Associations Institute. *Caught in the Middle: An Assessment of the Operational Readiness of the Canadian Forces*. Ottawa, 2001, 13.

⁷⁰ Don Senft, “The Medium Gun System is Coming!...Now What?” *The Army Doctrine and Training Bulletin* 6, no. 3 (Fall 2003): 26;

The Army had decided in the 1996 Campaign Plan that the Leopard would not be replaced with another MBT, so the 2003 announcement of the MGS purchase should not have come as a major surprise. The 2003 document *Advancing With Purpose: The Army Strategy* supported the MGS decision, and acknowledged the risk accepted in transforming to a medium-weight force which might be forced to work outside their comfort zone.⁷¹ There was some testing completed which appears to have supported replacing the tank's capabilities with the MGS combined with the Mult-Mission Effects Vehicle (MMEV), an anti-tank system mounted on a Lav III chassis.⁷² Despite the condemnation of the ACV concept as a result of *Quarré de fer*, therefore, the Army seems to have at least attempted to validate force structure and equipment in light of the changing future security environment; with the decision to not purchase a new tank having already been made in 1996, however, it is difficult to discern how the MMEV and MGS might have fared in comparison to a tank. While doctrine clearly did not drive the shift, political considerations will be shown to have played a significant role in the MGS decision.

While the doctrine-force development-equipment acquisition process was loosely followed for MGS, politics were a key determinant in its selection to replace the

http://www.army.forces.gc.ca/caj/documents/vol_06/iss_3/CAJ_vol6.3_09_e.pdf; Internet; accessed 20 February 2012.

⁷¹ Department of National Defence. *Advancing With Purpose: The Army Strategy*. (Ottawa: Chief of the Land Staff, 2003), 23.

⁷² Parliament of Canada. "Proceedings of the Standing Senate Committee on National Security and Defence: Issue 4 – Evidence, Afternoon Meeting," (29 November 2004); http://www.parl.gc.ca/Content/SEN/Committee/381/defe/04evb-e.htm?comm_id=76&Language=E&Parl=38&Ses=1; Internet; accessed 27 April 2012.

capabilities of the tank. Bland wrote in 2004 that the force development process was in fact well-developed, but that the actual process was “more commonly random and sporadic. Governments periodically acquire fleets of ships, aircraft and combat vehicles, and then close off production and future purchases until the next capabilities crisis occurs.”⁷³ At the heart of the problem is the reality of budgets and politics, which control defence procurement and spending notwithstanding the best intentions of defence planners. One major political consideration in procuring the MGS rather than a new tank was the difficulty in selling the CF as warfighters to the Canadian population. After several decades in which peacekeeping was at the forefront of CF operations, the Canadian public had come to see this as their primary role. In support of this theory, Walter Dorn cites the 1993 Senate Standing Committee on Foreign Affairs report that peacekeeping was the “sole military activity that Canadians fully support,” a trend that continued to reign a decade later according to public opinion polls.⁷⁴ With this in mind, acquiring a new tank was unlikely to garner overwhelming public support. The wheeled MGS, on the other hand, looked more like the LAV which had been deployed on peace support operations in the Balkans and in Kabul, Afghanistan in the low-intensity operations of 2003; it was therefore much easier to sell to a peacekeeping-minded Canadian population. In defending the decision to purchase the MGS, Lieutenant-Colonel Luc Petit alludes to the political and strategic mobility dimensions which came into play:

⁷³ Douglas L. Bland, Brian MacDonald, Christopher Ankerson, Howie Marsh, *Canada Without Armed Forces* (Montreal & Kingston: McGill University Press, 2004), xiii.

⁷⁴ Walter Dorn, “Canadian Peacekeeping: Proud Tradition, Strong Future?” <http://walterdorn.org/pub/32>; Internet; accessed 20 February 2012.

It is true that the MGS will not provide significant tactical improvements over the Leopard C2. Even though the Leopard is used extensively for training, it is rarely deployed in operations because of its size, logistic footprint and domestic and international political repercussions. As a result, in all recent deployments, Canada has deployed battle groups with very limited integral direct fire support. Because of its operational and logistic compatibility with the LAV III, the MGS is expected to be deployed with most mechanized battle groups abroad.⁷⁵

It is clear, when noting that this statement came from an officer involved in the MGS procurement project at Directorate of Land Requirements, that the political dimension weighed at least as heavily as that of operational effectiveness.

THE ROLE OF SF ON THE ROAD TO THE MGS DECISION

Given the policy of the 1994 WP, the direction from the Army in the 1996 Campaign Plan, the DOR (J&L) experiments, DND *Strategy 2020* and the wars in Iraq and Afghanistan, was SF used appropriately in determining the strategy for the future use of direct-fire support for the CF? Using Godet's Five Questions as a guide, this section will review the key components to examine when they were or were not applied.

Question 0, the prerequisite question of "who am I?", was answered in general by the 1994 WP. The requirement for a "multi-purpose combat-capable force" was an easily remembered mantra which endured for a decade after the 1994 WP. Policy determined that a constabulary force was not the way ahead, and that remained the case up to and following the decision to purchase the MGS. While budgetary constraints caused pressure on the CF throughout that time, DND remained focused on the requirement to

⁷⁵ Luc Petit, "On 'The Integrated Fire Support Capability: An Opportunity for Innovation' by Lcol J.A. Summerfield, *The Army Doctrine and Training Bulletin Vol 6, No. 3 (Fall/Winter 2003)*." *Canadian Army Journal* 7, no. 1 (Spring 2004), 118.

retain forces capable of continuing to conduct combat operations even if some decisions, such as that of the MGS, led to arguably weakening this capacity.

Question 1, “what could happen?”, was not addressed in the 1994 WP, however DND did subsequently attempt to further develop this through Strategy 2020 and the creation of scenarios. One of the objectives contained therein related to the innovative path, aiming to complete “...force-planning scenarios and use them to provide coherent and focused advice to government...”⁷⁶ DND followed up on this objective in response to the 2001 SCONDVA Report, stating that DND had “completed Force Planning Scenarios. ... Scenarios provide the content for considering assumptions and exploring force structure options. The Force Planning Scenarios, along with the other elements of the capability planning process, have been briefed in academic and public fora and included in reports to Parliament.”⁷⁷ Question 1 had therefore been answered by 2001; given, however, that the decision not to purchase an MBT as a replacement for the Leopard 1 was made in 1996, the usefulness of these scenarios in validating the requirement for MGS is questionable.

Question 2, “what can I do?”, which seeks to provide strategic options, may or may not have been answered. The aim of this step is to provide as many future states as possible and weigh the pros and cons of these against the scenarios developed in the previous step. Was the decision to abandon tanks re-visited and the potential to acquire a new tank investigated? Petit alludes to a weighing of factors in the decision to pursue the MGS, but does not say whether or not the idea of a new tank re-appeared on the table at

⁷⁶ DND, *Shaping the Future of the Canadian Forces...*, 9.

⁷⁷ House of Commons, *SCONDVA Procurement Study...*, 7.

any time: “The Army chose to acquire the MGS to replace the Leopard to rapidly improve operational capability, leveraging the US Stryker program to reduce costs and risk.”⁷⁸ This policy and defence strategies available certainly indicate that any dissenting views or alternatives were strictly kept at the staff and planning levels.

Question 3, “what will I do?”, was clearly answered through the decision to purchase the MGS. Follow-on plans to bring this decision into fruition will be further explored in the upcoming chapters, when other events would steer the strategic direction towards another path.

It has been demonstrated that although elements of the SF process were used in various stages on the road to the MGS, the process was not focused, centralized or coordinated. This may lead to the conclusion that SF is not well adapted to government processes, that politics, budgets and world events make the process unrealistic. Defence analysts who studied the challenges faced by the government and DND conclude that one of the major shortfalls was a lack of updated, relevant policy with which to guide the process. As Bland noted in 2004, “Canadians must begin quickly and dramatically to reconstitute and transform defence policy, the defence establishment, and the Canadian Forces if they are to confront successfully the evident, not the hoped for, fundamentals of present conditions and the immediate future.”⁷⁹ As is true with many challenges, a lack of concrete direction from the top, in the form of government-issued defence policy, caused an extremely difficult situation for planners attempting to chart the course for the future of the CF.

⁷⁸ Petit, “On ‘The Integrated Fire Support...’” 119.

⁷⁹ Bland, *Canada Without Armed Forces*, 3.

The next chapter will explore the use of SF in the period from 2003 to 2006, when the decision was made to deploy the Leopard C2 tank to Afghanistan. It will examine whether or not policy provided updated guidance to defence planners, and whether or not the requirement for tanks in Kandahar could have been foreseen.

