

Canadian
Forces
College

Collège
des
Forces
Canadiennes



Constraining Ambition: The Delusion of a Combat-Capable Canadian Army

Major Marc R. Kieley

JCSP 47

PCEMI 47

Master of Defence Studies

Maîtrise en études de la défense

Disclaimer

Avertissement

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

Les opinions exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2021.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2021.

CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES

JCSP 47 – PCEMI 47

2020 – 2021

MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

**CONSTRAINING AMBITION – THE DELUSION OF
A COMBAT CAPABLE CANADIAN ARMY**

Major M.R. Kieley

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

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

TABLE OF CONTENTS

Table of Contents	i
List of Tables and Figures	ii
Abstract	iii
Chapter	
1. Introduction	1
2. Defining the Purpose of Canada's Army	7
3. Designing an Army	38
4. A More Capable Canadian Army	74
5. Conclusion	93
Bibliography	98

List of Tables and Figures

Figure 3.1 - Strategy and Force Planning Framework	40
Figure 3.2 - Conceptual Model of Army Design	43
Figure 3.3 - Campaign themes and relative share of tactical activities	51
Table 3.1 - Land Force Taxonomy	71-72

ABSTRACT

Since 1994, Canadian defence policy has described the required capability of the Canadian Armed Forces as a general-purpose, combat-capable force. This generic description creates a challenge for the Canadian Army to design and field an appropriate force to meet the requirements of Canada's national objectives as it lacks both the size and resources to field the full range of modern capabilities required to execute all potential operations across the spectrum of conflict. This paper reviews Canadian defence policy from 1947 to 2017 to identify the enduring demands made of the Canadian Army and proposes a conceptual model of army design to determine the type of land combat force that a nation needs to meet its requirements. From this model, a taxonomy of ten types of armies is proposed that describe the range of forces that exist across the world. This model is then applied to the Canadian Army to determine which types of army Canada could choose to field, offering a path to create a more capable force by constraining its force development into a declared army type and purpose.

CHAPTER 1 - INTRODUCTION

Words may show a man's wit, but actions his meaning.

— Benjamin Franklin

In 2017, the Government of Canada released its defence policy, *Strong, Secure, Engaged*, providing the most recent attempt to summarize the purpose, mission, and roles of the Canadian Armed Forces (CAF). Having outlined the Government's vision for the CAF, the policy states its foundational premise that Canada “needs an agile, multi-purpose, combat-ready” military to achieve its objectives.¹ But for its five invocations of the term “combat-ready,” a definition is never offered. This is not a unique flaw of our current defence policy; a definition cannot be found in any preceding defence policy despite consistent demands for ‘combat-ready’ or ‘combat-capable forces.’ There is no assistance to be found either in any foundational doctrine manual of the CAF or its subordinate services. The Canadian Army manual *Land Operations* serves as the capstone doctrine for the conduct of land operations. Despite making 550 references to combat, it too fails to offer a definition, but commits that the Army will generate and maintain “combat capable” land forces to meet Canada's defence objectives.² The 1998 publication *Canada's Army: We Stand on Guard for Thee*, offers a more specific claim to the purpose of Army: “to defend the nation, and when called upon, to fight and win in war.”³

¹ Canada. Department of National Defence, *Strong, Secure, Engaged: Canada's Defence Policy* (Ottawa: Her Majesty the Queen in Right of Canada, 2017), 14.

² Canada. Department of National Defence. B-GL-300-001/FP-001, *Land Operations*. Kingston, ON: Director Army Doctrine, 2008, 1-3.

³ Canada. Department of National Defence. B-GL-300-000/FP-000, *Canada's Army: We Stand on Guard for Thee*. Ottawa, ON: Land Force Command, 1998, 2.

Perhaps on the surface these terms seem self-evident, or at least obvious enough to not require formal explanation. However, this lack of clarity is problematic; the CAF is neither funded nor equipped to be ready for *any* combat. Nor is it prepared to fight in, let alone win, the full range of warfare that could be encountered across the globe. This ambiguous requirement, whether accidental or by design, has had enduring effects on the CAF and particularly challenged the Canadian Army. The Canadian Army has been challenged to maintain a relevant and capable force in the face of a broad spectrum of global conflict, and rapidly developing threat vectors and technologies. This paper will examine the meaning of ‘combat-capable’ and argue for a specific definition of a combat-capable Canadian Army to guide force development and force structures to ensure that the Army remains relevant and effective. This argument will be aided by the presentation of a proposed conceptual model for army design, as well as a taxonomy of army types that represent the bounds of potential purpose and design for any modern land combat force.

To begin this analysis, Chapter Two will summarize the history of Canadian defence policy, highlighting the evolution of national demands on the purpose and ultimate requirements of the Canadian Army. These policy objectives will be contrasted with a study of the actual employment of the Army throughout its history, both at home and abroad. The explicit and implicit roles of the Canadian Army since 1947 will be identified, describing the different purposes and roles that have been assigned to the Army since the end of the Second World War.

Chapter Three will assess the considerations and design criteria for crafting a modern army. In reflecting on Western military doctrine and the global context of

military conflict, as well as modern technology and threats, a conceptual model of army design will be proposed. The analysis will describe a taxonomy of types of land forces that are fielded across the world which broadly describe the purpose, mission set, and threat model which inform their design.

Chapter Four will focus on the Canadian Army of today. It will consider the modern history of the Army in the context of the design model and taxonomy presented in Chapter Three. The model will then be applied to the contemporary realities of Canadian defence and will consider the ability of the Canadian Army of today to succeed across the spectrums of conflict, and against the increasing array of threats present around the world. Finally, this chapter will argue for what type of army Canada could choose to field to best achieve its national objectives while optimizing the purpose, design, and capabilities of the Canadian Army.

Literature Review

This thesis is based on an analysis of Canadian defence policy, military doctrine, specific historical decisions, and the synthesis of these issues and ideas with different perspectives on military planning, force development, military operations, and threat streams. While the ten defence policy statements issued since 1947 are critical primary documents, several Canadian academics are acknowledged experts in interpreting and contextualizing these policies. Douglas L. Bland collates and contextualizes defence policy up to 1994 in his 1997 collection *Canada's National Defence Vol 1: Defence Policy*.⁴ Writing with Sean M. Maloney, their 2004 book, *Campaigns for International*

⁴ Douglas L. Bland, *Canada's National Defence, Volume 1: Defence Policy* (Kingston: School of Policy Studies, Queen's University, 1997).

Security,⁵ provides analysis and understanding of how Canadian policy was crafted following the end of the Cold War and the reorientation away from conventional combat to focus on stabilization missions. In the 2008 book *Canada's International Policies: Agendas, Alternatives, and Politics* Brian W. Tomlin, Norman Hillmer, and Fen Osler Hampson devote a chapter to the evolution of Canadian defence policy from 1964 to 2005, focusing on the interplay of politics and policy in adapting to changing geopolitical circumstances.⁶

Focusing on the Canadian Army specifically, Peter Kasurak's 2013 book, *A National Force: The Evolution of Canada's Army, 1950-2000*,⁷ offers an exhaustive study of the impact of defence policy on the Army. Kasurak studies both how the Army as an institution adapted to the changes in defence policy, but also how uniformed leaders sought to influence, change, and resist the design and implementation of defence policies. The Army continues to assess its own strategic direction through the *Advancing with Purpose* publication series. The most recent edition, *Advancing with Purpose: The Canadian Army Modernization Strategy*, was released in 2020.⁸ While this publication addresses changes in technology and threat streams that demand associated evolutions in the Army, it does so from the perspective of maintaining a generically combat-capable force that is critiqued in this paper. The modernization strategy notes but does not discuss in detail an ongoing but incomplete Army initiative, Force 2025, which may result in a

⁵ Douglas L Bland and Sean M Maloney, *Campaigns for International Security* (Montreal: McGill-Queen's University Press, 2004),

⁶ Brian W. Tomlin, Norman Hillmer and Fen Osler Hampson, *Canada's International Policies: Agendas, Alternatives and Politics* (Don Mills: Oxford University Press, 2008),

⁷ Peter Kasurak, *A National Force: The Evolution of Canada's Army, 1950-2000* (Vancouver: UBC Press, 2013).

⁸ Canada. Department of National Defence. A-PP-106-000/AF-001, *Advancing with Purpose: The Canadian Army Modernization Strategy*, 4th Ed. (Ottawa, ON: HQ Canadian Army, 2020).

significant reorganization of the Army to allow it to remain combat-capable and relevant in the future operating environment. The 1994 Canada 21 Council report, *Canada 21: Canada and Common Security in the Twenty-First Century*, is unique in that it offers both a strategic critique of the CAF as well as a detailed proposal for how to reform it.⁹ Written to influence defence policy statement preparations in 1994, the report proposed a new orientation, mission, and force structure for the CAF. Although political and technological changes have overcome many of the recommendations, the logic and philosophical approach of the report remain relevant to discussions of the CAF today.

As to the topics of force design and army taxonomy discussed in Chapter Three, Richmond M. Lloyd of the U.S. Naval War College has written extensively about national strategy and force design. His 2005 article with P.H. Liotta, *From Here to There – The Strategy and Force Planning Framework*¹⁰ is a comprehensive discussion of the formulation of national strategy and how to design armed forces to meet the needs of that strategy. Regarding the design of a specific armed force element, Daniel Todd and Michael Lindberg produced a taxonomy of naval power in their 1996 book *Navies and Shipbuilding Industries: The Strained Symbiosis*¹¹, which inspired the taxonomy of armies presented in Chapter Three.

A review of literature demonstrates that recent studies of the Canadian Army have focussed on how to optimize the force: either through modernization or some program of reform. Regardless of the solution proposed, these studies continue to question the

⁹ Canada 21 Council. *Canada 21: Canada and Common Security in the Twenty-First Century*. Toronto, ON: Centre for International Studies, University of Toronto, 1994, 69.

¹⁰ Richmond M. Lloyd and P. H. Liotta, “From Here to There—The Strategy and Force Framework,” *Naval War College Review* 58, no. 2 (2005):

¹¹ Daniel Todd and Michael Lindberg, *Navies and Shipbuilding Industries: The Strained Symbiosis* (Westport, CT: Praeger Publishers, 1996).

structure and capability-mix of the Army, rather than its purpose. Not since the Canada 21 report of 1994 has a study questioned the very validity of the paradigm of combat-capability for the Canadian Army. While the Canada 21 report proposed a specific vision for the CAF, it did not discuss the underlying factor that determine the purpose and capabilities of an army. This paper will discuss the contemporary considerations that drive both the purpose and capabilities of the Canadian Army, as well as the factors and design model that more broadly delineate the types of armies that exist today.

CHAPTER 2 – DEFINING THE PURPOSE OF CANADA’S ARMY

While Canada’s current defence policy, *Strong, Secure, Engaged*, is the most recent policy instrument declaring the need for Canada to maintain combat-ready military forces, it is not the first. The modern Canadian Armed Forces (CAF)¹² has been shaped by the demands of successive defence policies in the over 75 years since the end of the Second World War. Changes in national policy have both contracted and expanded the CAF, introduced new capabilities while dismantling others, and dictated dramatic changes in mission focus as geopolitical realities shifted. In defining the purpose of the CAF, policy makers have had to contend with the investments and focus of their predecessors, seeking to impose their will to set a course that was constrained by previous commitments to specific equipment, structures, or strategic alliances, or even directly resisted by senior military leaders. Canadian defence policy remains an iterative process that imposes episodic evolution on the CAF, and the lasting impact of previous strategic and political decisions can still be seen in the current organization, capabilities, and missions of the institution. This chapter introduces the role of defence policy in defining the nature of the Canadian Army before examining its role and purpose from 1947 to the present.

¹² The ‘Canadian Armed Forces’ as a unified organization has only existed officially since 1968, when Bill C-243, *The Canadian Forces Reorganization Act* came into effect to amend the *National Defence Act*. The intention to unify the component services was announced in the 1964 *White Paper on Defence*; previous defence policies had referred to the individual services. While ‘Canadian Forces’ and ‘Canadian Armed Forces’ have been used interchangeably since 1968, this paper will use the preferred modern terminology of the CAF to describe the combined armed forces of Canada.

The Role of Policy in Defining Combat Capability

To properly contextual the policy imperative for a combat-capable Canadian Army,¹³ it is useful to first distinguish the demands on military thought, action, and purpose imposed by strategy and policy. CAF joint doctrine describes national strategy as the “art and science of developing and employing the instruments of national power (including the armed forces) in a synchronized and comprehensive fashion to secure national objectives.”¹⁴ Defence policy then, formally articulates the demands imposed on a nation’s armed forces in the context of national strategy. Depending on their level of ambition, defence policy statements, known colloquially as ‘White Papers’ in Canada, have at times offered grand strategic expressions of national goals and political intent, and provided expectations to the CAF regarding the objectives, roles, and capabilities it must embrace to fulfill them.¹⁵ Less bold statements, in contrast, have been forced to reconcile past ambitions with present political and fiscal realities, and introduced restraints instead of new aspirations.¹⁶ While defence policy statements are often criticized for lofty rhetoric that does not always translate into credible actions;¹⁷ they are

¹³ The use of the term Canadian Army throughout this paper refers to the land combat focussed component of the Canadian Armed Forces. While the Canadian Army traces its history to pre-confederation militia units, the modern force was born with the Militia Act of 1855 which created the Permanent Active Militia. This was changed to the Canadian Army (Active) in 1940. The 1968 unification of the CAF created *Force Mobile Command* in place of an independent Canadian Army, which was renamed *Mobile Command* in 1991, and then *Land Force Command* in 1993, before the restoration of the Canadian Army as the official name in 2011. When capitalized, Army will indicate the Canadian Army, however when uncapitalized, army will refer generically to a land combat force.

¹⁴ Canada. Department of National Defence. B-GJ-005-500/FP-001, *Canadian Forces Joint Publication 01 (CFJP 01): Canadian Military Doctrine*. Ottawa, ON: Canadian Forces Experimentation Centre, 2011, 3-2.

¹⁵ Maj Allan Thomas, “Change and Effect: The Evolution of Canadian Defence Policy from 1964 to 2017 and Its Impact on Army Capabilities” (Canadian Forces College, 2018), 2.

¹⁶ Craig Stone and Solomon Binuam, “Canadian Defence Policy and Spending,” *Defence and Peace Economics* 16, no. 3 (2005): 145–69, <https://doi.org/10.1080/10242690500123414>.

¹⁷ Bert Chapman, “The Geopolitics of Canadian Defense White Papers: Lofty Rhetoric and Limited Results,” *Geopolitics, History, and International Relations* 11, no. 1 (2019): 7–40.

intended to serve the very practical purpose of expressing specific activities that the CAF must execute while outlining specific structures that it must develop and maintain.

Critically, while the ultimate outcome of policy ambitions may be ambiguous, defence policy statements serve to constrain assigned tasks in an unambiguously finite envelope of fiscal and human resources.

While Canadian defence policy statements provide direction and guidance to the CAF, military leaders must devise their own strategies to achieve these objectives. The CAF describes the military level of strategy as subordinate to national strategy in that it defines “how and under what circumstances the military element of national power can be used to support national objectives.”¹⁸ Military strategy informs how the armed forces will be structured, organized, and equipped to meet national objectives, as well as the body of knowledge describing the fundamental principles of military thought and action, known as doctrine¹⁹.

Rather than merely receiving instructions, the CAF has a bidirectional relationship with the drafters of defence policy. The development of policy is a partnership, albeit unequal, between elected leaders who express political objectives and military leaders who provide professional advice on how they may be achieved and at what cost. However, once their advice has been incorporated into formal directions, CAF leaders are responsible to take whatever steps are required to implement them – often through the design, procurement, training, and ongoing stewardship of the military forces demanded. Military leadership is consequently required to execute a delicate balancing

¹⁸ *CFJP 01*, 3-2.

¹⁹ *CFJP 01*, 1-1.

act; they assist in conceptualizing the very tasks that they will be held accountable to achieve. This arrangement implicitly promotes a level of ambiguity in defining specific outputs that the CAF must achieve, such that both senior military leaders and politicians have room to interpret both tasks and results to account for the inevitable frictions of domestic politics, economics, and geopolitical realities.

The challenge for both political and military leaders to define national defence objectives and the required military response is also deeply affected by domestic politics and the international geopolitical situation of the day. Defence policies crafted in a clearly defined moment in history can afford more precision than those drafted in ambiguous times. This movement from specific to broad military requirements is clearly apparent in the progression of Canadian defence policy from 1947 to 2017, as evidenced in the transition from a Canadian Army with specific purpose and organization to one more vaguely tasked to remain ‘combat-capable.’ A review of the evolution of Canadian Army purpose through the defence policies issued since 1947 is presented in the next four sections of this chapter.