CHAPTER 3 – FULL CIRCLE: FROM MGS TO TANK

The decision to purchase MGS and not tanks was made post-9/11 and therefore should have taken into account the future security environment and the likelihood that combat operations would still occur in difficult terrain where vehicle mobility would be key to success. This notwithstanding, the Canadian Forces had decided on the MGS as the future direct-fire support vehicle for the army. The Defence portion of the Liberal minority government's International Policy Statement (IPS) in 2005 retained the status quo in its planned acquisition of the MGS. It will be demonstrated, however, that this Policy was not the product of government strategic planning following scenario-building, but rather as a result of intimate CF involvement in the creation of government policy.

Events in the year following the IPS, including the move of CF in Afghanistan from the relatively benign northern region of Kabul to the volatile southern province of Kandahar, ought to have indicated that the tasks troops would face were becoming increasingly dangerous. The CF, led by transformation-minded CDS General Rick Hillier, nonetheless stayed the course with the planned acquisition of MGS. The increased threat and combat focused mission ought to have caused some questions to be asked: When could MGS be ready? What was the plan for direct fire support of troops in Kandahar? Would the 25mm LAV III provide adequate protection and the direct-fire support needed to defeat the Taliban?

The need to answer these questions in this new role ought to have led to an SF cycle in order to analyze the purpose and direction of the CF, and build scenarios which could potentially help to determine if a shift in the course was required in view of the

move to Kandahar. Did this occur? If so, were there indicators which predicted the potential requirement for tanks in Afghanistan? This chapter will analyze the use and effectiveness of SF processes between the 2003 announcement of the MGS acquisition and the autumn 2006 announcement of the deployment of Canadian Leopard C2 to Afghanistan.

POLICY DEVELOPMENT 2003-2005

The decade-long absence of a defence policy review was corrected with the issuance of the Defence Policy Statement (DPS) section of Prime Minister Paul Martin's government's IPS in 2005. The document sought to better define the future environment in which Canada's armed forces would operate, providing a better contextual framework than had been seen in the 1994 White Paper (WP) on Defence. It focused on failed and failing states as the greatest future security concern: "The ability to respond to the challenge of failed and failing states will serve as a benchmark for the Canadian Forces. While this focus will not see the Forces replicate every function of the world's premier militaries, the task of restoring order to war zones will require Canada to maintain armed forces with substantial capabilities."⁸⁰ The target in this sense was at least defined, if not explicitly detailed through equipment requirements and expected levels of conflict intensity, and therefore the CF could focus their efforts on the asymmetric threats rather than conventional state armed forces. While budgets had increased since the 1990s, the caveat that the CF would not retain all capabilities that the U.S., for example, possessed

⁸⁰ Department of National Defence. *Canada's International Policy Statement: A Role of Pride and Influence in the World - Defence*. Ottawa: Minister of National Defence, 2005, 11.

meant that there would have to be decisions made as to what capabilities would be retained and what would be retired.

The DPS further provided three broad roles in which the CF could expect to participate, while retaining the spirit of the multi-purpose combat capable forces as introduced in the 1994 WP: "...Protecting Canadians, defending North America in cooperation with the United States, and contributing to international peace and security. To do so, our military must be effective, relevant and responsive, and remain capable of carrying out a range of operations, including combat."⁸¹ Where the 1994 WP shied away from providing specific guidance on what systems would be retained or acquired, the 2005 DPS provided much more clear direction. The "transformation" of the CF was introduced in the DPS, guiding the direction of the forces into the future.

"Transformation will require the CF to: evaluate their force structure on an ongoing basis to ensure that capabilities remain relevant. The status quo is not an option. The Forces will maintain or modernize those capabilities that remain valid, acquire new ones and eliminate those no longer needed."⁸² Of particular relevance to this work is the direction which was provided on the MGS. Not surprisingly, the MGS was retained as an integral piece of the transformation to a "modern, combat capable medium-weight force."⁸³ With the decision to purchase the MGS having been made while Lieutenant-General Rick Hillier was Chief of the Land Staff (CLS) in 2003, it is important to examine the

⁸¹ *Ibid.*, 5.

⁸² *Ibid.*, 12.

⁸³ *Ibid.*, 15.

influence which General Hillier had as Chief of Defence Staff (CDS) during the development of the 2005 DPS.

Government policy is meant to provide the strategic framework within which government departments operate. Necessarily, then, departments may be consulted in the development of policy but are seldom intimately involved in the actual creation and writing of policy. In this regard, the 2005 DPS can be seen as an anomaly. In order to achieve a new vision and departure from the previous government policy, Prime Minister Martin essentially devolved the work of creating the IPS to several departments: “Four independent papers would be written, and the Centre - the Prime Minister's office and the Privy Council Office - would somehow have to integrate them into a holistic document at the end of the exercise.”⁸⁴ Retired Lieutenant-General Mike Jeffrey recounts that the vision for DND was provided by Hillier: “Faced with this situation, CDS-to-be LGen Hillier inserted himself into the policy development process...to reshape the Defence Policy Statement (DPS) that had been drafted. This undertaking permitted him to further develop his vision for the CF and the development of the political themes that would underpin the future of the CF.”⁸⁵ While there are certainly advantages to the CF in having the CDS create policy favourable to the DND, there is a danger when the policy creator and the policy implementer are one in the same: a lack of impartiality and balance of opinion. As Stein & Lang note:

⁸⁴ Janice Gross Stein & Eugene Lang, *The Unexpected War: Canada in Kandahar*, (Toronto: Viking, 2007), 140.

⁸⁵ Michael K. Jeffrey, *Inside Canadian Forces Transformation: Institutional Leadership as a Catalyst for Change*, (Kingston: Canadian Defence Academy Press, 2009), 24.

Some allege that Canada's military now lacks sufficient civilian oversight, either by the Department of Defence or across the Government of Canada. It is the military that is forging policy. Yet that is not the way it is supposed to be in a mature parliamentary democracy. Civilian oversight matters. Policy is made better by it. The military benefits from it.⁸⁶

Regardless of the perception that the military was too closely involved in developing the policy, the prime minister was extremely happy with the product of Hillier's work on the DPS, noting that "The Defence Review saved the IPS. Hillier's contribution was the outstanding contribution to that effort."⁸⁷ The lack of change on the acquisition of MGS could be attributed to either Hillier's influence or the agreement of the Liberal government with the status quo; the involvement of the CDS in crafting policy unfortunately makes it impossible to discern.

The decision to focus on the asymmetric threats of failed and failing states did not go unchallenged by defence analysts and military members. General Hillier included the divestment of tanks in favour of MGS as key to the essence of transformation, branding those who opposed the MGS as preferring to "stop the process of change irrespective of the dramatically different threat."⁸⁸ The MGS was key to the mindset of CF transformation in the eyes of Hillier; some officers who had experienced combat against asymmetric enemies nonetheless still believed in the utility of the tank in modern operations. As Colonel Pat Stogran, commander of the 3rd Battalion Princess Patricia's Canadian Light Infantry Battle Group (3PPCLI BG) in Afghanistan in 2002 remarked in 2006:

⁸⁶ Stein & Lang, *The Unexpected War...*, 261.

⁸⁷ Prime Minister Paul Martin as quoted by Stein & Lang, *The Unexpected War...*, 155.

⁸⁸ David Pugliese, "The Return of the Leopard," *The Ottawa Citizen*, 8 July 2006, 5.

Even as the CF changes its focus from “The Bear” to the “Ball of Snakes,” even if we ignore the dash to Baghdad, and even to me and my ilk who claim to be avowed paratroopers and light warriors, the tank still fulfils a vital role in contemporary operations. Anyone who has been on the objective-end of an assault when tanks appear on the scene and has witnessed the “shock action” they instil, even though they may be Soviet-block technology from the 50s and 60s, can relate.⁸⁹

This perspective is not unique, based on the challenges which U.S. forces faced in Afghanistan in 2002 when there were at times no direct fire support assets available to support combat operations against insurgents. As recounted in the lessons learned from the U.S. led Operation Anaconda in March 2002, a 17 day long operation where hundreds of insurgents were killed or fled in what would become the last major combat by U.S. forces for that year, Kugler notes that: “The absence of tanks and artillery meant that they could not turn to the heavy weapons normally employed by the Army, along with infantry and helicopters, to wage major combat operations and generate firepower against targets located more than a few hundred meters away.”⁹⁰ Direct-fire support for the CF deployed to Kabul, Afghanistan from 2003-2005 was provided by the 25mm LAV III and Coyote platforms, and was adequate for the relatively low-intensity operations which were conducted in this region. Would the CF require any heavier direct-fire support prior to the delivery of the MGS? When could MGS be expected to arrive and be deployable in support of operations? An examination of the evolution of Canada’s deployment in Afghanistan helps to contextualize the requirements for equipment and capabilities.

⁸⁹ P.B. Stogran, “These Exciting Times We Live In,” *Canadian Military Journal* 6, no. 2 (Summer 2005): 79; <http://www.journal.forces.gc.ca/vo6/no2/doc/views-vues-01-eng.pdf>; Internet; accessed 18 February 2012.

⁹⁰ Richard Kugler, “Operation Anaconda in Afghanistan: A Case Study of Adaptation in Battle,” 10; <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA463075%26Location=U2%26doc=GetTRDoc.pdf>; Internet; accessed 21 February 2012.

TRANSITION: FROM KABUL TO KANDAHAR

The evolution of the CF deployment in Afghanistan caused major changes in the way the CF viewed itself and was viewed by the public. The decision to deploy forces to Kabul, AF in 2003 was sold to the public as primarily a stability operation; in November of 2003, Defence Minister John McCallum explained the CF mission as being in the ‘Pearsonian’ tradition, noting that “‘the non-combat mission to provide stability and security in the Afghan capital will be reflective of Canadian values,’ while keeping up with the war on terrorism.”⁹¹ This enabled the Canadian public to maintain the perception of the CF as peacekeepers rather than warfighters, and the government capitalized on this popular sentiment. The theme of the war on terror still appealed to the Canadian public, and the deployment of the CF in Afghanistan meant that it was not involved in the non-UN sanctioned and less popular mission in Iraq. In order to maintain credibility as a contributor to international security, the government capitalised on this softer contribution in order to maintain good standing with NATO allies and particularly the U.S.. The deployment in Afghanistan morphed from the relative security of Kabul towards the more volatile south beginning with prime minister Paul Martin’s Liberal minority government in 2005.

With the issuance of the DPS in 2005, the government had reasserted the need to remain involved in failed and failing states. Afghanistan certainly fit into this category, however there were other motives for increasing Canada’s profile through participation

⁹¹ Claire Turenne-Sjolander, "Framing Afghanistan: Past, Present and Future," in *Is There Life Abroad After Afghanistan? The Future of Canadian Expeditionary Operations*, (Halifax: Dalhousie Centre for Foreign Policy Studies, 2011), 39.

abroad. Kim McKechney notes that Canada's non-signature of the Ballistic-Missile Defence (BMD) agreement with the U.S. caused Canada to feel the need to re-assert its commitment to collective security, and a deployment of forces in a lead role in Kandahar province was one way to achieve this.⁹² The Martin government saw the mission shift as more of an evolution than a revolution, noting that the focus should remain on the IPS oriented 3D approach of Defence-Diplomacy-Development. As Stein and Lang relate, Martin wanted the mission in Kandahar to remain 'Pearsonian' in nature: "'I made four demands of Hillier before I agreed to the mission,' recalled Martin. 'I want in, but I want out. We do peacekeeping and reconstruction and win hearts and minds.'"⁹³ Martin's focus on peacekeeping and the ability to exit Afghanistan was required in order for the government to be able to deploy forces to other struggling regions, notably Darfur, in line with Martin's humanitarian priorities. The transition of forces to Kandahar was therefore announced in May 2005, effective February 2006, and included responsibility for standing-up a Provincial Reconstruction team as well as more aggressive tasks: "Since Kandahar was the most dangerous province, the CF was also given significantly enhanced combat responsibilities to help root out remaining Taliban/Al-Qaeda elements."⁹⁴ The acknowledgement that Kandahar was a more dangerous region, however, did not mean that the government committed to sending its troops to conduct a

⁹² Kim McKechney, "Canada's Military Intervention in Afghanistan: Combining Realism and Constructivism in the Analysis of Canadian Foreign Policy Decision-Making" (Saskatoon: University of Saskatchewan Master of Arts Paper, 2009), 79; <http://summit.sfu.ca/system/files/iritems1/9567/ETD4546.pdf>; Internet; accessed 3 March 2012.

⁹³ Stein & Lang, *The Unexpected War...*, 191.

⁹⁴ Duane Bratt and Christopher J. Kukucha, *Readings in Canadian Foreign Policy: Classic Debates and New Ideas*, (Toronto: Oxford, 2007), 318.

war; the focus was sold as increased support of stability and reconstruction efforts. To wit, Stein and Lang relate that the mission in 2005 was never billed as a war: "No official, civilian or military, used the word *war* to describe what was going on in southern Afghanistan."⁹⁵ The rhetoric involving what to call Canada's new task in Kandahar shifted noticeably with the election of Stephen Harper's Conservative government in early 2006.

With the deployment of the CF to Kandahar, developments on the ground soon made it clear that the mission had changed drastically. While the new Defence Minister, Gordon O'Connor, continued to label the mission as peacekeeping-oriented, Harper and CDS Rick Hillier were considerably more aggressive in describing the conflict as a dangerous struggle in which casualties would occur in attempting to make the region stable for reconstruction efforts. Claire Turenne-Sjolander remarks on the confusion caused by this lack of unity in messaging: "The contradictory messages coming from the government, casting Afghanistan as both combat and peacekeeping, muddied the waters. At the same time, the change in the mission translated into a substantial increase in the number of Canadian war dead..."⁹⁶ With Canadian casualties mounting steadily as a result of Improvised Explosive Devices (IEDs) and combat with insurgents, by the spring of 2006 it was increasingly difficult to characterize the conflict as anything short of a war. Whether or not the drastic change in task was apparent when the Martin government committed its troops to Kandahar, the reality had clearly changed. What was the plan for providing direct-fire support to Canadian forces engaged in this dangerous

⁹⁵ Stein & Lang, *The Unexpected War...*, 185.

⁹⁶ Turenne-Sjolander, "Framing Afghanistan...", 41.

new region? Were the deployed forces adequately equipped to deal with threats? A review of the status of the MGS project in 2006 will reveal that the CF was no closer to acquiring a new direct-fire support capability than it had been when the MGS project was announced nearly three years earlier.

THE MGS & STAGNATION

The development of the MGS as combat vehicle had, since its inception, been reliant on U.S. development and production. The transition of the CF to a medium-weight force, initiated in the 1996 “Army 2000 Campaign Plan”, and cemented in the announcement of the MGS purchase in 2003, has been shown to have largely mirrored the U.S. development of the Stryker family of combat vehicles and their move to a more strategically deployable force. Challenges faced in the U.S. with development of the MGS within specifications, therefore, also impacted CF planned acquisitions. As noted by security analysts, the need for protection and the requirement for medium-weight deployability caused severe challenges to the MGS: “Emerging technology finds itself between a rock and a hard place when faced with the MGS platform...Caught in-between the weight restrictions and the desire to protect against ATGM threats on the future battlefield, the MGS is suffering an identity crisis.”⁹⁷ The key limiting factor as of February 2006 was the inability of the MGS to be carried, as a combat capable fully assembled vehicle, in the back of a C-130J Hercules aircraft. Inability to correct this shortcoming caused delays and meant that the MGS was still not in production; the

⁹⁷ Global Security. “M1128 Stryker Mobile Gun System.” <http://www.globalsecurity.org/military/systems/ground/iav-mgs.htm>; Internet; accessed 1 Mar 2012.

timeframe slated for CF Initial Operational Capability (IOC) in July 2007, therefore, was highly unlikely.⁹⁸ With the MGS as a key element in Canadian Army Transformation, the delay meant that the Leopard would remain for the foreseeable future as the sole means of providing direct fire support for the CF. As had been demonstrated with the *Quarré de fer* experimentation, making a decision based on principle without a solid idea of the feasibility of effectiveness or, in this case, procurement, could lead to problems in implementing a sound strategy. As Bercuson et al. noted in their 2006 CDFAI report, “An Opaque Window,” “It must remain a matter of conjecture whether or not the ordering of equipment that is still years away from production at the time of ordering is a good idea. Canada cannot possibly acquire the MGS until the US Army is satisfied with it and it goes into production. When that might happen is still uncertain.”⁹⁹ Troops were therefore committed to combat operations in Kandahar with little to no hope of the MGS arriving in time to support their operations. Would direct-fire support beyond the capability of the 25mm Lav III main-armament be required? The use of IEDs, present even in Kabul but certainly the weapon of choice in Kandahar, rapidly caused the need for increased blast protection to bypass direct-fire support requirements in order of priority.

The first Canadian deaths in Kabul occurred as a result of explosions rather than through combat. Results of a Board of Inquiry (BOI) released in August 2004

⁹⁸ David J. Bercuson, Aaron P. Plamondon, Ray Szeto, *An Opaque Window: An Overview of Some Commitments Made by the Government of Canada Regarding the Department of National Defence and the Canadian Forces; 1 January 2000 – 31 December 2004*, Report prepared for the Canadian Defence & Foreign Affairs Institute. (Calgary: Canadian Defence and Foreign Affairs Institute, 2006): 25; <http://www.cdfai.org/PDF/An%20Opaque%20Window.pdf>; Internet; accessed 1 March 2012.