Post-War Realities, 1947 to 1971

The first modern Canadian defence policy emerged in the aftermath of the Second World War. In September of 1945, the War Committee was rebranded as the Cabinet Committee on Defence and quickly set to work reducing Canada’s war time forces to an affordable skeleton, designed to serve as a nucleus for future wartime expansion.²⁰ In 1947, Defence Minister Brooke Claxton released *Canada’s Defence*, which served to

²⁰ Andrew Richter, *Avoiding Armageddon: Canadian Military Strategy and Nuclear Weapons, 1950-1963*, Studies in Canadian Military History (Vancouver, CA: UBC Press, 2003), <https://deslibris.ca/ID/404043>, 15-16.

summarize Canada's military achievements during the Second World War, while also setting clear expectations about the required transformation back to a peacetime military. Claxton believed that any future war would be preceded by obvious warning and allow time for the deliberate building of appropriate military forces. Claxton also acknowledged in 1947 that atomic bombs, jet aircraft, and rocket technology would dramatically alter the conduct of future wars but cautioned that Canada was not yet ready to make significant defence decisions until their impact was more fully understood.²¹

In 1949 Claxton released a second, forward looking policy statement; it was simply titled *Canada's Defence Program* and tasked Canada's military to: (1) provide the force necessary to defend Canada; (2) maintain operational staff, equipment, and training personnel that would be capable of rapid expansion; and (3) develop joint defence plans with other nations."²² It also provided guidance on the nature of the conflict for which Canada's forces were to prepare - a war for survival against the forces of Communism. Aside from the establishment of a composite brigade group assigned to respond to feared Soviet seizures of forward operating bases in Alaska and Canada's North, known as the *Mobile Striking Force*,²³ the purpose of the Canadian Army was to incubate the skills and knowledge required to enable a deliberate expansion for an imagined but undefined future war against the Soviet Union.

In the fifteen years it took to produce a subsequent defence policy, much had changed in the world. The West was no longer questioning whether the future of warfare

²¹ Canada. Department of National Defence, *Canada's Defence* (Ottawa: 1947), reproduced in in Douglas L. Bland, *Canada's National Defence, Volume 1: Defence Policy* (Kingston: School of Policy Studies, Queen's University, 1997), 20.

²² Richter, *Avoiding Armageddon*, 18.

²³ Sean M. Maloney, "The Mobile Striking Force and Continental Defence, 1948-1955," *Canadian Military History*, 2, no. 2 (1993): 75-88, <http://scholars.wlu.ca/cmh/vol2/iss2/10>.

would be atomic but struggling to conceive of ways to fight short of all out nuclear war. The vague future threat of communism had been overcome by Canada's commitment to the NATO alliance of a forward deployed brigade group in Germany and an air division spread across Europe, tasked specifically to deter Soviet aggression.²⁴

The Canadian Army had also grown significantly beyond the size and scope imagined by Claxton in 1949. The outbreak of the Korean War in 1950, and the commitment of a brigade group to NATO in 1951 led to ongoing expansion of the Canadian Army throughout the 1950s without a unifying defence policy. When the Liberal government of Lester B. Pearson was elected in 1963, Defence Minister Paul Hellyer inherited an Army focused on committing a division to the NATO Central Front through one heavy brigade established in Germany, and two additional brigades ready to deploy from Canada.²⁵ Amongst a broader agenda of defence reform including the unification of the individual armed services to form today's integrated CAF,²⁶ Hellyer was skeptical of Canada's ability to reinforce Europe with heavy equipment if war with the Soviets were to break out.

Hellyer sought to impose a more rational purpose and more affordable organization for the Army but was constrained by the extant commitment of a deployed brigade group. His 1964 defence policy statement, the eponymous *White Paper on Defence*, ultimately resolved his concerns by committing to organize the Army into four brigades; the existing heavy brigade stationed in Europe for NATO, two brigades in

²⁴ Canada. Department of National Defence, *White Paper on Defence* (Ottawa: Queen's Printer and Controller of Stationery, 1964), 21-23.

²⁵ Peter Kasurak, *A National Force: The Evolution of Canada's Army, 1950-2000* (Vancouver: UBC Press, 2013), 76.

²⁶ MGen Daniel Gosselin, "Hellyer's Ghosts: Unification of the Canadian Forces Is 40 Years Old - Part One," *Canadian Military Journal* 9, no. 2 (n.d.): 6-15, <http://www.journal.forces.gc.ca/vo9/no2/03-gosselin-eng.asp>.

Canada to be equipped as air transportable mobile forces to support NATO wherever required, and a lighter special service force intended to be air-droppable and employable across “a variety of military tasks.”²⁷ While the Canadian Army of the 1960s was still wrestling with the tactical purpose of conventional forces in a nuclear war, the 1964 policy had at least confirmed that the Army was intended to be capable of fielding a brigade size force in major combat against the Soviet Union, a conventional major military power.

Rather than providing focus and clarity for the CAF, the 1964 policy heralded a period of conflict between the military and the government. Hellyer had planned for the unification of the services as well as reductions in strength to provide the cost savings required to modernize equipment. His successor Leo Cadieux, and Chief of the Defence Staff (CDS) General J.V. Allard, found that by 1967 the defence budget could no longer be afforded due to higher than anticipated inflation and escalating capital costs.²⁸ A change in political leadership would compound these fiscal woes after Pierre Elliot Trudeau became Prime Minister in 1968. Trudeau and his advisors carried a growing skepticism for the prospects of conventional warfare in an era where the United States and Soviet Union had achieved nuclear parity, and China had emerged as a nuclear power. Trudeau began to signal his intentions to reduce Canada’s participation in NATO, focusing instead on domestic sovereignty and security, and to reduce the potential for major conflict through peacekeeping. On April 2, 1969, Trudeau issued a statement in which he declared that the economic recovery of Western Europe had raised the question as to whether Canadian troops were still required to defend it. He went on to announce

²⁷ Canada, *1964 White Paper*, 22.

²⁸ Kasurak, *A National Force*, 109.

that his government would begin to reduce the number of CAF soldiers deployed to the continent, while concurrently discussing the future role for Canadian soldiers in Europe with NATO allies.²⁹

Behind the scenes of Trudeau's policy statement, debate had raged within his Cabinet. Trudeau's foreign policy advisor, Ivan Head, had presented a study to Cabinet on March 29 proposing a 50% reduction of the CAF over the next decade, and a reduction from 10,000 to only 1,800 personnel deployed in Europe. Reception was mixed: Trudeau supported the recommendations, President of the Privy Council (and next Defence Minister) Donald Macdonald advocated instead for a complete withdrawal from NATO, while Cadieux threatened to resign.³⁰ In the end, Cadieux succeeded in tempering Trudeau's ambitions if only slightly, and the subsequent policy statement made clear that a plan for major reductions in Canada's NATO contributions was required. In May 1969, Cabinet approved a plan proposed by Cadieux to reduce the forces to 81,000 from 98,000 personnel, reduce deployed forces in Europe to 3,500, and disband all armoured and mechanized units in favor of a light air-transportable force that would be employed on NATO's flanks. The Minister was authorized to negotiate with NATO but had been directed to return to Cabinet if the alliance demanded significant changes to this proposal.³¹

Despite the political turmoil, fiscal realities had already led the Minister and CDS to spend several years attempting to rationalize Canada's role in NATO, including

²⁹ Pierre Elliot Trudeau, "A Defence Policy for Canada," *Statements and Speeches*, 69, no. 7 (April 3, 1969)

³⁰ Brian W. Tomlin, Norman Hillmer and Fen Osler Hampson, *Canada's International Policies: Agendas, Alternatives and Politics* (Don Mills: Oxford University Press, 2008), 136.

³¹ Kasurak, *A National Force*, 119.

seeking options to disengage from the Central Front, or replace existing heavy forces with smaller, lighter, and more mobile organizations. Over ongoing objections from NATO leadership, force development studies were conducted to assess how smaller and more lightly equipped Canadian elements would fare against Soviet formations, suggesting that they could remain as viable fighting forces, but only with the addition of expensive attack helicopters and fire support weapons. In the end, Cadieux and Allard seemed to find a compromise by betraying each party; in August 1969 Cadieux received Cabinet's blessing to reduce total Canadian forces in Europe by half to 5,000 personnel, without admitting that they would remain committed on the Central Front. NATO leadership was allayed by a promise to remain on the Central Front with a smaller but modernized force; but both NATO and the Army were being offered empty promises. The Army had yet to design an appropriate force structure, nor was the equipment required even available for purchase.³²

Ultimately, Cadieux would retire, with Macdonald requesting to take over the defence portfolio along with the task to craft a defence policy in the narrow arcs of Trudeau's intent and extant commitments to NATO. The 1971 policy statement, *White Paper on Defence: Defence in the 70s*, described Canada's overriding defence objective as "the prevention of nuclear war by promoting political reconciliation to ease the underlying causes of tension...and by contributing to the system of stable mutual deterrence."³³ The policy admitted that the prevention of war may not be possible, and

³² Ibid, 123-125.

³³ Canada. Department of National Defence, *White Paper on Defence: Defence in the 70s* (Ottawa: Information Canada, 1971), 6.

accepted that an appropriate military force would have to be maintained that could contain a conflict before it escalated into an existential threat to Canada.

Marking the first use of deliberately vague language to describe the role of the CAF, *Defence in the 70s* announced that Canada would “maintain within feasible limits a general-purpose combat capability of high professional standard...”³⁴ While formally undefined, the required maximum scope of this combat capability was outlined by the paper’s intent for the heavy combat forces stationed in Europe. The current NATO Brigade Group was established as a tank-based force, stationed on the Central Front, and committed to the main defence of Europe. The new policy promised to cut almost 5000 personnel and included a dramatic shift in mission and organization: the force would be reconfigured for “tactical reconnaissance missions in a Central Region reserve role” and have its tanks replaced by a fire support vehicle that could take on Soviet armour but remain light enough to transport by air.³⁵ Despite the implicit consequences of shifting from the guaranteed heavy combat of a main defensive role to the task of reconnaissance in reserve, the ambiguous definition of ‘general-purpose combat capability’ in *Defence in the 70s* reflected uncertainty over the purpose, tasks, and equipment of the Canadian Army.

In the end, the implementation of the 1971 White Paper would be undermined by a number of factors: political maneuvering by generals; pressure from NATO allies; the resurgence of support for heavy armor following the 1973 Yom Kippur War; and, the challenge of actually designing and procuring the reconfigured force that the policy had demanded. Unable to find the imagined fire support vehicle, the Army was able to delay

³⁴ Canada, *Defence in the 70s*, 7

³⁵ Canada, *Defence in the 70s*, 35.

the decommissioning of its European tanks, buying time for the new CDS, General Jacques Dextraze, and Western German Chancellor Helmut Schmidt to convince Trudeau to sign an order for 128 new Leopard C1 tanks in 1975.³⁶ Despite all this, the policy at least maintained that combat capability was still defined in opposition to the Warsaw Pact forces of the day. The most capable elements of the Canadian Army were to be designed to survive in battle against a Soviet motorized rifle regiment.³⁷

Confidence and Confusion Among the Cold Warriors, 1987 to 1994

The next defence policy would arrive 16 years later under the Conservative government of Prime Minister Brian Mulroney and his Defence Minister Perrin Beatty. Mulroney had made the poor condition and inadequate funding of the armed forces a major issue in the 1984 election campaign, but once in office his government took more than two years to develop a defence policy that matched election ambitions with available resources.³⁸ While the 1971 policy had to contend with Canada's established commitment of forces to NATO's Central Front despite doubting its value and purpose, the 1987 defence policy statement, *Challenge and Commitment: A Defence Policy for Canada* embraced this role. Mulroney's policy held that a strong conventionally armed Western alliance was critical to dissuading Soviet aggression that could quickly lead to all out nuclear conflict. Here the policy statement broke with its predecessors by providing a more concrete definition of the required Canadian capability as one that was "trained,

³⁶ Frank Maas, "From a Beetle to a Porsche: The Purchase of the Leopard C1 Tank for the Canadian Army," *Canadian Military Journal*, 16, no. 4 (2016): 16–27, <http://www.journal.forces.gc.ca/vol16/no4/PDF/CMJ164Ep16.pdf>.

³⁷ Kasurak, *A National Force*, 126.

³⁸ Douglas L. Bland, *Canada's National Defence, Volume 1: Defence Policy* (Kingston: School of Policy Studies, Queen's University, 1997), 184-185.

equipped, and positioned according to the threat.”³⁹ Although the policy outlined in well-illustrated detail the quantitative superiority of Soviet Forces, its strong language made clear that the Government expected a CAF able to fight and organized for efficiency and combat effectiveness.⁴⁰ Reinforcing its rhetoric with concrete plans for the Army, the policy also committed to consolidating Canadian commitments within NATO to allow for the fielding of a division sized force (combining the forward deployed Brigade with reinforcements from Canada), and enhancing its combat power with the acquisition of air-defence units and additional tanks.

Challenge and Commitment offered the Canadian Army the most specific and explicit policy direction it has ever been provided to guide its development, organization, and training: it was required to field a division sized force trained to fight as part of a NATO Corps and Army Group structure in major combat against a high-end adversary. This clarity would, however, only last for a moment. Defence Minister Perrin Beatty had conducted only limited consultation within the Department of National Defence (DND) and the CAF in developing the policy statement, potentially due to fear of leaks to the media.⁴¹ Once the requirements for new personnel and equipment to meet all the commitments expressed in the policy were calculated, it was obvious that they could not be afforded. The government had promised modest growth in defence spending to support their policy; however, by changing the method used to calculate the effects of inflation the actual purchasing power of the military decreased from 1987-88, and deliberate cuts would be imposed in 1989. The Army was hit especially hard and had to

³⁹Canada. Department of National Defence, *Challenge and Commitment: A Defence Policy for Canada* (Ottawa: Minister of Supply Services Canada, 1987), 20.

⁴⁰ Ibid, 22.

⁴¹ Kasurak, *A National Force*, 203.

abandon the procurement of additional tanks and a modern communications equipment to outfit a division sized force in Europe, among other projects.⁴² But it was not only the fiscal underpinning of the defence policy that was eroding: the strategic imperatives driving the hard combat requirement for the Canadian Army were quickly evaporating too.

Mikhail Gorbachev's ascension to Secretary of the Soviet Communist Party in 1985 had reinvigorated diplomacy between the East and West. In December 1987 the United States and Soviet Union signed the Intermediate-Range Nuclear Forces Treaty, and by May 1988, President Ronald Reagan was standing in Red Square in Moscow declaring that the world may be entering "a new era in history."⁴³ The shifting global climate reinforced the fiscal constraint of the Canadian Government, forcing the Army to retreat to generating general-purpose forces based on the mantra of acceptable, affordable, and achievable, or the "Triple A Army."⁴⁴ Within four years, the Soviet Union would collapse, invalidating the core conceptions of *Challenge and Commitment* and casting the entire strategic orientation of the CAF into doubt.

At the November 1991 Rome summit, NATO announced its new strategic concept which called for major reductions in forward presence in Europe, with alliance members instead maintaining flexible and mobile forces at home supported by large reserves.⁴⁵ The Conservative government took the first steps to contemporize Canada's defence policy with the release of the 1992 *Defence Policy Statement*. Although the

⁴² Ibid, 207-209.

⁴³ "U.S. - Soviet Relations, 1981-1991," Office of the Historian, U.S. Department of State, accessed January 21, 2021, <https://history.state.gov/milestones/1981-1988/u.s.-soviet-relations>.

⁴⁴ Kasurak, *A National Force*, 210.

⁴⁵ Canada. Department of National Defence, *Canadian Defence Policy* (Ottawa: Her Majesty the Queen in Right of Canada, 1992), 8.

policy affirmed that the Army of the future would maintain a general-purpose combat capability, it also promised to cut the CAF from 84,000 to 75,000 total personnel and withdraw all elements from Europe.⁴⁶ While the future role of the Army in the post-Soviet era was still unclear, the commitment to reinforce NATO with an entire Canadian division was cancelled, and 4 Canadian Mechanized Brigade Group would be withdrawn from Europe. Along with the brigade group, the policy had also withdrawn the strategic rationale for the Army to maintain forces capable of fighting in high-intensity combat against a conventional adversary.

The 1993 Federal election returned the Liberal party to power, now in a global strategic environment that appeared to have forever changed. Defence Minister David Collenette quickly turned to the problem of aligning the orientation and budget of the CAF away from the Cold War and towards a more relevant, and affordable, purpose. Collenette prepared to issue his own defence policy by establishing a Special Joint Committee of the Senate and House of Commons (SJC) to consult with individual Canadians, interest groups, academics, and members of the military. The consultations revealed a schism between those from within the military and DND who wanted to maintain a large military capable of engaging in high end combat operations, and those from without who wanted to focus on peacekeeping, intervention in regional conflicts, and stability type operations.⁴⁷ The Canada 21 Council, a think tank headed by former Trudeau advisor Ivan Head and including Trudeau's second MND Donald MacDonald as a member, was an influential group with significant ties to the Liberal Party. It became the leading voice advocating to transform the CAF into a specialized force executing

⁴⁶ Ibid, 24.