⁹⁹ *Ibid.*, 7-8.

determined that the deaths of three Canadians travelling in the Iltis light wheeled vehicles were not preventable based on the lack of a known threat from mines or IEDs at the time of the October 2003 and January 2004 incidents.¹⁰⁰ These would not, however, be the last attacks where IEDs and explosives were used, and the response in October 2003 was the purchase of the better protected Mercedes-Benz Gelaendewagen (G-Wagon) for deployment to Kandahar.¹⁰¹ The G-Wagon's lack of robust protection against more than small-arms fire and anti-personnel (AP) mines, however, led to mounting casualties in crews and a resultant November 2005 purchase of 50 RG-31 Nyala South-African mine resistant vehicles.¹⁰² The armour race in Afghanistan had begun, and the insurgents rose to the challenge of building a bigger or more effective IED in order to counter the increased blast protection of the CF. As Colonel Pat Stogran observed in 2005, it was ironic that the calls for increased protection in 2003 came at nearly the same time at which the MGS project was announced, highlighting the weaknesses of the medium-weight forces, even against a determined insurgent foe to say nothing about conventional enemies. "Notwithstanding the psychological aspect the MGS clearly lacks, nowhere near the same amount of protection can be bolted onto the chassis of a wheeled vehicle as a tracked one... Unfortunately, the Army has a difficult time affording armoured vehicles, especially the Leopard."¹⁰³ So was the MGS a failed concept, primarily based on the

¹⁰⁰ Department of National Defence. "DND Releases Findings of Boards of Inquiry into Kabul Vehicle Mine Strike and Suicide Bomber Attack." News Release NR-04.064 (24 August 2004); <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=1437>; Internet; accessed 6 Mar 2012.

¹⁰¹ Peter Pigott, *Canada in Afghanistan: The War So Far*, (Toronto: Dundurn Press, 2007), 180.

¹⁰² *Ibid.*, 181-186.

¹⁰³ Stogran, "These Exciting Times We Live In," 80.

2003 belief that low-intensity conflict against a conventional but poorly armed foe would reign in the future? This is perhaps a part of the issue, however the heavy reliance that the 2003 *Army Future Force* concept paper and the subsequent 2005 DPS placed on information dominance and situational awareness was another key challenge faced by forces in Afghanistan.¹⁰⁴ UAVs, satellite and high-tech Coyote surveillance platforms could do little to distinguish the IED-emplacer or suicide bomber from the rest of the population. As the admittedly partisan American Victor O'Reilly argued in his 2003 work on the shortfalls of the MGS as part of Stryker Brigade Combat Teams, efforts to achieve information dominance could not replace armour:

One of the theories behind the Stryker is that situational awareness, resulting from UAVs, total air dominance, technological superiority and so on, can be traded for armor. Unfortunately, full situational awareness – knowing where all friendlies and all enemy are at all times - is not possible and, almost certainly, never will be. Network centric command, control and sensors bring enhanced situational awareness generally, but cannot avert tactical surprise. Therefore, survivability and lethality in combat vehicles cannot be solely traded for better information.¹⁰⁵

Troops deployed in both Kabul and Kandahar could certainly attest to the difficulty in avoiding tactical surprise, and as 2006 wore on towards summer, it became increasingly evident the strategic impact that suffering casualties as a result of arguably inadequately protected armoured vehicles could have on Canadian popular support for the mission in Afghanistan.

¹⁰⁴ DND, *Future Force: Concepts for...*, 19.

¹⁰⁵ Victor O'Reilly, "Stryker Brigades Versus the Reality of War," (2003): 28; http://www.globalsecurity.org/jhtml/jframe.html#http://www.globalsecurity.org/military/library/congress/2003_rpt/stryker_reality_of_war.pdf||STRYKER BRIGADES Versus THE REALITY OF WAR; Internet; accessed 1 Mar 2012.

It is clear that the MGS project by 2006 was in dire straits, while the conflict in Afghanistan concurrently increased in lethality and danger to troops on the ground. Subsequently, in July of 2006, the Army leadership requested that the MGS project be cancelled and the feasibility of extending the life of the Leopard C2 to 2015 be examined.¹⁰⁶ Whether or not the CF had plans at that time to deploy tanks to Afghanistan remains unclear, however the events of August and September 2006 certainly caused a review of previous tenets and an updated view on the value of heavy armour.

THE TURNING POINT: OP MEDUSA

The increased insurgent activity in the spring and summer of 2006 had continued to focus on primarily IED attacks on coalition forces and ambushes in Kandahar province. CF casualties as a result of these activities occurred daily in the summer ‘fighting season,’ but the insurgents had yet to mount a coordinated and determined resistance. This all changed when insurgents decided to make a stand in the Panjwayi and Zhari districts in August 2006, as a culmination of six months where violent attacks had increased in the province by 600%.¹⁰⁷ Stein & Lang summarize the situation that faced CF troops:

In August and September 2006, the Taliban did something insurgents usually do not do early on. They massed their forces and prepared for a conventional battle, hoping to inflict high casualties on ISAF forces and push through to the city of Kandahar. The stakes were very high. If

¹⁰⁶ David Pugliese, “The Return of the Leopard,” *The Ottawa Citizen*, 8 July 2006.

¹⁰⁷ Bernd Horn, *No Lack of Courage: Operation Medusa, Afghanistan*, (Toronto: Dundurn Press, 2010), 29.

Kandahar had fallen to the Taliban, the morale of the Karzai government might well have broken. ISAF responded with Operation Medusa.¹⁰⁸

This shift to conventional tactics had not been expected, and the medium weight CF battle group faced a difficult task for which they were not ideally equipped. As recounted by then Defence Minister Bill Graham, "...nobody foresaw the summer offensive of 2006. The Light Armoured Vehicle (LAV) III was considered the perfect vehicle for the terrain, the perfect tactical response. We needed lightly equipped, agile soldiers who would go into the villages, 'make love to the people' and 'kill the bad guys.'"¹⁰⁹ The change in insurgent tactics called for a return to more conventional tactics on the part of the CF. In conventional operations against an enemy force in place, engineering assets such as armoured engineer vehicles equipped with dozer blades and tanks equipped with mine ploughs and rollers are used to breach obstacles such as ditches and minefields. Unfortunately, the Canadian battle-group had none of these assets in place, and had to instead to resort to using standard unprotected bulldozers to breach for the break-in – with resultant heavy vehicle and personnel casualties.¹¹⁰ The operation, Medusa, in which the CF battle group dislodged the insurgent forces, was waged conventionally and was successful in defeating or dispersing the insurgents, but exposed some of the critical weaknesses in CF force structure and equipment as deployed on the ground.

Op Medusa caused a drastic shift in the mindset of commanders, as evidenced by the observation of the Canadian battle group commander, Lieutenant-Colonel Omer

¹⁰⁸ Stein & Lang, *The Unexpected War...*, 219.

¹⁰⁹ *Ibid.*, 186.

¹¹⁰ Horn, *No Lack of Courage...*, 70 & 110.

Lavoie: “If you’d asked me five months ago, ‘do you need tanks to fight insurgents?’ I would have said, ‘No, you’re nuts.’ He added, ‘Because [the Taliban] are acting conventionally, then conventional assets like tanks, armoured engineering vehicles, and armoured bridge-laying vehicles certainly have their place here.’”¹¹¹ Perhaps the insurgents’ actions in the summer of 2006 could not have been predicted, however the need for increased heavy equipment for troops on the ground was now easily defensible to the Canadian public. Regardless of what the population may have thought about Canada’s entry into what was now clearly a war, the resolve of the government and the support of the population for the troops led to the return of armour to the CF deployed operations. As noted by Stein & Lang: “The casualty rates in the Canadian Forces in the summer of 2006 were higher than those of any other NATO country operating in the south. The situation on the ground deteriorated so badly that the commander requested and received a squadron of the aged Leopard tanks to reinforce Canadian troops.”¹¹² The decision to send the Leopard C2 to Kandahar signaled a shift in the Army move towards a medium-weight force, capitalizing on the momentum begun in July with the request to cancel the MGS project. Deployment of the Leopards did not begin until November 2006, however the resolve to rapidly deploy them demonstrated that plans and strategy are always subject to change based on events on the ground.¹¹³ This being the case, it is interesting to examine the elements of SF which were used between 2003 and 2006, and

¹¹¹ Omer Lavoie as quoted by Trevor Cadieu, “Canadian Armour in Afghanistan.” *Canadian Army Journal* 10, no. 4 (Winter 2008): 7; http://www.army.forces.gc.ca/caj/documents/vol_10/iss_4/CAJ_vol10.4_03_e.pdf; Internet; accessed 16 January 2012.

¹¹² Stein & Lang, *The Unexpected War...*, 243.

¹¹³ Pigott, *Canada in Afghanistan...*, 189.

whether or not SF could have been better employed in order to foresee the need to retain the tank capability in the CF arsenal.

SF AND THE ROAD TO OP MEDUSA

Godet's five questions for SF will once again be used to determine the effectiveness of SF in defence matters related to armour and MGS from 2003 to 2006. The preliminary question 0, Who am I?, was answered in the 2005 DPS. It differed little from the 1994 WP requirement to provide multi-purpose combat capable forces. As has already been mentioned, however, it affirmed that the CF could not afford to retain all capabilities of larger state armed forces, and that a prioritization of capital projects was required in order to ensure that the most important equipment was procured in order to maintain key capabilities. The government and DND were fairly clear, unlike the 1994 WP, on who the forces were and what was critical to the institution in order to maintain Canadian security and protect Canadian interests

Question 1, What could happen?, was defined in the 2005 DPS. It focused on failed and failing states, and was further defined by CF leadership as focusing on 'the ball of snakes' of irregular forces rather than the conventional forces of 'the bear,' as seen in the Cold War era. In addition to failed and failing states, the continued prevalence of terrorism, the proliferation of weapons of mass destruction and the possibility of regional flashpoints turning into open conflict in both the Far- and Middle-East were all considered as future security threats.¹¹⁴ The government attributed this relative completeness to the scanning provided through public consultations, parliamentary

¹¹⁴ DND, *Canada's International Policy Statement...*, 5-6.

committees and defence experts. As a result, the possibilities were better laid out and explained in the 2005 DPS than in previous government defence policy.

As for question 2, What can I do?, the decision to retain the commitment to MGS as part of transforming into a medium weight force was retained despite difficulties in development of the MGS as a platform. Regardless of ongoing training on Leopard tanks in Canada, they were never seen as more than an interim training platform while waiting for delivery of the MGS. The Conservative election platform of 2004 included the purchase of new tanks such as the M1 Abrams or the Leopard 2, however this was never mentioned publicly as a policy shift between the Conservative party forming the government in January 2005 and the end of 2006.¹¹⁵ It is clear from comments that General Rick Hillier made on several occasions as far back his time as Chief of the Land Staff, characterizing the tank as a “millstone” around the neck of the CF which threatened his self-championed transformation with transformation, that DND certainly did not openly build future force structure options with tanks in mind.¹¹⁶ Part of the process of scenario building requires objectivity, developing options impartially based on what was discovered through scanning of what could happen rather than what one might prefer to have happen. It certainly does not appear that the MGS decision and future force structure was viewed impartially after the fall 2003 commitment to the medium-weight wheeled MGS. After Op Medusa, however, with the MGS project cancelled and the requirement for protected breaching and direct-fire support assets made clear, the only

¹¹⁵ Pugliese, *The Return of the Leopard*.

¹¹⁶ Pigott, *Canada in Afghanistan...*, 188.

option was to deploy the Leopards; this is more a product of reaction, however, than of Strategic Foresight.

Finally, question 3 – What will I do? – was predetermined by the fact that the only option examined for future direct-fire support was the MGS. With the MGS project cancelled and the Leopard C2 deployed in Afghanistan, the scenario had changed dramatically and the need to recommence planning and reformulating strategy for the use of armour in the future was evident.

As has been seen, due to personalities, political agendas and a rapidly evolving security environment, Strategic Foresight was used loosely at best and as an afterthought at worst. The future of armour for the CF was still not a resolved question. Despite bringing new capability to deployed forces in Afghanistan, the Leopard C2 was over 30 years old and suffering from high use and frequent demand for spare parts and maintenance. A new solution would have to be found to replace the Leopard C2 with another tank or ACV. The next chapter will deal with the way ahead in this search for strategy and the equipment to implement it, as Canada decides on the Leopard replacement. Would tanks be required into the future? How long would the Leopard C2 bridge the gap in providing protected direct-fire support? Was any SF process used following the initial deployment of tanks in Afghanistan in order to determine whether or not a tank capability would be required in the future CF force structure?

CHAPTER 4 – INTERIM SOLUTION OR AN ENDURING REQUIREMENT?

The events which led to the deployment of the Leopard C2 to Afghanistan demonstrated that certain conditions or situations could exist, even in the asymmetric counter-insurgency of the 21st century, that required well-protected vehicles with robust direct-fire support capability and high tactical mobility. The decision thus made to deploy the aged Canadian tanks in combat operations, the next step was to determine whether or not another tank would be required to replace the Leopard C2 – either uniquely for the duration of the combat mission in Afghanistan, or as part of the CF force structure into the future. This chapter will examine the decisions made to lease 20 Leopard 2A6M from Germany for use in Afghanistan and to purchase 100 used Leopard 2A4 from the Netherlands. It will also consider the 2008 Canada First Defence Strategy and how it provided government policy with respect to tanks. It will demonstrate that the lease of German tanks was an appropriate response to an urgent operational requirement, but that the purchase of used Dutch tanks was done more in response to favourable conditions for procurement rather than as a result of Strategic Foresight, resulting in a less than ideal fielding of Leopard 2 and subsequent reactive force development strategies. The Canada First Defence Strategy will be demonstrated to be useful policy document which contains a clear strategic vision for the CF as well as enough specific detail to chart the course of Canadian defence into the future. Finally, the use of Strategic Foresight in the Leopard 2 acquisition will be examined, concluding that the spirit of the process was only minimally adhered to and therefore of minimal usefulness.

LIMITATIONS OF LEOPARD C2 IN AFGHANISTAN

The deployment of Leopard C2 in the fall of 2006 provided a robust direct-fire support asset to CF troops to accomplish their tasks, but was not an ideal long-term solution. The demanding conditions of the Afghanistan environment, as well as the high threat of IEDs and rocket-propelled grenades, meant that the aged Leopard C2 was more an expedient solution than a long-term fix. Early use in operations saw great benefit in the use of the 105mm main armament in breaching mud walls and providing intimate support to dismounted troops, as well as the use of implements such as mine ploughs and rollers to clear routes of IEDs.¹¹⁷ Three limitations of the Leopard C2 were however identified: overheating of the crew compartment as a result of the hydraulic turret drive system, a lack of blast protection to the belly and sides of the tank, and difficulty in maintaining serviceability of a 30 year old fleet with some shortages of replacement parts.¹¹⁸ With these shortfalls in mind, therefore, it was natural for the CF to seek a more enduring solution in light of the July 2006 request by the Army to cancel the MGS project.

Canada was not the only nation that was reviewing their stand on the usefulness of tanks at the time. As a result of the 2006 war with Lebanon, Israel had placed renewed emphasis on replacing their older tanks with new Merkava IV; the Israeli Defence Force (IDF) had previously deemed tanks irrelevant in the face of low intensity conflict against

¹¹⁷ Cadieu, "Canadian Armour in Afghanistan...", 9.

¹¹⁸ Defence Industry Daily. "Tanks for the Lesson: Leopards, too, for Canada." <http://www.defenseindustrydaily.com/tanks-for-the-lesson-leopards-too-for-canada-03208/>; Internet; accessed 15 January 2012.

an irregular enemy, but the 2006 conflict emphasized the requirement for tanks and combined arms operations rather than just stand-off precision artillery and air strikes.¹¹⁹ Canada alternatively, with no domestic capability to produce tanks and a need to replace the Leopard C2 in Afghanistan due to lack of spare parts and less than state of the art protection against IEDs, had to examine options which were both expedient and cost effective.¹²⁰ They examined retrofit of the Leopard C2 as well as buying new tanks; the former was not judged feasible due to the near obsolescence of the tanks, which had already been upgraded around 2000, and the latter was judged too slow and approximately three times as costly as purchasing used tanks.¹²¹ The future of the tank in the CF inventory, however, was not clear at the time.

As has been mentioned in previous chapters, since the 1996 “Army 2000 Campaign Plan” the tank was never envisioned as the future direct-fire support platform: “We will not replace the Leopard tank with a heavy tracked tank. We are out of that business.”¹²² The July 2006 request by the Army to cancel the MGS project was not responded to by the Minister of National Defence, however, and no mention of a new tank was made by the CF or DND in the fall of 2006. Did Canada see a requirement for tanks as part of the CF inventory into the future, or just for the current deployment in

¹¹⁹ Rand Corporation, *Military Capabilities for Hybrid War: Insights from the Israel Defense Forces in Lebanon and Gaza*, (Santa Monica: The Rand Corporation, 2010), 3-4. <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA518686&Location=U2&doc=GetTRDoc.pdf>; Internet; accessed 2 March 2012.

¹²⁰ Department of National Defence. “Backgrounder: Renewing the Canadian Forces’ Tank Capability.” BG-07.012 (12 April 2007).

¹²¹ *Ibid.*

¹²² Department of National Defence, “Army 2000 Campaign Plan,” (Ottawa: Chief of the Land Staff, 1996), 2.