⁴⁷ Bland, *Defence Policy*, 282.

constabulary functions at home and peace support operations abroad, while rejecting the operational and organizational demands imposed by the NORAD and NATO alliances.⁴⁸

Ultimately the SJC report would agree that Canada needed to maintain the status quo of military capabilities and alliances despite reducing expenditures, and Collette would direct that it form the basis of his defence policy, albeit with even further cuts than the committee had recommended.⁴⁹ The 1994 *Defence White Paper* made it clear that the Government no longer saw a likely role for the CAF in conventional combat, but offered language to appease those who argued that capable forces should still be maintained. The paper declared that Canada must maintain a prudent level of military force to ensure national sovereignty; serve as the basis for wartime expansion and mobilization; and, participate in international peace and stability operations. Notably, the 1987 defence policy's steadfast commitment to NATO collective security was replaced with a reluctant acknowledgement that Canada would "participate effectively...if and when required, in the defence of North America and our allies in Europe, and in response to aggression elsewhere."⁵⁰ Collette's policy declared that Canada would retain a multi-purpose combat capable force, but only at a scale that's cost was consistent with other higher policy and fiscal priorities.⁵¹

The 1994 white paper's description of the required macro-capabilities of the CAF continued to equivocate and leave significant room for interpretation and debate. The

⁴⁸ Douglas L Bland and Sean M Maloney, *Campaigns for International Security* (Montreal: McGill-Queen's University Press, 2004), 126–27. Canada 21 Council. *Canada 21: Canada and Common Security in the Twenty-First Century*. Toronto, ON: Centre for International Studies, University of Toronto, 1994, 69.

⁴⁹ Tomlin, Hillmer and Hampson, *Canada's International Policies*, 147-49.

⁵⁰ Canada, "1994 Defence White Paper," Department of National Defence (Ottawa: Canada Communications Group, 1994), para 22.

⁵¹ *Ibid*, para 24.

policy stated that “Canada needs armed forces that are able to operate with the modern forces maintained by our allies and like-minded nations against a capable opponent – that is, they must be able to fight “alongside the best, against the best.”⁵² In the absence of meaningful priorities and intent, as expressed in 1987, the 1994 policy was agnostic as to the definition of this ‘capable opponent’ against which any element of the CAF, let alone the Army, had to be prepared to fight. As part of the SJC consultations, the Canada 21 Council had argued that Canada could expand the Army’s personnel and specialize in deploying light mechanized task groups to respond to United Nations requirements. However, it cautioned that failing to strictly define the requirements and limits of a general-purpose force would result in “a miniature model of the traditional ‘general purpose’ military force – one with a little of everything, but not enough to be effective in any conceivable situation.”⁵³ Arguably in extending an olive branch to the existing defence establishment by keeping the dream of combat capable forces alive, the policy did more harm than good to the Army. Without the resources to sustain a multi-purpose force, or a specialization to limit the scope of equipment, structures, and capabilities required, the personnel cuts from 1992 and 1994 would begin to profoundly hollow out the Canadian Army as it tried to maintain “a little of everything.”⁵⁴

This premonition of becoming a miniature-scale model remains a valid criticism of the Canadian Army of today and will be revisited. If the language in the 1994 *White*

⁵² Canada, *1994 White Paper*, para 25.

⁵³ Canada 21 Council. *Canada 21: Canada and Common Security in the Twenty-First Century*, 62.

⁵⁴ Canada. Parliament. “Wounded: Canada’s Military and the Legacy of Neglect,” Standing Committee on National Security and Defence (House of Commons, September 2005), http://publications.gc.ca/collections/collection_2011/sen/yc33-0/YC33-0-381-14-eng.pdf. This Senate report details specific challenges faced by the Army in pages 25-44, and discusses the combined challenges of budget shortfalls, high tempo, shortage of personnel, and lack of training capacity following the reduction of the strength of the Army.

Paper left room for interpretation as to the requirement output of the Canadian Army, the resources allocated did not. From 1993 to 1998, the defence budget was reduced by 23 percent, with inflation reducing real purchasing power by over 30 percent.⁵⁵ While the Army's leadership would stubbornly hold onto the mindset of major combat capability, they could only do so by preserving the equipment they had retained from the Cold War, now repatriated and redistributed within Canada. The defence budget, if not the defence policy, had made it clear that the required capability of the Army was no longer high-end combat against a peer adversary, but rather peacekeeping or stability operations set against capable adversary forces, and alongside more capable allies.

The War on Terror and Global Uncertainty, 2001 to 2008

In the preamble to the 2005 defence policy statement, *A Role of Pride and Influence in the World*, the Liberal Government's Minister of National Defence Bill Graham highlighted the meaningful changes that would be included in Canada's first defence policy issued after September 11, 2001. While the 1994 *White Paper on Defence* had carefully navigated options for post-Cold War reorientation, the 2005 policy declared plainly that the defence of Canada against terrorism was now the first priority and organizing purpose of the Canadian Forces.⁵⁶

The policy's conceptualization of the future role of the Canadian Army was clearly based on the experiences of peacekeeping in the Former Yugoslavia, where

⁵⁵ Canada. Parliament. "Facing Our Responsibilities: The State of Readiness of the Canadian Forces," Standing Committee on National Defence and Veterans Affairs (House of Commons, May 2002), <https://www.ourcommons.ca/Content/Committee/371/NDVA/Reports/RP1032107/nddnrp04/nddnrp04-e.pdf>, 27.

⁵⁶ Canada. Department of National Defence, *Canada's International Policy Statement: A Role of Pride and Influence in the World (Defence)* (Ottawa: Her Majesty the Queen in Right of Canada, 2005), i.

Canadians had served from 1992 to 2004.⁵⁷ Canada's early 2002 deployment to Afghanistan was also a significant influence, with the combined experiences evident in the policy's focus on modern, combat capable forces that would become more relevant and responsive to instability through their ability to quickly deploy "the right mix of forces to the right place, at the right time."⁵⁸ Notably, the 2005 white paper was the first to discuss the role and intent for Special Operations Forces, and it was clear that the government saw significant utility for solving problems of terrorism and instability at home and abroad with these small but targeted elements. For the Army, this policy directed the land forces to continue to improve the combat capabilities of light forces, to modernize intelligence, surveillance, and reconnaissance systems, and to "continue to transform into a modern, combat-capable medium-weight force, based primarily on wheeled Light Armoured Vehicles (LAV)."⁵⁹

The Canadian Army had long maintained a mix of wheeled and tracked fighting vehicles, driven by competing defence policy requirements to maintain a highly mobile force while also maintaining heavy combat elements on NATO's Central Front.⁶⁰ Wheeled fighting vehicles were more economical to purchase and maintain, could self-deploy over long distances by road, and were easy to transport overseas by sea or air. They were an ideal platform for stability operations that offered sufficient firepower and

⁵⁷ "Canadian Armed Forces Operations in Bosnia-Herzegovina," Canadian Armed Forces - Operations and Exercises, accessed January 21, 2021, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/canadian-armed-forces-operations-bosnia-herzegovina.html>.

⁵⁸ Ibid, 11

⁵⁹ Ibid, 15

⁶⁰ Frank Maas, "The Success of the Light Armoured Vehicle," Canadian Military History 20, 20, no. 2 (April 30, 2012): 27–36, <http://scholars.wlu.ca/cmh/vol20/iss2/4>. The M113 tracked armoured personnel carrier (APC), first procured in the 1960s, was replaced by the wheeled Light Armoured Vehicle (LAV) III in 1998 as the mainstay of the Canadian Army's armored vehicle fleet.

protection when major combat was not expected. The Army also continued to operate a fleet of Leopard I tanks, purchased in 1978 for use in Europe, and the question of their replacement was finally answered by the 2005 policy. The Canadian Army would transition from a tank-based force capable of heavy combat against a peer force to a medium weight force that had limited anti-tank capabilities mounted to a common wheeled platform. In contrast to the 1994 policy, *A Role of Pride and Influence* offered specific examples of the scale of conflict to which the Army's development and procurement efforts would be oriented. Combat operations were described as those seen during the Kosovo air campaign and the initial U.S. led invasion Afghanistan, which were defined separately from complex peace support and stabilization missions as exemplified by NATO deployments to Bosnia and the enduring International Security Assistance Force mission in Afghanistan.⁶¹

These categorizations offered a useful conception of the type of conflict the Government envisioned: light conventional force would support special operations forces in the early stages of conflicts against asymmetric terrorist forces, enabled largely by overwhelming precision fires delivered from air and sea. In their wake, medium-weight forces would deploy, primarily by sea, to take over peacekeeping and stability functions, driving around the operating environment in protected and mobile vehicles to deliver civil-military affairs, humanitarian assistance, and engineering support. A small reserve of combat power would be afforded to deal with the possibility of encountering a rogue tank or bunker at some point. The 2005 policy, issued a year before Canada's commitment to Afghanistan would shift dramatically in the move from Kabul to

⁶¹ Canada, *A Role of Pride and Influence*, 28

Kandahar, warned the Army to prepare for an era of high tempo but limited intensity. It was to: develop its ability to command and lead multinational operations; deploy 2,400 personnel indefinitely across two task forces and support a six-month surge of an additional 1,000 personnel; and, to invest in its ‘soft’ skills of supporting civilian populations, training host nation military forces, and engaging in defence diplomacy.⁶² What was no longer required was the ability to engage in peer combat; but rather to quickly and efficiently overwhelm an asymmetric opponent in the short and sharp opening phase of a protracted stability campaign.

After only three years, *A Role of Pride and Influence* was replaced when Conservative Prime Minister Stephen Harper and Defence Minister Peter MacKay issued the 2008 defence policy, the *Canada First Defence Strategy* (CFDS). While the Liberal policy had anticipated the expansion of stability operations in Afghanistan, what had developed instead was a protracted counterinsurgency campaign where 146 CAF members were killed in combat operations between 2006 and 2010.⁶³ When Harper took office in February 2006, the CAF had already been committed to the campaign in Kandahar Province by the previous government. An independent commission headed by former Deputy Prime Minister John Manley was launched in 2007 to offer recommendations on the future of Canada’s mission. The report, tabled in January 2008, included several observations about deficiencies in equipment and capabilities that were both hindering success and causing unnecessary loss of life, such as the lack of medium-

⁶² Ibid, 31,

⁶³ “Canadian Forces’ Casualty Statistics (Afghanistan) - Archived,” National Defence and the Canadian Armed Forces, June 20, 2013, <http://webcache.googleusercontent.com/search?q=cache:2ASpzDSol10J:www.forces.gc.ca/en/news/article.page%3Fdoc%3Dcanadian-forces-casualty-statistics-afghanistan/hie8w9c9+&cd=3&hl=en&ct=clnk&gl=ca>.

lift helicopters that necessitated additional vehicle movement along improvised explosive device (IED) laden roads.⁶⁴ The government took quick action to resolve these deficiencies, and many of the observations about Kandahar appear to have informed the 2008 *Defence Strategy*.

CFDS declared that the CAF would achieve an “established level of ambition” articulated in six core missions: domestic and continental operations including in the Arctic and with NORAD; support to a major international event in Canada such as the Olympic games; response to a domestic terrorist attack; domestic support to civilian authorities during a natural disaster; lead and/or conduct a major international operation for an extended period; and, to deploy forces to crises across the world for short periods of time.⁶⁵ In a familiar refrain, the policy demanded that Canada maintain “fully integrated, flexible, multi-role and combat capable” military forces. Breaking from previous policies, the 2008 defence policy did not articulate specific goals for land, air, and naval forces, but rather spoke to the broader strategic and operational capabilities required for each role that the Government envisioned. The policy defined the threats the CAF would face as “conventional and asymmetric” including “terrorism, insurgencies and cyber attacks.”⁶⁶ The specific adversaries that the policy imagined Canadian soldiers confronting were, however, more difficult to parse. In defining the strategic environment, the policy highlighted domestic and international terrorism, ethnic and border conflicts, failed and fragile states, nationalism, global crime, resource scarcity and competition.

⁶⁴ Canada, *Report of the Independent Panel on Canada’s Future Role in Afghanistan*. Ottawa, ON, 2008, 35.

⁶⁵ Canada. Department of National Defence, *Canada First Defence Strategy* (Ottawa: Her Majesty the Queen in Right of Canada, 2008), 4.

⁶⁶ *Ibid*, 7.

The reading of the global situation then went on to warn of the threats of the proliferation of advanced weapons, new nuclear states, and Islamist militancy in the same sentence.

The policy also warned of the buildup of conventional forces in Asia as being a potential concern to international security in the years to come.

Having heralded the dangers of the full spectrum of warfare against every possible threat stream, the policy offered some specific clues towards the actual bounding of the threats for which the Canadian Army should be prepared to engage. *CFDS* highlighted lessons learned from the ongoing experience in Afghanistan, including providing personnel with the right mix of equipment so that they could participate in the full spectrum of operations from “countering asymmetric threats like improvised explosive devices, to contributing to reconstruction efforts in a harsh and unforgiving environment.”⁶⁷ As will be discussed in Chapter Three, within the spectrum of conflict recognized in Canadian military doctrine, these activities are more closely aligned with the mid-range of conflict, rather than representative of the full range of warfare.

CFDS commitments to Canadian Army equipment offered additional insight into the tasks envisioned for the Army. New logistics vehicles as well as a family of land combat platforms were promised, including the Tactical Armoured Patrol Vehicle, an armoured car designed for stability operations,⁶⁸ although neither vehicle would be delivered until well after the end of the Afghan deployment. The outlier was the government’s commitment to purchasing 100 Leopard 2 tanks. The Army’s Leopard 1 tanks, now nearly thirty years old, were pressed into service in Afghanistan when the

⁶⁷ Ibid, 9.

⁶⁸ Chris Thatcher, “Defining the TAPV,” *Canadian Army Today*, December 5, 2017, <https://canadianarmytoday.com/defining-the-tapv/>.

LAV-III proved insufficiently mobile and robust for dislodging Taliban insurgents in the most rugged terrain of Southern Kandahar, and had been supplanted in theatre by a small number of leased Leopard 2 variants from Germany.⁶⁹ The Army had previously planned to continue its progression to a medium weight wheeled force, but tank advocates within the CAF were able to highlight the unique requirements of the Afghan theatre to win a procurement coup and reinvigorate a core capability of the Army – thus keeping the potential to fight in major conventional combat alive in the Canadian Army, despite the limited consideration of inter-state conflict in *CFDS*.⁷⁰

Arguably the Harper government intended to build a Canadian Army that could confidently execute NATO or UN-led limited interventions against less than peer adversaries, including stability, counter-insurgency operations, or peace enforcement missions. This Army would only deploy at the battle group level but would be capable of fielding its own brigade headquarters element to provide enabling capabilities and command Allied forces.⁷¹ The purchase of modernized land vehicles and medium-lift helicopters were as much intended to increase military capabilities as to minimize the potential for casualties which would undermine political support for the government's military ambitions. A cynical interpretation is that senior Army leaders convinced the government that tanks would serve as additional firepower and protection to guard

⁶⁹ "Ottawa May Lease 20 New Tanks for Afghan Mission," CTV News, April 3, 2007, <https://www.ctvnews.ca/ottawa-may-lease-20-new-tanks-for-afghan-mission-1.235929>.

⁷⁰ Notwithstanding this procurement coup, armour remains challenging to maintain and support, and the 100 tanks purchased represented the smallest procurement of a main battle tank ever conducted by Canada. This small fleet size would practically guarantee ongoing employment challenges once the fleet was divided into operational and training echelons, and accounting for the significant number of broken vehicles that would exist at any time.

⁷¹ While the battle group would focus on tactical actions, the brigade headquarters would represent the CAF at the operational level of a campaign, as well as deploy additional signals and sustainment elements, as well as coordinate both Canadian and coalition intelligence, surveillance, and reconnaissance assets.

against the loss of Canadian life, while seizing this leverage to undo the course set by the 2005 policy statement's commitment to abandon the main battle tank – and along with it the ability to participate in high intensity conflict.⁷²

Rapid procurement efforts to make up for capability deficiencies within Afghanistan had left the Army with an incongruent mix of equipment: a wheeled LAV based force with brand new but mobility-challenged towed howitzers,⁷³ supported by modern tanks but lacking wholesale capabilities that would be required to participate in high end conflict, such as anti-tank missiles, or any air-defence systems. The 2008 policy made no suggestion that these would ever be procured – it envisioned combat capability as a force capable of dominating in asymmetric conflict or perhaps holding its own against an aggressive third world army. Despite this, the leadership of the CAF had

⁷² “More Soldiers, Tanks Necessary to Fight Taliban: Ottawa,” CBC News, September 15, 2006, <https://www.cbc.ca/news/canada/more-soldiers-tanks-necessary-to-fight-taliban-ottawa-1.570030>; “Canadian Troops to Get New Tanks in Afghanistan,” CTV News, April 12, 2007, <https://www.ctvnews.ca/cdn-troops-to-get-new-tanks-in-afghanistan-1.237093>. In September 2006 DND announced that fifteen tanks and an additional infantry company would be deployed to Afghanistan, citing changing Taliban tactics and claiming that this deployment would “dramatically multiply opportunities to secure and stabilize the region.” In April 2007, Minister of National Defence Gordon O’Connor announced that twenty leased Leopard 2A6 tanks would arrive in Afghanistan to replace the aging C1 models and that the government would purchase a further 100 tanks. General Hillier asserted that tanks were much more resistant to roadside bombs than other vehicles. Curiously, O’Connor bragged that the Leopard 2A6 would “be able to take on any tank in the world,” despite the lack of Taliban tank capability. Hillier’s claim about the increased protection offered by tanks is inarguably true but ignores that most Canadian soldiers would continue to travel in less armoured light armoured vehicles and trucks. Furthermore, as the Government insisted that the combat commitment to Afghanistan would end as planned in Feb 2009 and had already announced that the leased tanks would be shipped directly to the country, it is clear that the additional tanks were purchased to provide an enduring tank capability for the Army.