Afghanistan? What analysis was used to arrive at a decision and potential reversal of a decade old policy by the government and DND? The announcement of the acquisition of Leopard 2 by Canada in April 2007 clarified the enduring requirement for tanks in the CF, but the analysis which led to it is conspicuously absent.

LEOPARD 2 – EXPEDIENT AND ENDURING?

The acquisition of Leopard 2, announced on April 12th 2007, heralded the return of a reinvigorated tank component for the CF. The requirement for tanks, presaged by the deployment to Afghanistan the previous fall, was cemented in the attempt to justify the purchase to the Canadian public: “The heavily protected direct fire capability of a main battle tank is an invaluable tool in the arsenal of any military. The intensity of recent conflicts in Central Asia and the Middle East has shown western militaries that tanks provide protection that cannot be matched by more lightly armoured wheeled vehicles.”¹²³ The usefulness of tanks across the spectrum of operations had been highlighted in the *Quarré de fer* experiments of 1998, however it was not until the CF found itself mired down in the fight in Afghanistan that the requirement for this “invaluable tool” overwhelmed the financial and political costs of acquiring a new tank. Increasing casualties in Afghanistan was one of the key enabling factors which made the acquisition marketable: “Simply put, tanks save lives, providing soldiers with a high level of protection. In Afghanistan...tanks have also provided the Canadian Forces (CF) with

¹²³ DND, “Backgrounder: Renewing...”

the capability to travel to locations that would otherwise be inaccessible to wheeled light armoured vehicles, including Taliban defensive positions.”¹²⁴

Having determined that procuring new tanks would be both too slow and too costly, Canada decided on a hybrid lease and purchase agreement with two countries. After analyzing submissions from three countries, based on “price, upgrade costs, delivery schedule, operational performance, survivability and through-life operating and maintenance costs,” the decision was made to purchase up to 100 used Leopard 2A4 from the Netherlands, and to lease 20 Leopard 2A6M from Germany for immediate deployment to Afghanistan.¹²⁵ Given that the Army’s request to cancel the MGS had occurred only the previous July, the April 2007 decision indicated a very rapid decision-action cycle at odds with most other procurement processes. In explaining the decision, little more than the immediate requirement for updated armour for Afghanistan was provided: “The Canadian Forces have always planned to retain a direct-fire capability and recent conflicts have confirmed the importance of retaining a tracked tank capability. The Leopard 2 main battle tanks will bring strength, added protection and the ability to access difficult terrain that a wheeled vehicle cannot provide.”¹²⁶ With such little background to justify this purchase, and the implicit cancellation of the MGS program, it is little surprise that some wondered what the basis for the decision was and why an explanation was not forthcoming. As Dave Perry wrote in the Canadian Naval Review in 2007, “Government and military planners may well have carefully studied the available

¹²⁴ *Ibid.*

¹²⁵ *Ibid.*

¹²⁶ *Ibid.*

options, and are making this purchase based on a desire to obtain the best available equipment for any conceivable operations the CF will face in the future. If this is the case, it would be nice to see the supporting evidence to scrap a 3 1/2 year old procurement program.”¹²⁷ The immediate requirement in Afghanistan may well have justified the lease of tanks for that role. The following years would show, however, that the strategy for obtaining a CF tank capability into the future by the hasty purchase of used Dutch tanks certainly could have benefitted from further analysis and planning.

Despite the fact that the procurement process has been described as cumbersome, complicated and slow, the methodical approach to procurement has the advantage of allowing adequate time to validate requirements and how they may best be addressed. The Leopard 2 project, in its haste to deliver a vehicle rapidly for Afghanistan, failed to develop a detailed, complete and workable plan to obtain tanks for long term CF needs. The 2009 Auditor General’s report was critical of several elements of the Leopard 2 procurement process, amongst three other land vehicle procurements. While it acknowledged the need for expedited procurement in order to support combat operations, the report noted that some procedural requirements were not met or were only completed after the fact. For example, it stated:

National Defence did not disclose some important information needed for informed decision making, which made it difficult for the Secretariat to fulfill its challenge function. For instance, National Defence did not state that there was a high risk that it would not be able to replace all the old

¹²⁷ Dave Perry, “In response to ‘An Appetite Suppressant for Procurement?’ By Eric Lerhe,” *Canadian Naval Review* (2007) [journal on-line]; available from <http://naval.review.cfps.dal.ca/forum/view.php?topic=13>; Internet; accessed 2 March 2012.

tanks in Afghanistan with the new Leopard 2 tanks, which was one of the project's goals.¹²⁸

The bureaucracy which exists to ensure that regulations are followed was therefore not allowed to properly do its job as a result of non-disclosure – whether deliberate or for the sake of expediency. The report also notes that, surprisingly, there is no separate process or project management for dealing with urgent operational requirements (UOR), which essentially left DND with the decision to either follow the lengthy timelines and procedures for normal projects, or to cut out certain steps – with approval of senior management on the Project Management Board.¹²⁹ Established procedures were clearly not designed for rapid procurement, and some potentially critical steps were therefore not completed.

The Auditor General's report recommended that a framework be developed in order to better manage UOR. It highlighted specific deficiencies in the planning of the tank replacement project, such as the failure to identify the need for tank ploughs and implements: "No research was done to find out if these implements could actually be fitted on the tanks. Later, it was determined that it would be more difficult and time-consuming than originally expected to install them on the purchased tanks."¹³⁰ Such gross deficiencies created extra work to have the implements researched and approved under a different project, and was but one of many shortfalls in the rapidly developed

¹²⁸ Office of the Auditor General, *2009 Fall Report of the Auditor General of Canada to the House of Commons: Chapter 5 – Acquiring Military Vehicles for Use in Afghanistan*, (Ottawa: Public Works and Government Services Canada, 2009), http://www.oag-bvg.gc.ca/internet/docs/parl_oag_200911_05_e.pdf; Internet; accessed 17 February 2012.

¹²⁹ *Ibid.*, paragraphs 5.19- 5.20.

¹³⁰ *Ibid.*, paragraph 5.21.

plan. The inability of the Dutch Leopard 2s to be used for training troops in Canada, due to differing turrets and lack of serviceability, was also overlooked. This caused a resultant increase in the training bill for use of facilities and equipment in Germany, and meant that “because of the cap on funding for upgrading the Leopard 2 tanks, National Defence will not be able to upgrade all the tanks to the desired level. The result is that the training fleet will consist of a different model of tank than the deployment fleet—a situation that the Canadian Forces considers less than ideal.”¹³¹ This characterization is certainly an understatement considering the small size of the CF and the vastly increased logistic burden and training required to maintain several variants of tanks despite a small fleet size. There are undoubtedly efficiencies to be found in the procurement process; however, drastically reducing the planning cycle in order to rapidly propose and approve procurement caused, in the case of the Leopard 2, many secondary effects with which the CF will have to live for years to come.

The approval process for Leopard 2 was short-circuited as a result of urgency, in the case of the leased tanks, and likely stemmed from a lack of rapid progress seen in past projects. The difficulties with some defence procurement projects have been well publicized, from the Maritime Helicopter (Sea King) replacement project to the current procurement of F-35 fighter aircraft. With a lack of understanding of processes in some regards, to a frustration on the part of the military when political considerations and budgetary changes cause cancellation or delay of much needed capabilities, it should come as little surprise that DND took some advantage of the urgency of the situation in Afghanistan to fast-track the procurement of Leopard 2. As Chief of the Land Staff

¹³¹ *Ibid.*, paragraph 5.68.

Lieutenant-General Andrew Leslie remarked to the Senate Standing Committee on National Security and Defence in March 2009: "...the procedure that is in place to get some projects approved is too cumbersome and takes far too much time and effort. Approval of projects is delayed for months, and sometimes even for years, which leads [the Department of National Defence] to absorb exorbitant costs."¹³² With such a perspective from the head of the Army, there is little doubt that those involved in the actual project management and procurement felt the frustrations even more acutely. The previously noted lack of a UOR process enabled the short-circuiting of the drawn-out procurement timelines, and was exacerbated by what Granatstein identifies as a lack of experienced personnel in the domain:

There is also the confusion in procurement that has, if anything, worsened in the last several years in part because of the government's urgent need (and success) to re-equip the CF so it could fight better in Afghanistan. The CF's procurement system is short of project managers, and the dead weight of Public Works and government regional development policies hangs over every equipment acquisition.¹³³

Procurement is not self-driven, but rather is conducted based on Government of Canada policy translated into defence priorities and direction. In the case of Leopard 2 acquisition, the 2005 Defence Policy Statement did not specify the need for tanks, but provided for retaining forces capable of the spectrum of operations, including combat. The need for tanks in Afghanistan justified, at least in the short-term, the procurement. The leasing of tanks from Germany could

¹³² Martin Shadwick, "State of the Forces," *Canadian Military Journal* 9, no. 4 (2009); <http://www.journal.forces.gc.ca/vo9/no4/doc/17-shadwick-eng.pdf>; Internet; accessed 1 April 2012.

¹³³ J.L. Granatstein, "The Harper Government and Defence After Four Years," Paper prepared for the Canadian Defence and Foreign Affairs Institute, March 2010: 3; <http://dspace.cigilibrary.org/jspui/bitstream/123456789/28005/1/The%20Harper%20Government%20and%20Defence%20After%20Four%20Years.pdf?1>; Internet; accessed 2 March 2012.

have adequately dealt with this aspect, while the purchase of a permanent fleet could have been approached more methodically. This is confirmed by the fact that the first of the Dutch tanks, upgraded to 2A4M CAN status to include improved blast resistance, only arrived in Afghanistan in December 2010 – mere months before the July 2011 cessation of combat operations by the CF.¹³⁴ The April 2007 announcement by government, however, put those DND personnel involved in the procurement project in a difficult position: deliver the vehicles according to timelines, and within approved budgetary constraints, or risk loss of political support and potential project cancellation. The political factor is one that cannot be discounted in this case.

Politics are one of the greatest hurdles to effective project management and procurement. One needs only look as far as the Sea King replacement to understand the long-term impacts that politics can play, after the EH-101 was cancelled in 1993 by the newly-elected Chretien government. As Aaron Plamondon wrote on this subject:

... Weapons and equipment procurement in Canada has historically been an inefficient process, and the acquisition of a capability for the military has often been secondary to political considerations. When these political factors are the focus, they drastically extend the timeline of acquisition. And in Canada, the longer a procurement takes, the more politically vulnerable it becomes.¹³⁵

¹³⁴ Department of National Defence, “New Canadian Leopards Roar into Afghanistan,” *Army News* (4 February 2011); <http://www.army.forces.gc.ca/land-terre/news-nouvelles/story-reportage-eng.asp?id=5043>; Internet; accessed 27 April 2012.

¹³⁵ Aaron Plamondon, *The Politics of Procurement: Military Acquisition in Canada and the Sea King Helicopter*, (Vancouver: UBC Press, 2010), xv.

The political landscape was favourable to procurement of tanks in 2006-2007, as a result of increased casualties – even if the population did not support the war in Afghanistan, they did not want to see their troops blown up in less than the best-protected vehicles. With a solid pre-recession economy and a minority government, the procurement of Leopard 2 proceeded rapidly beginning in 2007 as a result of political will and an approved budget. The 20 Leopard 2s leased from Germany arrived by the end of 2007, however the delivery of the upgraded Dutch tanks did not occur until December of 2010 due to contracting and delivery delays caused by the rapid procurement.¹³⁶ The tanks were employed on all matter of tasks, including convoy escorts, assaults on insurgent strongholds and overwatch of forward operating bases. While no information is publicly available on the number of casualties which were prevented by deployment of Leopard 2, with its mine-blast protected belly armour, the Leopard 2 arguably achieved the best balance of mobility and protection of any of the CF vehicles deployed in Afghanistan. The argument of needing better protected tanks, with improved survivability over the Leopard C2, was one which did not need empirical evidence in order to gain public support.

With DND motivated to get new equipment while possible, and the Government anxious to be seen to be doing its part to provide adequate equipment to save lives, the fast-tracked acquisition was a case of ‘making hay while the sun shines.’ In the years following, the government would tout the effectiveness of their procurement in terms of the reduced timelines; Associate Minister of National Defence Julian Fantino remarked in 2011, “Since 2006, our government has reduced the average time required for military

¹³⁶ DND, “New Canadian Leopards...”

procurement from 7 years to 48 months, and we are working still at finding more efficient, more effective ways of expediting procurement for the military, so it's a work in progress and we'll continue doing that.”¹³⁷ There are certainly efficiencies to be found in the procurement process, but simply ignoring detailed planning in projects is not the best way in which to ensure that the equipment and support for projects are well considered and in line with strategic planning.

STRATEGIC GUIDANCE AND STRATEGIC FORESIGHT

The publication of the Canada First Defence Strategy (CFDS) in 2008 addressed the need for detailed defence policy and clear priorities with which to move DND into the future. For the first time in decades, defence policy was created with a 20 year horizon in mind, acknowledging the need for “clear strategic goals” based on expectations of the Forces, capability requirements and resources required to attain them.¹³⁸ It addressed scenario building and possible future missions, with a clear priority placed, as the name of the policy implies, on the protection of Canada. The document made reference to the fact that some projects had to be rapidly executed while the strategy was being developed, as was the case with the Leopard 2 and strategic airlift: “Over the last two years, the Government committed significant resources to rebuilding the Forces and made decisions related to the most urgent equipment needs while continuing the analysis

¹³⁷ Chris MacLean, “Interview with Associate Minister, Responsible for Defence Procurement,” *Frontline Defence* Issue 5, 2011, 8.

¹³⁸ Department of National Defence, *Canada First Defence Strategy*. (Ottawa: Department of National Defence, 2008): 5; http://www.forces.gc.ca/site/pri/first-premier/June18_0910_CFDS_english_low-res.pdf; Internet; accessed 25 March 2012.

supporting the Canada First Defence Strategy.”¹³⁹ The policy continually reinforces the need for detailed resource planning and emphasizes the necessity of sequencing projects in order to ensure that “equipment is not delivered without the necessary personnel to operate it and the infrastructure required to support it.”¹⁴⁰ Whether or not this is based on logic or the lessons learned from Leopard 2 and other fast-tracked projects, it was at least worthy of mention.

Will the CFDS really influence or change the nature of procurement and project management? The fiscal and political landscapes are such that strategic planning may be conducted, but realities may not conform to plans and they may have to be modified based on government will and available resources. As Shadwick notes of the post-2008 recessionary Canada, “In such an environment, finding the financial resources – and the public will? – for a credible Canadian defence capability is going to become increasingly difficult.”¹⁴¹ Nonetheless, published strategy with clear vision of the way ahead and the capabilities required for both domestic and expeditionary operations is critical to defence planning; constant revision and updating is inherent in Strategic Foresight processes.

Was Strategic Foresight applied in the Leopard 2 acquisition? A final review of Godets’s five questions for SF will help assess this. The answer to the prerequisite question, Who am I?, had essentially not changed since the 1994 Defence White Paper. The 2005 DPS and the 2008 CFDS both retained the ‘combat-capable’ mantra; the reality of combat on the ground in Afghanistan, however, made the necessity for real

¹³⁹ *Ibid.*, 16

¹⁴⁰ *Ibid.*, 19

¹⁴¹ Martin Shadwick, “Darkness Revisited,” *Canadian Military Journal* 9, no. 3 (2009). <http://www.journal.forces.gc.ca/vo9/no3/doc/14-shadwick-eng.pdf>; Internet; accessed 2 April 2012.

effectiveness in lethal combat operations more evident, and the CF became a war-fighting force again for the first time in decades. Tanks, as stated in the April 2007 Leopard 2 announcement, were critical hardware for fighting forces.

Question 1, What could happen?, is one which ought to have been more fully developed. After years of stating that tanks were not required and irrelevant, the decision to re-invest in a tank capability was hastily made. Certainly, tanks were deemed to be required for current operations in Afghanistan, but would they be required into the future? Other than insurgents acting in a conventional rather than an asymmetric way during Op Medusa, what caused the assessment of what might happen in the future to change so rapidly and drastically away from a wheeled ACV? A review of past assumptions pertaining to future threats, combined with future-scanning may have yielded the possibility that the current tank requirement was a one-off or unique situation.

With respect to question 2, What can I do?, some options were considered on how best to obtain an adequate tank ability – either through upgrading the Leopard C2, purchasing a new tank, leasing tanks or buying surplus tanks. No wheeled ACV alternative to the MGS was considered, likely in light of the long and unfruitful development process which resulted in the request to cancel the project. Clearly, some options for the future of direct-fire support were explored, but they did not consider all potential avenues available.

Question 3, What will I do?, was resolved clearly with the April 12th 2007 announcement detailing the lease of 20 Leopard 2A6M from Germany and 100 surplus Leopard 2A4 from the Netherlands. The broader plan to acquire, refit, train crews and equip the forces with the Dutch tanks was not outlined when the strategic decision was

announced, likely because the detailed work had not yet been completed. As has been already demonstrated in the 2009 Auditor General's report, the absence of plans to deal with implements and training for the Leopard 2s shows that question 4, How will I do it?, was haphazard and after the fact. The enduring legacy of this failure to conduct the detailed operational planning required for a complete and adequate acquisition, overhaul and implementation of the Leopard 2 fleet will be seen through the training and maintenance and challenges inherent to a mixed fleet of operational and training variants for the coming decades.