⁷³ Paul Pryce, “On Target: The Procurement of Canadian Artillery,” NATO Association of Canada, March 10, 2015, <https://natoassociation.ca/on-target-the-procurement-of-canadian-artillery/>.

resolved to use *CFDS* (and the good will generated from the Afghan mission) as an opportunity to maintain enough ‘dual-use’ capabilities to reverse the decline in mandated combat capability that had begun in 1994.

Strong, Secure, Engaged and the Return to Ambiguity, 2017 and Beyond

After nearly ten years of Conservative rule, the Liberal Party was elected to a majority government in October 2015. A few short weeks later, Prime Minister Justin Trudeau’s first Speech from the Throne announced the launch of a “open and transparent process to review existing defence capabilities.”⁷⁴ Following in the footsteps of Minister Collenette in 1993, the Government committed to broad consultation within the defence community and broader public. The launch of a major effort to examine defence policy was hardly unexpected; Trudeau campaigned on a pledge to rebrand Canada’s role in the world as one of liberal internationalism, and his defence policy would be a major tool to articulate his plan to turn intent into action.⁷⁵ More concretely, as both the Royal Canadian Air Force needed to replace their aging CF-18 fighters, and the Royal Canadian Navy needed to replace the bulk of their aging fleet, a plan had to be formulated for the massive financial expenditures on the horizon. There were also troubling signs that the age of stability operations and counter-terrorism challenges that the two previous defence policies had anticipated was not developing as assumed. While Trudeau inherited an expeditionary deployment supporting the fight against the Islamic State in Syria and Iraq, he also inherited a training mission in Ukraine that had been hastily deployed in the

⁷⁴ Government of Canada, “Speech from the Throne,” Hansard, 42nd Parliament, 1st Session, Friday, 4 December 2015. <http://www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&Parl=42&Ses=1&DocId=8061386>.

⁷⁵ Richard Nimijean, “Introduction: Is Canada Back? Brand Canada in a Turbulent World,” *Canadian foreign policy journal* 24, no. 2 (May 4, 2018): 127–38, <https://doi.org/10.1080/11926422.2018.1481873>.

months following Russia's annexation of Crimea along with pressure within NATO to commit troops to reinvigorate the alliance's resolve (if not the capability) to contain Russia within Europe.⁷⁶ A new defence policy also had to contend with the increasing tensions caused by the rapid expansion of the Chinese military and its ambitions for control of the Asia-Pacific region.⁷⁷

In June 2017, the Liberal defence policy, *Strong, Secure, Engaged: Canada's Defence Policy* was released under the signatures of Minister of Defence Harjit Sajjan and Minister of Foreign Affairs Chrystia Freeland. Notable as Canada's most comprehensive defence policy, *SSE* described a world "marked by the shifting balance of power, the changing nature of conflict, and the rapid evolution of technology."⁷⁸ While recent defence white papers had foreseen the increasing importance of terrorism and asymmetric conflicts, *SSE* declared the re-emergence of major power competition as a development that needed to be addressed by Canadian defence policy. *SSE* described the character of the conflict NATO allies were preparing to fight as "near-peer," a conceptualization of threat that will be discussed in detail in Chapter Three, and defined the military required by Canada as "agile, well-educated, flexible, diverse, (and) combat-ready."⁷⁹ In discussing the role of the Army in the broad spectrum of potential conflict, *SSE* notably diverged from previous policies; rather than preparing land forces specifically for emerging challenges like peace support operations or counter-terrorism,

⁷⁶ Christian Leuprecht, Joel Sokolsky, and Jayson Derow, "Paying It Forward: Canada's Renewed Commitment to NATO's Enhanced Forward Presence," *International Journal* (Toronto) 74, no. 1 (March 2019): 162–71, <https://doi.org/10.1177/0020702019834887>.

⁷⁷ Lindsay Maizland, "China's Modernizing Military," Council on Foreign Relations, February 5, 2020, <https://www.cfr.org/background/chinas-modernizing-military>.

⁷⁸ Canada. Department of National Defence, *Strong, Secure, Engaged: Canada's Defence Policy* (Ottawa: Her Majesty the Queen in Right of Canada, 2017), 14.

⁷⁹ *Ibid.*

the Canadian Army would train and maintain ‘high-end war fighting skills’ which would allow a “highly trained, versatile and well-equipped combat force (to) rapidly adapt to humanitarian assistance, disaster relief or peace operations.”⁸⁰

Inarguably a victory for the Army, the 2017 policy committed to the elevation of the brigade group as a deployable element over the previous commitments to battle groups only,⁸¹ and promised the procurement of critical combat enablers such as modernized command and control systems, intelligence and surveillance systems, engineering mobility assets, as well as the replacement of anti-tank and anti-aircraft weapons which had been removed from the Army in previous decades. While the Army was the benefactor of many commitments, the policy suffered from both fiscal realities and a lagging appreciation of global threats – partially resulting from *SSE*’s commitment to establishing a fully costed defence program on a 20-year horizon based on a brief window of global economic conditions and threat streams. The funding committed to the ground-based air defence program for example is wholly insufficient to meet the full scope of aerial threats that developed between the conceptualization of the project and today.⁸² While Army leaders seized on the promise to re-build Army brigades that were prepared and equipped to fight a “near-peer” enemy in major combat, a careful reading of *SSE* suggests that this was a hopeful exaggeration of the policy.

⁸⁰ Canada, *Strong, Secure, Engaged*, 36.

⁸¹ In Western military organization, a brigade group is an affiliation of combat arms units organized under a single headquarters and commander for both tactical command and administrative control, consisting of between 3,000 to 6,000 personnel. In the Canadian Army, a brigade consists of three infantry battalions, an armoured, artillery, and combat engineer regiment, a logistics battalion, an HQ and signals squadron, and other required supporting specialist organizations. Brigades were the tactical unit of action throughout WW1 and WW2, however throughout the 1990s the CAF begin to deploy mission specific battle groups based around a single infantry battalion or armoured regiment with a sub-unit each of required supporting arms and sustainment elements, ranging from 600 to 1,400 personnel.

⁸² Marc Kieley, “No Umbrella for the Rain: Canadian Implications Following the Global Revolution in Reconnaissance-Strike Technologies,” *International Journal* (Toronto). 2021, In Press.

Defining the operational tempo for which the CAF must be prepared, *SSE* demanded that the military be able to “contribute to international peace and stability” through: the sustained deployment of a task force of up to 1500 personnel as the lead nation; the deployment an additional 1500 person task force as a supporting nation; two smaller sustained deployments of 100-500 personnel; and, additional limited deployments of six to nine months for one group of 500-1500 personnel and two groups of 100-500 personnel.⁸³ Within the Army, a brigade is the lowest organizational echelon at which key combat enablers like air defence capabilities are allocated. At minimum, the Army would only need to be prepared to equip a single deployed brigade group with these key assets, not the entirety of the three established brigade groups that form the core of the Army’s Regular Force. Furthermore, the defence policy never promised to field a Canadian Army capable of fighting a “near-peer” enemy itself, but rather committed to building “combat ready” forces into the context of the NATO or other international alliances.

In the absence of a doctrinally templated threat like the Soviet Union within NATO’s front lines, or the generally understood bounds of asymmetric conflict after a decade in Afghanistan, the drafters of the 2017 policy were asked to prioritize the major elements of land equipment they believed they would need to operate over the next 20 years, informed by a brief window of world history that likely focused on Russia’s invasion of Crimea and the ongoing conflict in Ukraine. Even with that perspective, given the significant capital expenditures required by the replacement of the Halifax Class frigates and the CF-18s over the same horizon, the Army would have been

⁸³ Canada, *Strong, Secure, Engaged*, 17.

challenged to make a compelling case to make all the required investments. As will be discussed in Chapter Three, while *SSE* made meaningful promises to invest in the Army, one is forced to consider whether Army leaders were overly optimistic that the promised equipment (both in the capabilities to be acquired and scale to which they could be procured) would allow the Army to field brigades ready for “near-peer” conflict. More likely, its leadership leveraged the modern threat environment to obtain commitments to acquire the most capability they could against more pressing Navy and Air Force demands and assumed they would have to leverage coalition allies for missing capabilities while maintaining pressure to leverage surplus funds or urgent operational requirements to make up the difference.

In assessing the definition of combat capability as demanded by the 2017 defence policy, a balance must be established between the stated aims and the assigned resources. More than ten years of combat in Afghanistan left the Canadian Army well trained, equipped, and experienced for a certain type of campaign, but ill-suited to take on a modern enemy. The most recent Canadian defence policy made promises to invest in vehicles, communications, and some defensive suites, but stopped short of dramatically modernizing firepower, or providing the resources required to defend the force against the full suite of developing modern threats. Air defence procurement for example was allocated a ceiling of \$490 million to provide protection against enemy airborne weapons; however the equivalent project in the United States Army is for a tactical suite of seven layered systems supporting two extant strategic level capabilities, one of which, the Patriot Missile system, costs over \$1 billion U.S. per battery.⁸⁴

⁸⁴ Amanda Macias, “Russia Is Luring International Arms Buyers with a Missile System That Costs Much Less than Models Made by American Companies,” CNBC, November 19, 2018,

Conclusion

A review of Canadian defence policies from 1947 to 2017 reveals a cyclical problem for the Canadian Army. While the requirement to protect the maritime approaches and airspace of Canada creates enduring purpose and requirements for the Navy and Air Force, the Army struggles to define its own purpose and role when not defined against a specific mission. The post-war Canadian Army of 1947 floundered for definition until it was committed to NATO's central front in 1951, giving it a clear task against a defined threat, with explicit requirements for organization, structure, and capability. Since the NATO commitment was withdrawn in 1992, the Army has laboured to interpret generic demands to maintain a combat capable force against an array of threats including humanitarian operations, asymmetric terrorism, and the unexpected resurgence of great power competition. Without an explicitly defined upper limit to the combat capability required, the Army is forced to maintain an ever-increasing array of capabilities and equipment despite enduring shortages of fiscal and human resources. As the list of advanced adversary capabilities continues to grow, it may become impossible for the Army to meet the stated policy objectives of deploying brigade sized land forces that are truly combat capable in the context of conventional inter-state conflict.

One approach would be to caveat the Canadian Army and acknowledge that it is only capable of meeting this requirement if augmented on a mission-by-mission basis with the outstanding capabilities from either allied forces or urgent procurement. The second approach is to develop a more nuanced understanding of the capacity of the

Canadian Army that would allow it to be developed into a more precise implement of national power. Specifically, the Army, and the government, can acknowledge that there are different types of armies that are able to conduct different types of operations, and to more accurately define the Army that Canada wants as it moves beyond 2025 and into an uncertain future. The technology of war has become too sophisticated, and too powerful, to maintain an Army that is truly capable of ‘full-spectrum’ operations without practically unlimited funds. Given this reality, the following chapter will consider the spectrum of possibilities for a more deliberate Canadian Army by proposing a design model and a taxonomy of the types of land combat forces that exist across the world today.

CHAPTER 3 – DESIGNING AN ARMY

As examined in Chapter Two, the Canadian Army has changed dramatically in form and function throughout its existence as the demands of national policy shifted and evolved. Defining a consistent role and purpose for the Army has been an enduring challenge for both the drafters of defence policy and military leadership. When that purpose has been defined against a clear task and threat, such as fighting a Soviet motorized rifle regiment on NATO's central front, the requirements for equipment, structure, and organization have been readily apparent. The requirements for the Army to be prepared to respond to global uncertainty in an era of resurgent great power competition are far less evident. Since 1947, the purpose of the Army has been defined by the interplay of the global security environment, domestic politics, and available fiscal resources, and not by a clear definition of what kind of army Canada seeks to maintain. The five sections of this chapter will examine the design considerations for a modern army, focusing on purpose, missions, and threats. While these factors are equally applicable to the entirety of the armed forces of any given nation, this exercise will be limited to land forces only. These factors will then be synthesized to propose a taxonomy of land combat capability, describing the design criteria and macro requirements of various types of armies.

Foundations of Army Design

The foundational design criteria for any armed force will always be national policy and national objectives. In a pure design exercise, an army should reflect this national strategy: a nation defines what it wants to achieve (ends), determines how it believes it can achieve them (ways), and builds a physical armed force that can meet

those requirements (means).⁸⁵ Aside from pure strategic calculations, national criteria may also be influenced by intangible considerations such as culture and history. As Figure 3.1 shows, the U.S. Naval War College has developed a strategy and force planning framework which demonstrates the translation of national interests into objectives and onto specific security strategies. It then considers the impacts of factors such as available resources, technology, and actors within the global system to identify specific elements of military force that must be developed.

⁸⁵ Richmond M. Lloyd and P. H. Liotta, "From Here to There—The Strategy and Force Framework," *Naval War College Review* 58, no. 2 (2005): 125.

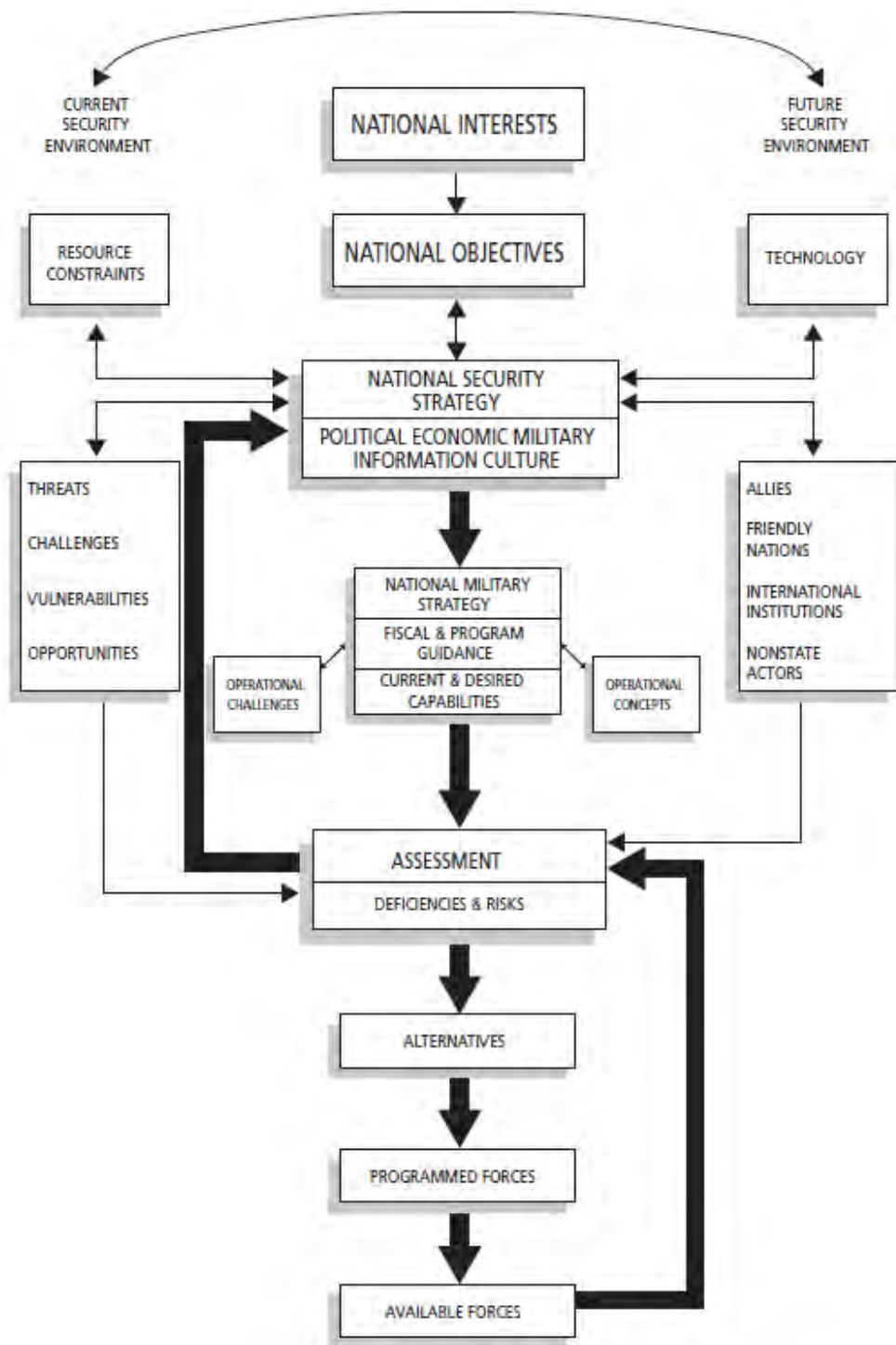


Figure 3.1 – Strategy and Force Planning Framework

Source: Lloyd, “From Here to There – The Strategy and Force Framework”, 124.