Strategic Foresight based processes were loosely employed in the case of the Leopard 2 acquisition. Political factors, omnipresent in defence procurement, weighed heavily in favour of rapid acquisition; DND willingness to bend rules or exploit gaps in policy facilitated the approval of the project and ultimately enabled the Leopard 2 procurement. The CFDS, published after the Leopard 2 purchase, logically provided for the capability and justified the purchase as urgent enough to preclude waiting for an updated defence policy document. Are tanks still required in the CF inventory in order to provide for multi-purpose combat capability? Regardless of one's point of view on this matter, Strategic Foresight and planning aims to make informed decisions based on current and likely future scenarios. The use of Strategic Foresight in the Leopard 2 acquisition was conducted up to the point of "what will I do?", albeit in a partial manner, but the "how will I do it?" was incomplete. The short timelines required for decisions to be made, as a result of political considerations, is one major limiting factor on the application of Strategic Foresight in defence procurement.

CONCLUSION

This paper provided an overview of the theory of Strategic Foresight as well as procurement and force development processes, identifying specifically the challenges of producing strategic direction in the absence of continually updated government defence policy to drive force structure and capability requirements. It reviewed CF policies and the employment of tanks from the end of the Cold War to the decision to replace the tank with a wheeled Mobile Gun System in 2003, concluding that the decisions were not based on scenario building or testing and analysis as much as fiscal and political constraints. The potential need for deployment of Leopard C2 main battle tanks to Afghanistan in 2006, portended by the lack of an alternative direct-fire support vehicle and the use of tanks in Iraq since 2003, was demonstrated to have been foreseeable through scenario building. Finally, the decision to obtain German and Dutch Leopard 2 tanks was shown to have been more of an immediate reaction to events in the Afghan theatre of operations at the time than a product of Strategic Foresight processes.

The Strategic Foresight methodologies presented are a potentially useful tool to analyze the future security environment and inform capability development in order to respond to future challenges. In the case of force development in the CF, however, the objective use of scenario building is limited in applicability due to budgetary constraints, infrequent publishing of government defence policy and political factors which frustrate or limit the ability of the CF to plan and respond as circumstances otherwise dictate. The 2007 acquisition of Leopard 2 for the CF was therefore the result of over a decade in which the tenets of Strategic Foresight were not applied, resulting in a hastily acquired capability based more on opportunity than forward thinking. A lack of clear scenario

building at the political level caused the 1994 Defence White Paper to lack the concrete analysis and direction needed for the CF to develop force structures based on probable future tasks and capabilities. This shortcoming was further exacerbated by a poor economy in the 1990s, which caused drastic paring down of the CF; the tank, a relic of a bygone era, was seen as an easy target for saving money and transforming into a more multi-purpose force. This elusive force construct did not, however, allow for a force which was as combat capable, or as well equipped for conventional high-intensity conflict, as those stationed in Germany before the fall of the Berlin Wall.

A failure to look further than the types of operations the CF was engaged in at the time of the 1994 White Paper meant that some capabilities, such as the protected mobile direct-fire support provided by the tank, were seen as irrelevant in the peace support type roles which were increasingly prevalent at the end of the 20th and beginning of the 21st century. If anything, the terrorist attacks of 2001 only served to solidify in the minds of the government, DND and the CF, that future conflicts did not require conventional tools, such as tanks, since the fight against global terrorism and insurgency was not a conventional one. The primary reasons that tanks returned to the forefront of the CF in 2006 were threefold; first, the technological challenges and delays faced by the MGS project caused the Army to request cancellation of the project in July 2006; second, the insurgents returned to conventional tactics in Afghanistan for a brief period in August and September 2006; and finally, the increasing CF casualties in Afghanistan caused the purchase of the tank to become more defensible to the Canadian public. Had any of these conditions not existed, or not been compressed into a short timeframe, the Leopard C2 might not have deployed and the Leopard 2 might never have made a return to the CF

inventory. It was entirely a case of circumstance, therefore, rather than Strategic Foresight and methodical force development and procurement, which led to the decisions made in 2006 and 2007 to get back into the tank business. This being the case, what role does Strategic Foresight have to play in defence policy, DND procurement and CF force development? The answer is that in the recent past, its role has been very small – but this does not mean that there is not a viable and valuable role for Strategic Foresight in defence.

There were several instances examined where elements of Strategic Foresight processes were applied in the development of policy and strategies. *Strategy 2020* attempted to provide a DND framework for defence planning in the absence of up to date government policy. *Quarré de fer* attempted to test the effectiveness of the ACV through simulation and experimentation in order to determine if something other than a tank could complete the traditional direct fire support as well as OOTW tasks. Testing of MGS and MMEV concepts subsequently demonstrated that there was some merit to the ACV concept as an alternative to the tank. The flaw with all of these processes and steps, however, are the bias which existed and therefore influenced the impartiality of the outcomes. In the case of *Strategy 2020*, it was a DND document rather than defence policy, and was therefore constrained by government budgets and discretion. The results of *Quarré de fer*, indicating the limitations of an ACV in conventional conflict, were doomed to be disregarded from the outset since the 1996 Army Campaign Plan had already determined that the answer to “What should I do?” did not include tanks as an option. The MGS and MMEV trials were likewise influenced by 2003 Army strategy which clearly stated the requirement and desire to move to a medium-weight forces. The

ability to critically examine a situation from an impartial manner was conspicuously absent from 1994 to 2007, and the outcomes were therefore more based on reaction than deliberate planning and preparation through weighing of possible outcomes.

The failure of Strategic Foresight to produce results which foresaw the potential need for tanks in the CF inventory into the future does not mean that there is no attempt to scenario build and test theories in the force development realm. The 2011 work of the Army in *Designing Canada's Army of Tomorrow* is useful in demonstrating the lengths to which the CF has gone to ensure that the future is carefully considered and planned for.¹⁴² It contains detailed descriptions of what future security environments are likely to include as threats, and postulates on how the CF should best develop, equip and train in order to appropriately meet the challenges. Likewise, the CF directly acknowledged the shortcomings in certain procurement processes which were made apparent in such forums as the 2009 Auditor General's report dealing with procurement. *Designing Canada's Army of Tomorrow* further acknowledges the errors made in the Leopard 2 project, albeit indirectly, by stating the requirement to minimize the number of variants of given fleet types in order to achieve efficiencies in training and logistic support – something which the multiple Leopard 2 variants miserably failed to achieve.¹⁴³ Strategic Foresight may help prevent such errors in the future by allowing enough advance warning of potential

¹⁴² Department of National Defence, *Designing Canada's Army of Tomorrow*, (Kingston: Directorate of Land Concepts and Designs, 2011).

¹⁴³ *Ibid.*, 55. – Note, the ref states: “In support of the principles of simplicity and economy the minimum number of fleets should be employed to the greatest extent possible. Commonality between fleets should be a strong consideration. The ultimate goal is a common operator station throughout the fleets.” While this seeks to achieve commonality between different fleets, while Leopard 2 fails to achieve this even internal to the tank fleet.

capability requirements to permit thorough and logical procurement which provides not only urgent operational requirements but also a sustainable, long-term solution.

The Strategic Foresight processes which are successfully implemented in the private sector, specifically by such pioneers as Royal Dutch Shell, are not perfectly transferable to defence. Oil markets contain a number of quantifiable variables and a limited number of uncertainties which allow for development of models to plan based on maintaining equilibrium; as such, there is a more methodical and nearly mathematical approach which can be acted upon rapidly.¹⁴⁴ Private sector organizations are also less subject to political influence and major swings in policy which may result from a change of government. Their processes are therefore more free from bias and less dependent on resources which are outside their control, for example budgets which must be prioritised and shared between government departments. Public sector departments who dedicate time to scenario building and Strategic Foresight concepts, however, will be more easily able to identify trend changes and understand potential options to respond to them. As Dwight Eisenhower famously stated, “In preparing for battle I have always found that plans are useless, but planning is indispensable.”¹⁴⁵ A culture of looking forward, not in order to develop absolute solutions but rather to better understand potential developments and organizational responses, can stand armed forces in better stead to respond to internal political and domestic or external defence challenges. Lack of up to date defence policy and fluctuating budgets must not frustrate attempts to prepare for the future in a proactive

¹⁴⁴ Schoemaker, Paul J.H. “Scenario Planning: A Tool for Strategic Thinking.” *Sloan Management Review* 36, no. 2 (Winter 1995); <http://www.favaneves.org/arquivos/scenarioplanning.pdf>; Internet; accessed 24 April 2012.

¹⁴⁵ <http://www.brainyquote.com/quotes/quotes/d/dwightdei164720.html>; Internet; accessed 12 April 2012.

and informed fashion – the stakes and risks of failure are simply too high to remain reactive.

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