While the United States certainly follows a strategic rationale and decision-making process in designing their military forces, the history of Canadian defence policy makes it clear that Canada has largely reinvented the wheel with each change of government and new defence policy.⁸⁶ The Canadian experience of force design demonstrates that many nations do not follow a rigorous strategic process, but rather take incremental steps to adapt an extant force towards new policy goals, threats, or resource constraints. That is not to say that less strategically minded nations, like Canada, do not have national strategic ends, but that their military means are more quickly constrained by the practical realities of resources and affordability. Many nations are also constrained by less rational factors, such as the inertia of legacy military forces, and national nostalgia, pride, and myths that may allow obsolete structures to survive out of popular appeal rather than meaningful purpose. The Canadian Army carries a weight of national pride for its past military accomplishments; arguably perpetuating this history continues to divert resources from more practical and relevant capabilities or force structures.⁸⁷ A simplified conceptual model of army design is required to explain those that are not based upon a clear logic model of national interests, but rather a more generalized idea of ‘what type’ of army that nation either needs or wants to field.

⁸⁶ W. D. Macnamara and Ann M. Fitz-Gerald, “A National Security Framework for Canada,” Institute for Research on Public Policy, October 9, 2002, <https://irpp.org/research-studies/policy-matters-vol3-no10/>, 20.

⁸⁷ 2016 Spring Reports of the Auditor General of Canada, “Report 5—Canadian Army Reserve—National Defence” retrieved from https://www.oag-bvg.gc.ca/internet/English/parl_oag_201602_05_e_41249.html. The AG report identified that 58 out of 123 Army Reserve units were at less than 70% of their ideal size. The 123 units of the Army Reserve are located in communities based on pre-World War Two demographics that are no longer sufficient to maintain the authorized strength of many units.

A Conceptual Model of Army Design

Although individual national considerations of population size, economic output, culture, and geographic size and location will always have significant impacts, the design considerations of purpose, missions, and threats make important distinctions between the natures of armies fielded across the world. The following section will propose a simplified model of army design based on these three pillars. Purpose defines the primary existential requirement of an army; missions describe the scope of activities it must be able to conduct; and finally, the conceptualization of threat defines what forces the army is capable of operating against. These pillars rest upon the foundations of national objectives, national military culture and history, legacy force structures designed for previous defence needs, and available resources. Collectively these pillars provide the inputs with which defence planners shape the physical manifestation of the army through a balance of scale and scope.

Scale refers to the quantitative size of the force. The size of an army, in numbers of troops and pieces of major equipment, has long been the metric with which military forces are ranked against each other. This metric however fails to account for the significant differences in technology, capability, quality, training, and doctrine that may allow a smaller but qualitatively superior force to defeat a larger but inferior one. Scope refers to the breadth of capabilities, technologies, weapon systems, etc., that equip an army. The ultimate design of any land force will reflect a balance of scale and scope derived from a consideration of the three pillars of design, and the foundation of objectives and resources. An illustrative example of the relationship between size and scope is the balance of conventional power within Europe during the Cold War. While

Moscow fielded 58 divisions in Central Europe in 1975, NATO had only 23 opposing them.⁸⁸ While the Soviet Union had invested in scale, the West instead invested in scope, balancing out their quantitative weakness with massive investments in long range surveillance and precision weapons, developing the ‘reconnaissance-strike complex’ that would ultimately evolve into the Air-Land battle concept which has defined Western operational approaches since the Gulf War.⁸⁹ The conceptual model of army design proposed in this analysis is represented graphically at Figure 3.2 below.⁹⁰

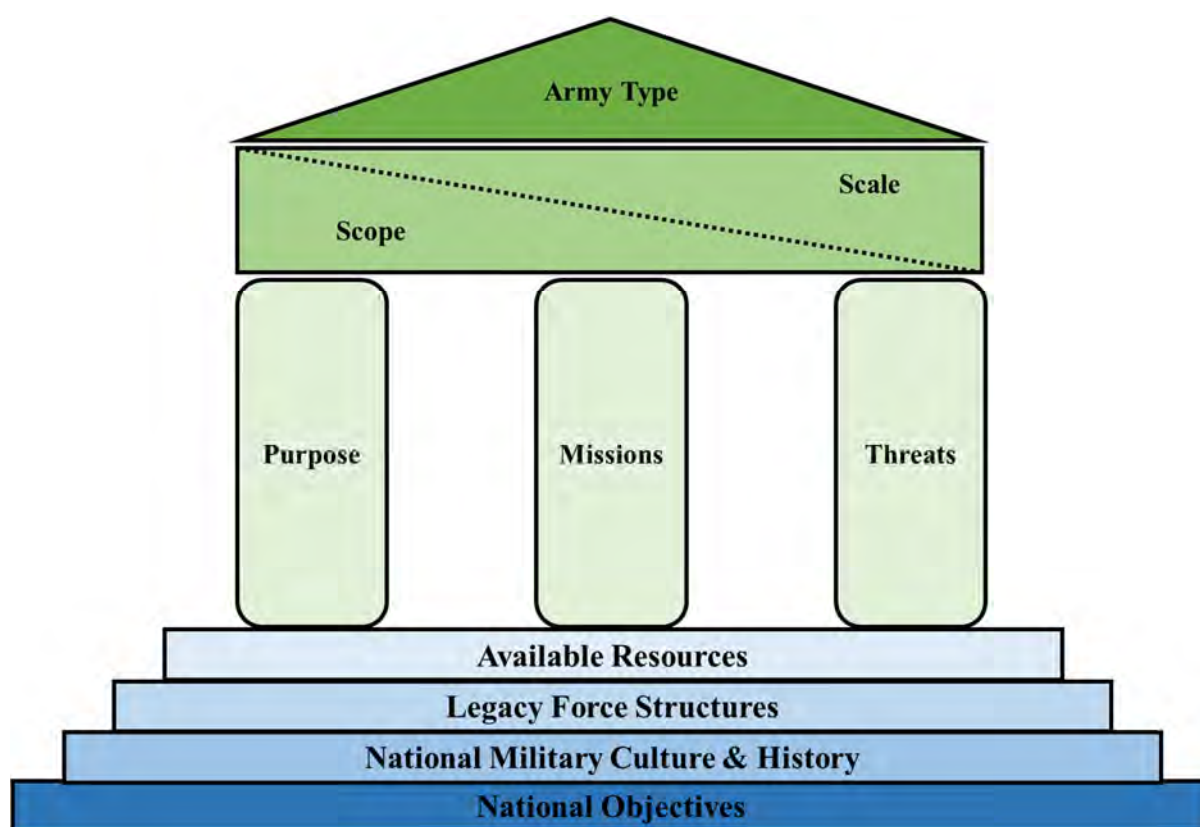


Figure 3.2 – Conceptual Model of Army Design

⁸⁸ “NATO and Warsaw Pact: Force Comparisons,” North Atlantic Treaty Organization, accessed November 9, 2020, https://www.nato.int/cps/fr/natohq/declassified_138256.htm.

⁸⁹ Jacqueline Newmyer, “The Revolution in Military Affairs with Chinese Characteristics,” *The Journal of Strategic Studies* 33, no. 4 (2010): 483–504, <https://doi.org/10.1080/01402390.2010.489706>, 484.

⁹⁰ Prepared by the author.

Unless resources are truly limitless, an army's balance of scope and scale need to be constrained by a reasonable understanding of the type of force it needs to generate and maintain. As explained in Chapter Two, there has been an enduring tension throughout modern Canadian Army history between the roles and requirements as defined by policy and the desires of Army leaders to maintain capabilities that would allow expansion beyond those roles. The Army's efforts to maintain a main battle tank and its desire to stay fully committed to NATO's Central Front through the 1970s, in contrast to Prime Minister Pierre Trudeau's desires to reduce both its capability and commitment, reflect an archetypal example of this conflict. Further, while White Papers have provided, to varying degrees of specificity, the outputs that the Army must be able to achieve, they have not strictly limited the maximum of capabilities it can develop to achieve those outputs. In short, policy has failed to define what type of army the Canadian Army is, which leaves it free to pursue the capabilities and structures it wants, rather than only those that are strictly and inarguably linked to the requirements of defence policy.

The Purpose of an Army

In 1998 the Army published *Canada's Army: We Stand on Guard for Thee*, to describe its "origins, history, and contribution to building and defending the nation."⁹¹

Canada's Army provides this definition of the purpose of the Army:

"The Army's primary purpose is to defend the nation and, when called upon, to fight and win in war. The army fulfils this function when it maintains a military deterrence capability which is credible and visible during peacetime, and by being able to undertake combat operations if deterrence fails."⁹²

⁹¹ Canada. Department of National Defence. B-GL-300-000/FP-000, *Canada's Army: We Stand on Guard for Thee*. Ottawa, ON: Land Force Command, 1998, i.

⁹² Ibid, 2.

While the publication goes on to elaborate on the purpose of the Army to both defend Canada and promote Canadian interests abroad, it does little to link the required size and scope of the Army with the tasks at hand. The Canadian Army is required to defend the world's second largest country, while responding to threats to national security, protecting our sovereignty, fulfilling collective security obligations, and maintain Canada's freedom of action in the international affairs.⁹³ While reasonable and logical goals for an army, they were nonetheless ambitious for one made up of only three combat brigades. This dichotomy between stated ambitions and actual means is revealing as to the real purpose of the Army.

This analysis proposes that the fundamental purpose of any armed force is to defend the physical integrity and political sovereignty of the state that maintains it. Despite this common purpose, however, geography and politics have demanded very different designs for land combat forces across the world and throughout history. Isolated by two oceans and sharing a land border with a (mostly) friendly neighbour, Canada has never been required to physically defend the entirety of its territory. During the War of 1812, arguably the most serious threat to sovereignty that Canada (although then still a colony) ever experienced, total defensive forces never exceeded 70,000, including British soldiers, Canadian militia, and indigenous allies.⁹⁴ By the late 1940s, with the threat of nuclear annihilation hanging over the entire world, Canada's requirements for continental defence could be met by a single brigade prepared to airdrop

⁹³ Ibid, 3.

⁹⁴ "War of 1812 Facts," American Battlefield Trust, accessed March 16, 2021, <https://www.battlefields.org/learn/articles/war-of-1812-faqs>.

into the North to deny forward airfields to Soviet bombers, the Mobile Defence Force.⁹⁵ In contrast, in 1793 France was forced to conscript 350,000 men through the first *levée en masse*, leading to a peak strength of 1,500,000 soldiers to defend their fledgling revolution from a combined invasion from Rome, Portugal, Naples, and Tuscany.⁹⁶ As world history has made clear, the geographical proximity of many nations combined with their cycles of political tension made the maintenance of armies capable of practically defending their physical territory from invasion a necessity until the end of the Cold War.

While all military forces exist to defend their nation, there is a clear distinction between nations that must defend their integrity and those that must only defend their sovereignty. Although the Mobile Striking Force was never called on to expel a hostile invader from our northern shores, the need for sufficient land combat power to be capable of using armed force to ensure Canada's sovereignty over its territory has been a persistent element of defence policy since 1947. In comparison to Canada's 23,000 full-time soldiers, China's People's Liberation Army maintains 1,020,000 ground force personnel to defend the world's third largest country, reflecting a national security appreciation that demands a credible defence of the very territory of the nation.⁹⁷

While the primary role of any military is to defend its nation, that does not mean that it will only be used to defend from barbarians at the gates. Military force has long been used to defeat growing threats to the nation abroad, to pursue and protect the

⁹⁵ Sean M. Maloney, "The Mobile Striking Force and Continental Defence, 1948-1955," *Canadian Military History* 2, 2, no. 2 (1993): 75–88, <http://scholars.wlu.ca/cmh/vol2/iss2/10>.

⁹⁶ Michael Broers, "The Concept of 'Total War' in the Revolutionary--Napoleonic Period," *War In History* 15, 15, no. 3 (2008): 247–68, <https://doi.org/http://dx.doi.org.cfc.idm.oclc.org/10.1177/0968344508091323>.

⁹⁷United States. "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019," United States (Washington, D.C.: United States Department of Defense, May 2, 2019), https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf, 115.

national interest around the globe, or even to conquer the world to impose hegemonic order. Different nations, however, take different approaches to defeating threats to their peace and prosperity, consequently demanding armed forces designed for different purposes.

The Canadian Army reflects Canada's faith in the liberal international order that emerged in the aftermath of the Second World War, and the ability to use all aspects of national power, in coordination with multilateral alliances and international institutions, to promote security through strengthening international norms.⁹⁸ Canada's current defence policy promises that the CAF will remain engaged in the world by contributing to a stable and peaceful world.⁹⁹ The Canadian Army does not have the full range of capabilities nor the required size to engage in unilateral expeditions abroad, but it is trained and practiced to contribute to various international efforts, most often through the NATO and United Nations frameworks.¹⁰⁰ While this approach suits Canada well, matching our national temperament, ambitions, and economic power, our faith in international institutions is not shared by potential adversaries or even all our allies.

The foreign policy of many nations continues to be guided by realist approaches to international relations, working with international institutions, but never abandoning the ability to take unilateral action to pursue their own interests. As Kenneth Waltz described in his influential *Theory of International Politics*, "Among states, the state of nature is a state of war. This is meant not in the sense that war constantly occurs but in

⁹⁸ Roland Paris, "Are Canadians Still Internationalists? Foreign Policy and Public Opinion in the Harper Era," *International Journal* (Toronto) 69, no. 3 (2014): <https://doi.org/10.1177/0020702014540282>, 275.

⁹⁹ Canada. *Strong, Secure, Engaged*, 14.

¹⁰⁰ Canada. Department of National Defence. B-GJ-005-500/FP-001, *Canadian Forces Joint Publication 01 (CFJP 01): Canadian Military Doctrine*. Ottawa, ON: Canadian Forces Experimentation Centre, 2011, 2-2.

the sense that, with each state deciding for itself whether or not to use force, war may at any time break out.”¹⁰¹ In order to use force a state must maintain an army of the appropriate scale and scope to take action in accordance with its goals. The US 2018 *National Defence Strategy* (NDS), roughly equivalent to Canada’s defence policy statements, describes the American ambition to not only engage with the global community, but to actively shape it. Beyond deterring aggression against American and allied interests, the NDS confirms the defence objective to maintain favourable regional balances of power around the world.¹⁰² In their 2021 Defence Primer, the Congressional Review Service offered a succinct appreciation for the rationale behind the design of the U.S. military:

“Countries have differing needs for military forces. The United States, as a country located in the Western Hemisphere with a goal of preventing the emergence of regional hegemony in Eurasia, has defined a need for military forces that is quite different from the needs of countries that are located in Eurasia.”¹⁰³

If the Canadian Army is designed to participate in a global order, then the American Army is designed to shape it, and the relative sizes of these organizations, let alone the capabilities they possess, are a stark illustration of the different scale at which they operate. The American Army maintains a combined regular and reserve strength of

¹⁰¹ Kenneth N. Waltz, *Theory of International Politics* (Reading, Mass.: Addison-Wesley Pub. Co., 1979), 103.

¹⁰² United States, “Summary of the 2018 National Defense Strategy of the United States of America” (Washington, D.C.: United States Department of Defense, 2018), <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>, 4.

¹⁰³ Ronald O’Rourke, “Defense Primer: Geography, Strategy, and U.S. Force Design” (Washington, D.C.: Congressional Research Service, February 11, 2021), <https://crsreports.congress.gov/product/pdf/IF/IF10485/15>.

1,005,500¹⁰⁴, while Canada maintains 42,000 total soldiers.¹⁰⁵ While the Canadian Army's contributions to cooperative international security arrangements have varied with defence policy, it has consistently been an army that is only capable of international action alongside allies.

While Canada's approach to security is typical to most members of NATO, and the American approach is paralleled by competitors such as Russia and China, other Western nations have maintained the ability to undertake limited independent expeditionary military action. The UK fought a successful campaign to reclaim the Falkland Islands in 1992 and intervened in Sierra Leone's civil war in 2000,¹⁰⁶ while in 2013 France launched Operation Serval to defeat Islamist insurgents at the request of the government of Mali.¹⁰⁷ While France received limited allied logistical support, including the services of a Canadian C-17 heavy lift aircraft,¹⁰⁸ it was a successful demonstration of a middle power using its armed forces to pursue unilateral international security objectives within extant global structures. The size of the French Army is approximately 118,600 personnel, reflecting a force that has both a practical concern for the physical defence of

¹⁰⁴ Mark F. Cancian, "U.S. Military Forces in FY 2020: Army," Center for Strategic & International Studies, October 15, 2019, <https://www.csis.org/analysis/us-military-forces-fy-2020-army>.

¹⁰⁵ "The Canadian Army of Today," The Canadian Army, January 27, 2021, <https://army.gc.ca/en/home/organization.page>.

¹⁰⁶ David H. Ucko, "When Intervention Works: The Instructive Case of Sierra Leone," War on the Rocks, August 31, 2016, <https://warontherocks.com/2016/08/when-intervention-works-the-instructive-case-of-sierra-leone/>.

¹⁰⁷ Sergei Boeke and Bart Schuurman, "Operation 'Serval': A Strategic Analysis of the French Intervention in Mali, 2013–2014," *International Affairs* 38, no. 6 (2015): 801–25, <https://doi.org/10.1080/01402390.2015.1045494>.

¹⁰⁸ Canada, "Operation FREQUENCE," Department of National Defence, September 4, 2020, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-frequence.html>.

its territory and a consistent demand for expeditionary deployments in support of both independent and coalition military actions.¹⁰⁹

The first pillar for the design of an army is thus the core purpose it must fulfil for the nation: to defend the physical territory of the state or merely its sovereignty, the international rule of law or an entire global order. For each of these potential tasks, a nation must also decide how it intends to engage in international security; through alliances and cooperation only, in limited but unilateral campaigns, or to seek the hegemonic ability to dominate the security environment as a regional or global power.

Missions

While a state's requirement for defence and their intent for international engagement are key determinants of what type of army it needs, there are significant nuances in the types of operations that an army may be tasked to undertake. Western doctrine recognizes that operations along the spectrum of conflict are broadly categorized into two types: war and operations other than war (OOTW). War is defined as sustained combat operations to achieve strategic aims through coercive force, while OOTW encompass an array of activities where the military is used for purposes other than fighting war, but which may still include limited combat.¹¹⁰ Military operations are further divided into four sets of tactical activities that are conducted in different proportions as the intensity of conflict advances.¹¹¹ The four tactical actions are defined as offensive, defensive, enabling, and stability. The relative importance of each action

¹⁰⁹ "L'armée de Terre: Qui Sommes-Nous ?," Ministère Des Armées, accessed March 3, 2021, https://www.defense.gouv.fr/english/node_64/1-armee-de-terre/qui-sommes-nous.

¹¹⁰ Canada, *CFJP 01*, 2-12.

¹¹¹ Canada. Department of National Defence. B-GL-320-000/FP-001, *Act: The Operational Function*. Kingston, ON: Directorate of Army Doctrine, 2013, 15.

varies along the spectrum of operations, exemplified in four campaign themes: Peacetime Military Engagement; Peace Support; Security; and, Combat.¹¹² Figure 3.3 demonstrates the balance of tactical activities in each campaign theme.

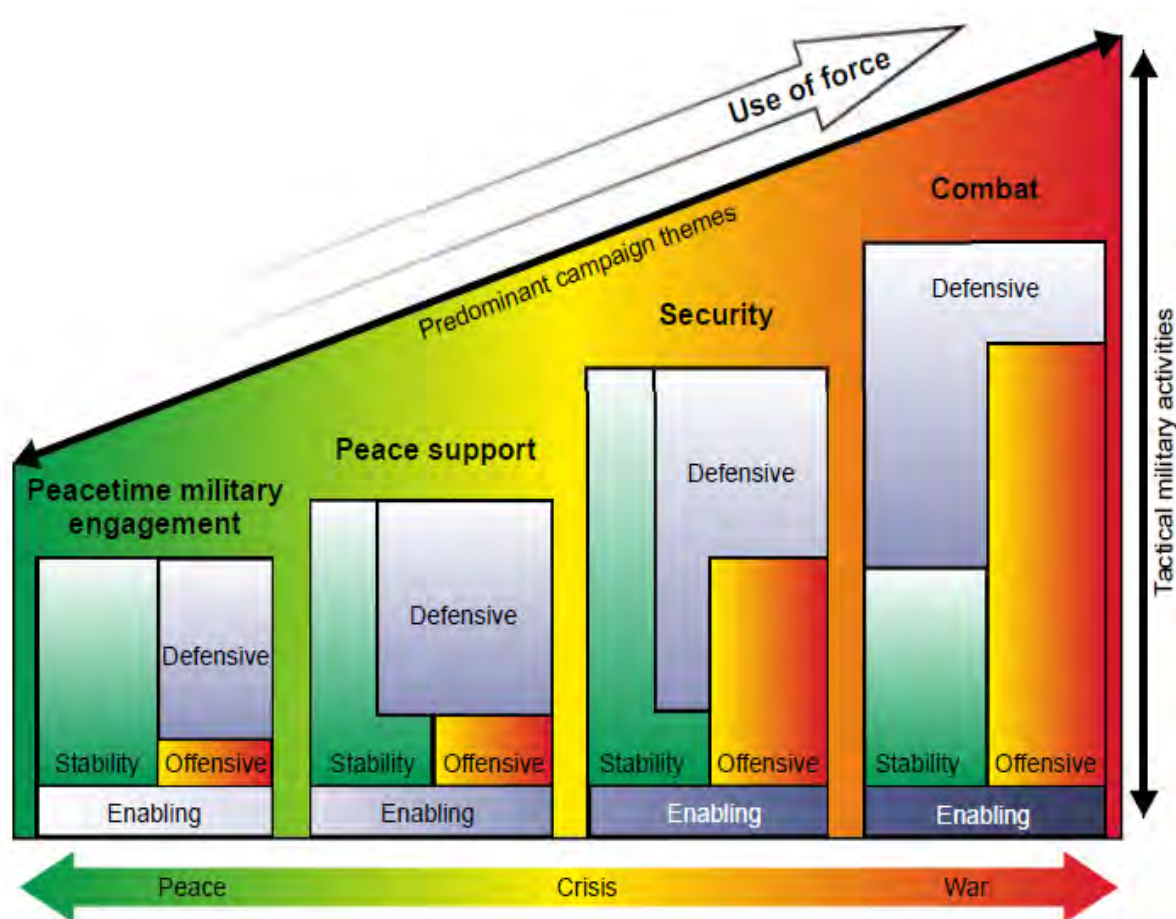


Figure 3.3 – Campaign themes and relative share of tactical activities

Source: NATO, *Allied Joint Doctrine for Land Operations*, 1-7.

NATO doctrine stresses the importance of identifying the correct campaign theme for a military operation: “The character of the campaign themes demands different intellectual approaches. They will require flexibility in force structures, size, governance

¹¹² North Atlantic Treaty Organization. AJP 3-2, *Allied Joint Doctrine for Land Operations*, Ed. A, Version 1. NATO Standardization Office, 2016, 1-7. There is a small terminology difference in Canadian Army and NATO doctrine, with Canadian doctrine using the terms Counter-Insurgency and Major Combat instead of Security and Combat.

and postures and different rules of engagement.”¹¹³ Similarly, military leadership must correctly identify the campaigns within which an army must be capable of operating and design a force that is able to effectively execute the required balance of tactical activities required to achieve national objectives. Without delving into the nuances of military operational doctrine, it is clear that armies of increasing scale and scope are required to effectively conduct operations as the intensity of conflict increases. At the same time, the component capabilities and structures of an army designed to excel in peace support operations will differ from one designed to dominate in major combat.

CAF leadership has persistently refuted this suggestion however, claiming that the most effective means to maintain a force able to operate across the spectrum of conflict is to train for the right hand edge of the spectrum, with the expectation that mastering the art of high intensity conflict will implicitly prepare soldiers for anything less.¹¹⁴ In contrast, during the 1993-94 Special Joint Committee deliberations on Canada’s Defence Policy, the Canada 21 Council and other commentators argued that the CAF should focus exclusively on the left half of this spectrum, trading in capabilities like main battle tanks for specialized personnel to execute peace support operations.¹¹⁵

Assessing the specific requirements for a given army to operate within a given range along the spectrum of conflict is a challenging exercise. The requirement to execute all four tactical activities is consistent across the spectrum, and both national objectives and military technologies, tactics, and threats will always be evolving. While there are a handful of armies around the world that do not participate in any activities other than

¹¹³ Ibid, 1-8.

¹¹⁴ Canada, *Strong, Secure, Engaged*, 36.

¹¹⁵ Canada 21 Council. *Canada 21: Canada and Common Security in the Twenty-First Century*, 57.

peaceful training activities with allies, the ability to participate in peace support operations where a threshold of hostile opposition is expected is arguably the minimum capability level expressed by serious land forces. Examining the escalating capabilities required for an army to move from executing peace support, to security, to combat operations offers a rubric to understand the specific distinctions between armies designed to operate within each campaign theme.

While war is coercive, OOTW often occur within a framework of host nation consent, or against non-state actors. For example, United Nations (UN) peacekeeping operations for example rely on the consent of the parties in conflict to allow for foreign military forces to be deployed to conduct this mission set. History has been clear that such consent may be weak, leading to challenges in achieving the goals of the peacekeeping mission, but consent does alleviate several threat streams and operational challenges.¹¹⁶ An army operating with host nation consent may still experience hostile actions from belligerents or even state forces on the ground, but they are unlikely to experience organized joint attacks from air or maritime adversaries. To be successful, they only need to maintain offensive and defensive capabilities in the land domain, and do not necessarily require, for example, an independent air-defence capability. Furthermore, while all expeditionary military forces must travel by land, sea, or air to the location of their mission, not all forces have to fight their way in. Canadian personnel and

¹¹⁶ Sofia Sebastian and Aditi Gorur, "U.N. Peacekeeping & Host-State Consent: How Missions Navigate Relationships with Governments," The Stimson Center, March 2018, <https://www.stimson.org/wp-content/files/file-attachments/UN-PeacekeepingAndHostStateConsent.pdf>, 19-21. The authors describe the three types of host nation consent to UN peacekeeping as Strong, Weak, and Compromised.

equipment deploying to the peacekeeping mission in the Former Yugoslavia in 1992 entered the theatre of operations administratively on a train from Germany to Croatia.¹¹⁷

Conversely, non-consensual military operations, including war but also security operations such as peace enforcement, must overcome active opposition to achieve their goals. An opposed entry into a foreign country, known as a joint forcible entry operation (JFEO) in doctrine but more colloquially as an invasion, requires an extensive and specialized force structure.¹¹⁸ The D-Day invasion of Normandy is a classic example of a JFEO within the context of a high intensity war, but these operations are also required to enable less intense operations than wars between global powers. A critical action in the invasion of Afghanistan was the U.S. JFEO to secure Camp Rhino, an airstrip south of Kandahar, undertaken in November 2001 by the 15th Marine Expeditionary Unit.¹¹⁹ Securing this airfield allowed follow on conventional forces to arrive unthreatened, including a Canadian light infantry battle group in February 2002.¹²⁰ Maintaining the ability to forcibly enter a foreign state is a significant distinguishing capability design consideration for an armed force that requires substantial investments in joint capabilities, as well as organic army capabilities. An invasion is also likely to require additional capabilities to fight and defend against air and sea assets, expanding the number of

¹¹⁷ Canada, “Past Operations: United Nations Protection Force (UNPROFOR),” Department of National Defence, December 11, 2018, <https://www.canada.ca/en/department-national-defence/services/military-history/history-heritage/past-operations/europe/canengbat-mandarin-harmony-cavalier-medusa-panorama.html>.

¹¹⁸ United States. Department of Defense. JP 3-18, *Joint Forcible Entry Operations*. Washington D.C.: Joint Chiefs of Staff, 2018, vii.

¹¹⁹ Jay M. Holtermann, “The 15th Marine Expeditionary Unit’s Seizure of Camp Rhino,” *Marine Corps Gazette* 86, no. 6 (June 2002): 41–43.

¹²⁰ Canada, “The Canadian Armed Forces Legacy in Afghanistan,” Department of National Defence, September 21, 2018, <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/canadian-armed-forces-legacy-afghanistan.html>.

domains in which a military force must be capable of fighting as they move from peace support, to security, and onto combat operations.

While both the invasions of Europe in the Second World War and the Western invasion of Afghanistan in the wake of 9/11 required the execution of a forcible entry operation, these were clearly conflicts of a different and more unique character. The distinctions between different natures of adversary threats will be examined in the following section, however there is intuitively a difference between the intensity of conflict in these two operations. In contrast to open warfare or traditional peacekeeping, the campaign theme of security may be the most challenging to conceptualize, as well as for which to design an appropriate army. Security operations typically include coercive peace enforcement operations, counter-insurgency operations (COIN), or limited interventions, all of which require that an army possess some elements of the capabilities demanded by high conflict warfighting. At the end of the Cold War, the success of the Security Council endorsed Operation DESERT STORM to push Iraqi forces out of Kuwait led to an increased interest in peace enforcement at the UN.¹²¹ Throughout the 1990s, UN missions in Somalia and the Former Yugoslavia saw the deployment of more robust military forces to contend with well armed belligerents who had little interest in committing to peaceful resolution of their conflicts. In Bosnia, the United Nations Protection Force (UNPROFOR) increasingly found the presence of heavy weapons necessary to dissuade Serbian and Croatian hostility; a Swedish Major defended their deployment of armoured vehicles noting that “A tank as back-up gives you an entirely different bargaining position.”¹²²

¹²¹ Ibid, 160.

¹²² Ibid, 223.

Proponents of maintaining major warfighting capabilities within small armies such as Canada's argue that this range of structures and abilities ensures that an array of tools are available for whatever contingency may arise in the messy middle of security operations. This contingency approach to maintaining the full scope of combat capabilities, without a specific or probable task to define the minimum size of that capability that must be maintained, threatens to create miniature scale armies – exactly as the Canada 21 Council had warned against in 1994.

Rather than maintaining a slice of all major combat capabilities to be prepared for any lesser task, the concept of limited intervention may offer a more targeted goal to design a capable and flexible, but small, army. Canadian military doctrine defines limited interventions as operational-level military undertakings of a limited scope and duration. While these tasks may be either domestic or expeditionary, the current CAF conception of these operations is limited to humanitarian-relief and non-combatant evacuation operations.¹²³ This was not always the case, however. Western military doctrine used to recognize limited interventions as a broader set of specific actions (including combat) that took place across the spectrum of conflict, but were of insufficient duration to warrant consideration as a major military campaign. As of 2008 the *U.S. Army Field Manual 3-0, Operations* defined limited interventions as operations executed to achieve an end state that is clearly defined and limited in scope, including non-combatant evacuation operations; foreign humanitarian assistance; consequence management; sanction enforcement; strike; raid; show of force; and, elimination of weapons of mass

¹²³ Canada. Department of National Defence. B-GJ-005-300/FP-001, *Canadian Forces Joint Publication 03 (CFJP 3.0): Operations*. Ottawa, ON: Canadian Forces Warfare Centre, 2011, 8-3.

destruction.¹²⁴ While never endorsed in joint doctrine, the U.S. Army's concept acknowledged that at times national security objectives can be achieved by short, sharp, and targeted offensive military operations designed to achieve a highly precise effect. As the UK identified in the Falklands, and as France demonstrated in Mali, the ability to conduct unilateral military action across the world in support of national strategic goals but short of major conflicts is a meaningful milestone of capability for an army. An army capable of a limited intervention does not need to possess an overwhelming land force, but it does need at minimum to possess an appropriate balance of organic offensive and defensive systems capable of achieving effects against all modern threats within the land and air domains.

While the scale and scope of an army will always limit the types of interventions it could perform, there is a clear distinction between a country that can take independent military action to achieve a national goal, and those that must rely on allies to enable their action by providing missing capabilities. Even accepting that major operational campaigns are most often undertaken in alliances that provide the full spectrum of required military capabilities, the ability to undertake limited interventions demark those states that are truly capable of achieving national strategic or political objectives with military force from those that are at best capable of rallying the support of the international community. Armies capable of independent interventions are also well positioned to take leadership roles in military alliances and coalition warfare, as they have freedom of action and do not require allies to substitute for their own missing critical capabilities.

¹²⁴ United States. Department of Defense. FM 3-0, *Operations*. Washington, D.C.: Department of the Army, 2008, 2-4.

The capacity for action, expressed in mission sets, is thus the second pillar of army design. The simplification of the spectrum of operations into distinct campaign themes offers the basic framework for assessing what an army can achieve by considering its size and capabilities. Furthermore, the ability of armies to execute tasks within each campaign theme, either restricted or unrestricted by caveats and limitations, is a significant factor. Finally, the ability of an army to execute unilateral action, as opposed to one that must rely on alliances to balance out capability deficiencies, delineates the full scope of mission sets that a land combat force is able to undertake.

Threats

Whether a nation state chooses to equip their armed forces as a strictly defensive force, or as a force capable of independent global intervention, its structure must reflect the third pillar of military force design; the threats the force is anticipated to counter. During the Cold War, the Soviet Union provided the West with a practical benchmark of required military capability. NATO undertook significant efforts to monitor and calculate the ratios of Soviet to Western squadrons, divisions, and fleets squaring off in Europe, seeking to maintain parity of forces. When it became clear that the Soviets could achieve quantitative superiority, the United States responded to the threat through investments in qualitative superiority, leading to the revolutionary development of precision strike weapon systems. Rather than matching the Soviet Union tank for tank, the U.S. deployed just enough land combat power to engage the front line of an anticipated Soviet invasion, while focusing on airpower to locate and destroy follow-on Soviet echelons before they could be deployed into the fight.¹²⁵ Thus, the U.S. approach to force design in the Cold

¹²⁵ Richard J. Samuels, *Air-Land Battles*, ed. Richard J. Samuels, Encyclopedia of United States National Security (SAGE Publications, Inc, 2005).

War was to directly counter the capabilities of their most capable adversary. Three models are commonly used for defence force planning: threat-based; capabilities-based; and, resource-focussed planning.¹²⁶

The CAF has experienced two eras of resource-based planning imposed by defence policy. The 1947 Defence Policy was written to dramatically cut defence expenditures and demobilize an organization built for a world war amid a brief moment of strategic optimism where the world's sole nuclear power, a close ally, precluded any meaningful threat to Canada. The Army of 1947 had no threat to orient against but was rather defined in terms of the maximum force size that the Government of the day was willing to maintain. Similarly, in the wake of the collapse of the Soviet Union, the Defence Policy Statements of 1992 and 1994 struggled to define the role of the CAF in the uncertain global security climate, but made it clear that affordability was the primary requirement above all others. This approach to planning is inherently delinked from considerations of strategy or purpose.¹²⁷ While effective leadership and vision may allow for a capable force to be built within a resource-based planning model, it is more likely to be a transitory phase in the history of an armed force, specifically in the aftermath of a major conflict or strategic shift, as was seen in the late 1940s and early 1990s. In contrast to this approach, threat and capability-based planning models both offer an approach to contending with specific actors and capabilities, be they real or imagined.

¹²⁶ Michael J. Mazarr et al., *The U.S. Department of Defense's Planning Process: Components and Challenges* (RAND Corporation, 2019), <https://doi.org/10.7249/RR2173.2>, 8. The Rand study further breaks down defence planning approaches into supply-based planning, which leads to resource-focussed planning, and demand-based planning, which includes both capabilities and threat-based planning.

¹²⁷ *Ibid.*, 18.

Throughout the Cold War, Western military planners used the Soviet Union as a pacing threat against which to base all decisions as to the necessary size and scope of their military forces. This threat-based approach relies on the threat being easily recognized, identified, and assessed, often through detailed modelling and wargaming to determine the exact types of forces needed to defeat the threat, either unilaterally or as part of an alliance.¹²⁸ In the aftermath of the Cold War however, the single clear and compelling threat of the Soviet Union dissolved into an uncertain global security environment, necessitating a new approach to threat planning. The initial U.S. response was to develop a threat model based on the simultaneous conduct of two major theatre wars (MTW), known as the 2 MTW paradigm. Based on the conceptual requirement to maintain suitably capable forces to contend with a resurgent Iraq attacking Kuwait and Saudi Arabia, as well as North Korea attacking the Republic of Korea, the 2 MTW model assumed that a force based on these threats would have sufficient capability and flexibility to deal with any other global contingency that arose.¹²⁹ Through the late 1990s a number of factors led to the utility of the 2 MTW model being questioned. American defence planners began to doubt the likelihood of either of the conflicts proposed by the 2 MTW model actually occurring, and became concerned that the financial cost of maintaining readiness for those unlikely wars imposed the opportunity cost of not modernizing U.S. forces for future wars.¹³⁰ At the same time, Western defence planners, including in Canada, were contending with the increase in complex stability and security

¹²⁸ John F. Troxell, *Sizing the Force for the 21st Century*, ed. Steven Metz, Revising the Two MTW Force Shaping Paradigm (U.S. Army War College Strategic Studies Institute, 2001), 7–40, 9.

¹²⁹ *Ibid.*, 19.

¹³⁰ Michael Casey, *Why the 2 MTW Must Go*, ed. Steven Metz, Revising the Two MTW Force Shaping Paradigm (U.S. Army War College Strategic Studies Institute, 2001), 105–20, 110.

missions, and beginning to question if their forces needed to be better designed for these new types of conflict.¹³¹

Capability-based planning (CBP) emerged in the 1990s as a model to contend with an ambiguous security environment defined by diffuse and uncertain threats. Rather than shaping an armed force to deal with specific threats, this model instead begins with considerations of national policy to determine what that armed force should be able to achieve. These objectives are then applied to an analysis of the future security environment, often through a set of operational scenarios, to determine the specific capabilities that a military must develop and maintain to meet national policy objectives.¹³² CBP was adopted by the U.S. military in 2001, and by the CAF in 2002. As CBP was developed in part due a lack of specific threat actors, it required the development of a generic adversary to guide both the development of desired friendly capabilities, as well as to imagine what capabilities a hostile force would employ. The term “near-peer” thus began to appear in Western military doctrine and defence policy to describe this generic enemy.

In international relations, a peer competitor is one that can integrate multidimensional elements of power to achieve its goals; including military, technological, economic, and political sources.¹³³ CBP implicitly assumed that the fall of the Soviet Union removed the only peer competitor to the Western military alliance, leaving only near-peer adversaries to contend with. Near-peer militaries were

¹³¹ See Chapter 1’s discussion of the 1994 *White Paper on Defence*.

¹³² Mark Rempel, “An Overview of the Canadian Forces’ Second Generation Capability-Based Planning Analytical Process,” Department of National Defence (Defence Research & Development Canada, September 2010), iii.

¹³³ Thomas S. Szayna et al., *The Emergence of Peer Competitors: A Framework for Analysis* (RAND Corporation, 2001), <https://doi.org/10.7249/MR1346>, xii.

conceptualized as having a degree of effective military capability but unable to match the full capabilities of modern Western forces. In a practical sense, this led to force planners imagining scenarios where they faced large armies of legacy Soviet equipment that were vulnerable to the integration of air and land effects (as in the Gulf War), or that lacked advanced technology such as night and thermal vision equipment, making them helpless against qualitatively superior Western forces.¹³⁴ The rapid global proliferation of advanced military technology, including precision strike weapons, has invalidated this concept however as an increasing number of adversarial states are able to challenge Western technical supremacy leading to the arrival of adversary states that lack political and economic power but are nonetheless technological peers.

The development of technological peers is exemplified by the rapid expansion of drone warfare by both major and minor states, as well as non-state asymmetric actors. While not the only concerning advance in adversary capability, it has dramatically increased the threat of aerial weapons to Western forces and the associated requirement for robust air defence. Russia's use of unmanned aerial vehicles (UAV) to direct devastating rocket artillery in Ukraine in 2014 made it clear that American drone dominance was over,¹³⁵ while Iraq's campaign against the Islamic State brought attention

¹³⁴ United States. Department of Defense. TC 7-100.2, *Opposing Force Tactics*. Washington, D.C.: Department of the Army, 2011, 1-14. Canadian Army Officer training leverages U.S. Army OPFOR models. While these models are highly flexible to allow the specific threat to be elevated from asymmetric to conventional operations to suit the training requirement, the consistent theme is that a technologically inferior force can defeat a Western army that applies its advantages incorrectly: "The OPFOR believes that a qualitatively and/or quantitatively weaker force can defeat a superior foe, if the lesser force can dictate the terms of combat."

¹³⁵ Dr. Phillip A. Karber, "Lessons Learned from the Russo-Ukrainian War: Personal Observations" (The Potomoc Foundation, 2015), 14.

to the weaponization of small commercial drones.¹³⁶ More recently, the stark victory won by Azerbaijan over Armenia in Nagorno-Karabakh in October 2020 highlighted the potency of widely available Turkish, Israeli, and Chinese drones and loitering munitions, and the existential threat posed to any army not enabled with a suite of defensive systems.¹³⁷ Thirty-nine countries now employ armed UAVs,¹³⁸ providing a stark example of how as advanced technologies proliferate widely around the world the generic terms of ‘peer’ or ‘near-peer’ enemies no longer have useful meaning, threatening the generic threat models often employed in CBP processes.

As the concepts of CBP became operationalized in force development models in Western militaries, they should have been able to account for the advanced capabilities being developed by emerging technological peers. The development of CBP however came at nearly the exact moment that the West was becoming increasingly embroiled in counterterrorism and counter-insurgency missions in first Afghanistan and then Iraq. In responding to their own capability shortfalls demonstrated in these campaigns, planners lost focus on countering the capabilities being developed by more robust adversaries. Russia and China meanwhile emerged as major conventional military threats, having undertaken decades of force development activities designed to counter and copy the Western military technologies and operational techniques first demonstrated in the Gulf

¹³⁶ Nicholas Grossman, *Drones and Terrorism: Asymmetric Warfare and the Threat to Global Security* (London: I. B. Tauris & Company, Limited, 2018), <http://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=5738773>, 119.

¹³⁷ David Hambling, “The ‘Magic Bullet’ Drones Behind Azerbaijan’s Victory Over Armenia,” *Forbes*, November 10, 2020, <https://www.forbes.com/sites/davidhambling/2020/11/10/the-magic-bullet-drones-behind--azerbajjans-victory-over-armenia/>.

¹³⁸ Peter Bergen, Melissa Salyk-Virk, and David Sterman, “World of Drones,” New America International Security Program, July 20, 2020, <https://www.newamerica.org/international-security/reports/world-drones/>.

War.¹³⁹ Both nations now possess broad capabilities in drone warfare and long-range precision strike weapons, including advanced long range anti-air and air to ground missiles. This has resulted in growing calls for Western nations to return to elements of threat-specific planning where specific and well-defined adversaries are clear.¹⁴⁰ In the UK's 2010 *National Security Strategy and Strategic Defence and Security Review*, the concept of risk was used to prioritize investments. Rather than estimating the force required to operate in future conflict scenarios, defence planners employed risk assessment methodologies to determine which capabilities would be required to defend against a hierarchy of risks to British interests.¹⁴¹ The U.S. military however is explicitly adjusting its planning paradigm to counter the specific threats posed by China, declaring them to be their new pacing threat and developing a new doctrinal operating model, Multi-Domain Operations, to compete with them in the Pacific.¹⁴²

For its part, Canada acknowledged the growing challenge of major power rivalries in its 2017 *Strong, Secure, Engaged* policy, but remained committed to the CBP model of force development.¹⁴³ Applying CBP within a resource constrained environment however can lead to gaps between policies and capabilities, and the threats they are intended to counter. For example, despite the significant aerial threats that have

¹³⁹ Kieley, "No Umbrella for the Rain."

¹⁴⁰ Tony Balasevicius, "Is It Time To Bring Back Threat-Based Planning?," The Mackenzie Institute, April 7, 2016, <https://mackenzieinstitute.com/2016/04/is-it-time-to-bring-back-threat-based-planning/>.

¹⁴¹ Timothy Edmunds, "British Civil-Military Relations and the Problem of Risk," *International Affairs* 88, no. 2 (2012): 265–82, 217.

¹⁴² "The Future Force in Multi-Domain Operations - by LTG Eric Wesley," YouTube video, 1:32:14, posted by U.S. Army Joint Modernization Command, 27 Jan 2020, <https://www.youtube.com/watch?v=RItpEV0enYU>. Multi-Domain Operations (MDO) expands the concept of Joint battle integrating Land, Sea, and Air elements to include Space and Cyberspace effects, as well as broader efforts to harness military power alongside culture, information, economics, and diplomacy to compete globally with China and Russia.

¹⁴³ In their introduction to SSE, the Minister's Advisory panel laud the policy statement for its "credibility of its capability planning and costing frameworks."

developed globally between 2014 and 2020, the Canadian Army has committed to the procurement of a single weapon system to provide an air-defence capability but has yet to decide which specific slice of aerial threats it will be designed to defend against.¹⁴⁴ In contrast, the U.S. Army is pursuing a spectrum of seven layered weapon systems, pursuing not a generic capability but a specific response to the threats posed to their forces.¹⁴⁵

The consideration of threat therefore forms the third pillar of army design. In combination with the purpose of their army and the nature of the missions it should be able to conduct, nations must consider the threat actors against which it will operate. A threat-based model establishes a specific pacing competitor, conceived as a peer or near-peer, against which all capabilities, size, and scope must be measured. The use of capability-based planning applies a decision-making process to consider potential future security conditions and threats against national defence policy to determine the capabilities that will be required. Even the use of a resource-based planning model assumes that future threats will be sufficiently limited and that more deliberate attention is not required. Having considered the threat, along with purpose and mission, a state may determine the type of army it needs, or wants, to maintain.

A Taxonomy of Army Capability

This section proposes a land force taxonomy based on the Todd-Lindberg model of naval taxonomy, drawing upon the army design pillars of purpose, mission, and threat.

¹⁴⁴ Kieley, “No Umbrella for the Rain.”

¹⁴⁵ MGen Cedric T. Wins, “CCDC’S Road Map to Modernizing the Army: Air and Missile Defense,” United States Army, September 10, 2019, https://www.army.mil/article/226920/ccdc_s_road_map_to_modernizing_the_army_air_and_missile_defense.

In 1996, Daniel Todd and Michael Lindberg produced their taxonomy, seeking to answer the question as to whether there were different types of navies. The Todd-Lindberg classification system considers two elements: an assessment of strategic purposes (political, economic, and geographical factors); and, the nature of different naval platforms.¹⁴⁶ In the first element, possible strategic requirements are identified for a navy to achieve, spanning from a symbol of sovereignty and source of prestige, to protecting vital interest, to offensive employment – mirroring the purpose pillar of army design. For the second element, the system assesses the specific capabilities of different naval platforms, including fighting ships, aircraft carriers, and sustainment vessels, to consider a navy’s scope of action, broadly analogous to the mission and threat pillars of army design.

The Todd-Lindberg system designates ten categories of naval types based on purpose and capability, ranging from global-reach power-projection to mere token navy. No comparable categorization into classification of types exists for armies.

Unsurprisingly, there are challenges in adapting this naval model to land power. The naval world benefits from a relative unimportance of terrain, and a broad standardization between types of naval platforms. While no doubt a simplification, the assessment of naval power can be achieved with broad fairness by counting the number and types of hulls that a given navy owns. In contrast, army major equipment holdings are significantly more diverse and the quality and capability of each across the world varies widely with the technology of the day. For example, comparing the number of tanks that one army has versus another as a capability metric would be problematic; one army may

¹⁴⁶ Daniel Todd and Michael Lindberg, *Navies and Shipbuilding Industries: The Strained Symbiosis* (Westport, CT: Praeger Publishers, 1996), 47-68

field zero tanks but have instead invested in capable anti-armour missiles fielded in depth at every echelon. Overly simplistic quantitative comparisons of armies by size mean nothing without a detailed understanding of the specific capabilities and the qualities they possess, and how they might be employed in any given operational encounter between two forces. What is needed is a macro-comparative tool that considers the 'weight-class' of an army by broader qualitative considerations. To that end, a land force taxonomy is proposed, focussing on the strategic intentions, broad capabilities, and force development imperatives that drive the ongoing procurement of new weapons and technology, and the development of doctrine and training to support their use.

This land taxonomy identifies ten groups of army types. While overlap between missions and roles is always likely, it defines the primary purpose as the highest level of capability that the force can achieve. It describes this purpose, along with the overarching defensive role that the army achieves for its state, ranging from literal defence of the physical territory to the protection and sustainment of global hegemony. In terms of mission sets, it delineates the highest intensity within the spectrum of conflict at which the army could reasonably be expected to succeed unilaterally, or in an alliance or coalition. The threat model used to drive the force development of the army is considered, along with a general appreciation for the capabilities of the force across all operational functions. For domains, it acknowledges that land forces are increasingly threatened from other operational domains, primarily air, but also developing space and cyber capabilities. The groups identified are as follows. A summary can be found in Table 3.1 with an example nation(s) that typify each type.

Forward Power Projection: This Army is a dominant land force belonging to a global hegemon. It is capable of molding the international security environment through forward deployed forces that it maintains across the globe. It has world-leading capabilities in all domains and can execute offensive and defensive actions therein. The maintenance of this force comes at significant expense to the state, and it is in a constant state of development and advancement.

Expeditionary Power Projection: These armies belong to a major global power and are significantly capable across all domains. They have developed advanced capabilities or operational doctrines designed specifically to challenge the forces of the global hegemon. While primarily positioned within their home state, they are capable of expeditionary deployments to achieve national objectives when required.

Regional Defence: This type of army belongs to a strong regional power that is focussed on dominating its regional sphere of influence while defending against intrusion from a global hegemon. While broadly capable in all domains, it has focused its specific capabilities and force structure on overcoming the strengths of the global hegemon. Its ability to project itself is limited to its home territory and regional sphere of influence.

Limited Intervention: Armies of this type are capable of unilateral military action against limited threat actors to pursue national objectives, such as obsolete conventional land forces or irregular forces. These forces maintain capabilities across the full spectrum of operational functions and domains. They would most likely be required to join an alliance or coalition to conduct combat operations against a modern adversarial force. The distinction between armies of this type and those of a *Major Alliance Partner* may principally be the political will to execute unilateral actions.

Major Alliance Partner: These armies maintain a broad array of modern capabilities across the operational functions and domains but are limited in their scale and/or scope to such an extent that major combat operations against a modern enemy require participation in an alliance or coalition. They may lack the scale to execute these operations unilaterally or may be missing specific high-end capabilities, such as strategic long-range weapons or high-altitude air defence. Despite their shortcomings, these forces are significantly powerful to allow their state to achieve its national objectives by overtly influencing the aims and activities of international coalitions.

Minor Alliance Partner: These armies maintain strong conventional land forces across all operational functions but are very limited in their scale and or/scope such that they require a significant number of capabilities to be provided by integration into a coalition or allied force. Common deficiencies of minor alliance partners include tactical and operational fire support, and the complete lack of organic air defence capability. States fielding these armies lack the ability to achieve unilateral international action but seek to maintain some influence while broadly supporting the international rule of law through participation in international coalitions that support their national objectives.

Territorial Defence: Armies of this type are focused on the defence of their territorial integrity and their force is specifically structured to the unique tactical and operational requirements of that defence. In times of peace, these armies may seek opportunities to commit forces to low-risk international activities, such as participation in United Nations missions, to generate experience and professionalism with their extant force structures.

Limited Defence: This type of army is focussed on responding to specific and limited threats to its territory and sovereignty. This includes the armies of states that are unable to practically defend their physical sovereignty due to either sheer size or the overwhelming dominance of a regional rival. In this case, the force exists to secure the sovereignty of the host nation and may serve as the point of integration with a larger defensive alliance such as NATO.

Sovereignty Force: This type of army is unique in that it belongs to a state that faces no existential threat against which it must defend, but still seeks to be able to respond with military force to domestic contingency operations, or to make discretionary contributions to international engagements with the alliances, coalitions, or the UN. This army is considered to respond to resource constraints, rather than threat models, in that military or political leadership design the force structure and capabilities desired within the established restraints of human or fiscal resources, rather than in response to strategic objectives or defensive imperatives. A sovereignty force may also be intended to serve as a scaffold for deliberate wartime expansion.

Constabulary Force: This type of army represents the minimum capability of a land force that a state may maintain. It serves primarily as a symbol of national sovereignty but may have domestic responsibilities to provide specific capability enhancements to civilian security forces. The force may participate in low-level international engagements with established regional partners as a means to generate and maintain experience but maintains only a minimum level of land specific capability.

Table 3.1 – Land Force Taxonomy

Group	Designation	Purpose	Defensive Requirement	Highest Conflict Intensity	Threat Model	Defining Capabilities	Example Nation
1	Forward Power-Projection	Shape global security environment in accordance with national objectives in opposition to global actors.	Forward defence of national objectives through shaping the international environment.	Unilateral major combat operations.	Pacing	World leading capabilities across all operational functions. Offensive and defensive capabilities within all domains. Sustained global force projection and expeditionary sustainment ability.	U.S.
2	Expeditionary Power-Projection	Respond to global security challenges to achieve national objectives in opposition to global or regional actors.	Forward defence of national objectives through shaping national sphere of influence.	Unilateral major combat operations	Pacing	Advanced capabilities across many operational functions, with selective world class capabilities to counter pacing threat. Offensive and defensive capabilities within all domains. Limited global force projection and expeditionary sustainment ability.	Russia
3	Regional Defence	Shape regional security environment in accordance with national objectives in opposition to global or regional actors.	Forward defence through shaping regional environment.	Unilateral major combat operations	Pacing	Advanced capabilities across many operational functions, with selective world class capabilities to counter pacing threat. Offensive and defensive capabilities within all domains. Regional force projection and sustainment only.	China
4	Limited Intervention	Undertake specific and limited expeditionary offensive operations to achieve national objectives in opposition to specific threats.	Forward defence against specific threats to national interests.	Unilateral limited combat operations	Capability	Modern capabilities within all operational functions. Offensive and defensive capabilities within all traditional domains, developing capabilities within space and cyber.	France, United Kingdom

Table 3.1 - Continued

Group	Designation	Purpose	Defensive Requirement	Highest Conflict Intensity	Threat Model	Defining Capabilities	Example Nation
5	Major Alliance Partner	Achieve national objectives through participation in international institutions in opposition to regional threats.	Defence against erosion of international order, defeat of threats to national interests.	Major combat operations within a coalition	Pacing	Modern capabilities within most operational functions. Offensive and defensive capabilities within all traditional domains, developing capabilities within space and cyber.	Germany
6	Minor Alliance Partner	Support international norms through participation in international institutions in opposition to regional threats.	Defence against erosion of international order.	Limited combat operations within a coalition	Capability	Modern capabilities within some operational functions. Offensive and defensive capabilities within land domain only, developing capabilities within space and cyber.	Canada
7	Territorial Defence	Defend physical territory of the state.	Defend physical integrity of the state.	Unilateral defensive combat operations	Capability	Modern capabilities within some operational functions. Defensive capabilities within traditional domains.	Brazil
8	Limited Defence	Defend against threats to the state.	Defend against specific and limited threats to the territory of the state.	Unilateral limited defensive combat operations	Capability	Selective capabilities within land domain based on specific tactical requirements.	Latvia
9	Sovereignty Force	Demonstrate national sovereignty, domestically or abroad.	Defend against specific and limited threats to national interests.	Limited combat or security operations within a coalition	Resource Based	Selective capabilities across operational functions within the land domain. Often reliant on integration paradigm with allied regional partner.	Ireland, New Zealand.
10	Constabulary Force	Demonstrate domestic national sovereignty.	Secure domestic sovereignty and support civilian security apparatus.	Domestic security operations	Resource Based	Selective capabilities based on specific domestic security requirements only.	Luxembourg

Conclusion

The process of conceptualizing and designing an army is complex. The translation of national objectives into strategic plans, into specific force structures requires significant understanding and analysis, and rarely occurs from a blank slate. The Canadian Army exited the Second World War as a global expeditionary power, but within two years had demobilized into a sovereignty force tasked only with lying in wait for the next war. Throughout the Cold War it rose again in power and prestige, only to be stripped of purpose and resources again in the peace dividend of the 1990s. The ultimate result of this constant change has been to create an army that enjoys an abundance of national pride but a deficient of purpose; it maintains the ambitions of a greater power in its policies, structures, and rhetoric, but lacks the capabilities of adversaries that it would quickly dismiss as less than peers. Chapter Four will discuss the specific role required of the Canadian Army and make recommendations as to the changes in structures and capabilities required to align the force with a coherent and achievable purpose.

CHAPTER 4 – A MORE CAPABLE CANADIAN ARMY

The design of the modern Canadian Army reflects the interplay of two dominant factors: the ambiguous demand for combat capability; set against the powerful inertia of military history and legacy force structures. The fall of the Soviet Union stripped the Army of its clear mandate to fight in a conventional peer conflict and marked its transition to a “general combat capability force” employed in a succession of security tasks ranging from peacekeeping to counter-insurgency operations over the next decades. The loss of the peer combat mandate did not, however, come with a demand to rationalize the structure of the Army, despite a progression of incremental cuts. The structure of the Army of 2021 is not fundamentally different from that structure of the Army of the 1960s; however, the lack of a specific mission with a clear pacing threat has resulted in an incoherent mix of capabilities. This chapter will reflect on the history of the impacts of Canadian defence policy on the Canadian Army in the context of the design model and taxonomy of land forces presented in Chapter Three. The trajectory of the Canadian Army as it contracted and expanded through a progression of army types will be identified, and the army design model will be applied to determine what type of force the Canadian Army should become to best meet Canada’s enduring national objectives.

The Army From 1947 to 2017

Through its history, the Canadian Army has taken dramatically different forms as the force adapted to geopolitical developments and shifting defence policies. The Second World War saw the rapid growth of Canada as an *Expeditionary Power-Projection Army*, fielding two corps and commanding the multinational First Canadian Army.¹⁴⁷ Yet within

¹⁴⁷ Canada. Department of National Defence. B-GL-300-000/FP-000, *Canada’s Army: We Stand on Guard for Thee*. (Ottawa, ON: Land Force Command, 1998), 20-22.

a few short years, in 1947 following the fall of Berlin, MND Brooke Claxton would sign *Canada's Defence*, reducing the Army to a *Sovereignty Force*, tasked with providing a token defence of Canada's north while maintaining the skills and knowledge required to rebuild a fighting force should it be required.¹⁴⁸ The ascension of the Soviet Union as a nuclear power with global ambitions then necessitated the establishment of NATO and the commitment of a Canadian brigade forward postured in Europe, establishing Canada as a *Minor Alliance Partner*. Despite this, the 1964 *White Paper on Defence*, and Pierre Trudeau's 1969 defence policy statement actively searched for a rationale to reduce that commitment to NATO in favor of an even lighter force, more suited to pursue peace, security, and stabilization tasks (perhaps unilaterally) as a specialized *Limited Intervention* force.

In 1987, Brian Mulroney's *Challenge and Commitment* would reverse the course of previous defence policy statements. It promised to increase the Canadian Army's commitment to NATO to a full division, and to fill capability gaps required to keep up with the Soviet threat offering the necessary political support to enable the Army's ambition to become a *Major Alliance Partner*.¹⁴⁹ The collapse of the Soviet Union however removed the national strategic objectives that demanded this more capable Army. Ever since the 1992 *Defence Policy Statement* the Army has struggled to define for itself what type of force it must become to meet the ambiguous requirement of post-Cold War defence policies. While the 1994 *Defence White Paper* did commit to the

¹⁴⁸ Andrew Richter, *Avoiding Armageddon: Canadian Military Strategy and Nuclear Weapons, 1950-1963*, Studies in Canadian Military History (Vancouver, CA: UBC Press, 2003), <https://deslibris.ca/ID/404043>, 15-16.

¹⁴⁹ Canada. Department of National Defence, *Challenge and Commitment: A Defence Policy for Canada* (Ottawa: Minister of Supply Services Canada, 1987), 20

maintenance of a multi-purpose combat capable force, it promised only one with a cost in line with more important national priorities; defining the Army as a *Sovereignty Force* capable only of limited deployments facing adversary threats that could be countered within the resource-based planning model imposed on the force.¹⁵⁰

The post-9/11 era brought a new focus for Canadian policy. Both the 2005 *A Role of Pride and Influence* and 2008 *Canada First Defence Policy* focused on the threat of terrorism and the need for the Army to be prepared to fight in complex peacekeeping, peace support, or counter-insurgency missions, against non-traditional opponents.¹⁵¹ In the context of asymmetric actors, the Army become a counter-insurgency (COIN) focused *Limited Intervention* force, capable of limited and specific unilateral action in line with the Government's national security objectives. Although lacking in the full range of land specific and joint capabilities required for a modern army to succeed against a conventional state military peer, the Canadian Army nonetheless demonstrated an ability to command, sustain, and execute all operations in Kandahar Province, Afghanistan from 2006 to 2010, until additional allied forces began to be deployed to add much needed capacity in the challenging security struggle against the Taliban.¹⁵² The Army's capability sets and scale were well suited to taking command in Kandahar, but ten years of security operations resulted in training, mindset, and equipment increasingly tailored for counter-insurgency fights rather than conventional combat operations against

¹⁵⁰ Canada, "1994 Defence White Paper," Department of National Defence (Ottawa: Canada Communications Group, 1994), para 24

¹⁵¹ Canada. Department of National Defence, *Canada's International Policy Statement: A Role of Pride and Influence in the World (Defence)* (Ottawa: Her Majesty the Queen in Right of Canada, 2005), i.

¹⁵² "Canada's Role Shrinking in Kandahar," *The Hamilton Spectator*, June 13, 2010, <https://www.thespec.com/news/2010/06/13/canada-s-role-shrinking-in-kandahar.html>. In 2010 as additional NATO forces, primarily U.S., were deployed to Kandahar, the province was divided into three areas of operation of which Canada continued to command only one.

a uniformed military.¹⁵³ Russia's 2014 annexation of Crimea created a significant problem for both Canadian defence policy and the Canadian Army, as both needed to pivot to engage a world where peer competition between the NATO alliance and a rising regional hegemon demanded new ideas and new equipment.

While the 1987 defence policy, *Challenge and Commitment*, was written for a world where the West was prepared for all-out war with the Soviet Union, the release of the 2017 policy, *Strong, Secure, Engaged*, (*SSE*) reflected a desire to make Canada more competitive against a rising Russia, rather than prepare for imminent conflict. Focussing on the need to deter major power competition through credible military forces, *SSE* called for a Canadian Army that was prepared for high-end war fighting and able to endure the sustained deployment of up to 1,500 personnel as a lead nation in a coalition operation.¹⁵⁴ Arguably, the Army described in *SSE* is the same described in *Challenge and Commitment* – a *Major Alliance Partner*; however, the failure of *SSE* to move past generic world conditions and allocate sufficient resources to counter a specific threat resigns it to a capability based model of force design rather than matching the capabilities of a measurable adversary. By acknowledging the potential for the Army to execute conventional combat operations against peer forces, but by making only selective investments in the most glaring capability gaps, *SSE* leaves the Army as a *Minor Alliance Partner*, albeit one with grander ambitions. The specific commitments and considerations imposed on the Army by *SSE* are not, of course, the result of a clean-sheet design, but

¹⁵³ Canada. Department of National Defence. B-GL-005/AC-001 *Advancing with Purpose: The Army Strategy*, 3rd Ed. (Ottawa, ON: Director Army Staff, 2014) iii. This publication marks the formal reorientation of the Canadian Army to conventional operations and focuses on broad efforts to rebalance the force, establish a managed readiness program, and focus on conventional warfighting doctrinal concepts, in the context of the 2008 *Canada First Defence Strategy*.

¹⁵⁴ *Ibid*, 17.

rather the best efforts of CAF and DND leaders to apply the available resources to achieve the best possible outcome for the force. The legacy of previous decisions also weighed heavily on their efforts, forcing equipment bought during the Afghan conflict to be incorporated into a plan for conventional war.¹⁵⁵ Ultimately, *SSE* reflects an Army not specifically designed for its current role but rather adapted and evolved over time to meet the changing demands of defence policy, unconstrained by any unifying vision of its type and purpose.

Application of the Model - Foundations

Although the global context changed dramatically for Canadian defence between 1947 and 2017, the design foundations of the Army did not change substantially during this time. Canada's enduring national objectives, defined in successive defence policies, have remained: defending Canada; collaboratively defending North America; and, being prepared to engage in elective expeditionary operations in support of international security and stability.¹⁵⁶ On the question of national military culture, the Army, and arguably the nation, remains proud of its martial history, making frequent remembrances of its world-class performance in both the First and Second World Wars, despite the significant contractions in size and capability that occurred after each war. The current structure of the force is constrained by geographic realities that demand that its footprint

¹⁵⁵ Chris Thatcher, "Defining the TAPV," *Canadian Army Today*, December 5, 2017, <https://canadianarmytoday.com/defining-the-tapv/>. The Tactical Armoured Patrol Vehicle is an example of how equipment designed for a specific operational conflict must be adapted to other purposes once acquired. As Taliban IED tactics in Afghanistan advanced, Canada acquired a series of better armoured vehicles, ultimately resulting in the TAPV being conceived as a utility vehicle designed more for its ability to survive being blown up than to achieve battlefield effects. The Army must now use 500 of these vehicles in roles such as armoured reconnaissance despite them being entirely unsuited to this role as a tall, highly visible vehicle without effective anti-armour weapons and limited ability to survive direct fire weapon engagement.

¹⁵⁶ Maj Allan Thomas, "Change and Effect: The Evolution of Canadian Defence Policy from 1964 to 2017 and Its Impact on Army Capabilities" (Canadian Forces College, 2018), 7.

be distributed across the nation, causing inevitable challenges with the efficiencies of dividing Army resources and capabilities symmetrically across great distances. It is also arguably further constrained by regimental structures that divide the Army into tribes of culture rather than strict function. At CFB Petawawa for example, an understaffed, LAV-6 based infantry battalion sits across the street from an understaffed, LAV-6 based armoured reconnaissance regiment, but the suggestion to amalgamate them to increase the strength of their combined fighting echelon would likely reverberate all the way to the CDS.

Finally, the Canadian Army is practically limited in the resources it has to dedicate to the maintenance of its existing force and the acquisition of new capabilities. Among NATO, Canada was the sixth largest spender on its forces in 2020 at \$22.15 billion dollars USD; however only 17.3% (a seven-year peak) of that budget was spent on equipment across the entire CAF. In contrast, the U.S. spends 29.2% of their defence budget on equipment, the U.K. 22.9%, France 26.5%, and Latvia 26.0%. In the context of a country that is unlikely to further increase defence expenditures, the Canadian Army must make careful decisions on which capabilities to maintain, acquire, and divest to capitalize on the limited funding available for equipment.¹⁵⁷

In summary, these foundations require that any potential design of the Canadian Army reflects a resource constrained force that is tasked to defend the nation, collaborate in the defence of our continent alongside the United States, and to undertake discretionary international deployments which may include combat. In meeting these

¹⁵⁷ NATO, "Defence Expenditure of NATO Countries (2013-2020)," (Media Release, Public Diplomacy Division, October 21, 2020), https://www.nato.int/nato_static_fl2014/assets/pdf/2020/10/pdf/pr-2020-104-en.pdf, 13

requirements, the force must respect the political desire to maintain a broad footprint across the world's second largest country, and service the perpetuation of its historical reputation as an independent and highly capable land force that could fight alongside or against the best armies of the world.

Purpose

If the defence of the nation is the primary purpose of an army, the Canadian Army could not hope to defend the vast physical expanse of the country with only 42,000 regular and reserve soldiers combined.¹⁵⁸ However, since the War of 1812, there has not been a serious requirement to consider that defence. Throughout the Cold War, Canadian defence policy recognized that the defence of Canada was inexorably linked to the defence of North America against the only likely form of attack – nuclear war. Before the development of intercontinental ballistic missiles, manned Soviet bombers did not have the range required to reach major North American cities without landing somewhere to refuel. This gave the Army a tangible role in the defence of the country; to parachute in and destroy Soviet mounting bases in the Arctic before they could be used to deliver nuclear weapons to Ottawa and Washington.¹⁵⁹ The development of long-range missiles and air to air refuelling however has long since obviated this requirement, and there is no longer any conceivable requirement to defend Canada against land attack. Although the Army still practices to a more limited extent the skills required to assure sovereignty over

¹⁵⁸ “The Canadian Army of Today.” The Canadian Army, January 27, 2021. <https://army.gc.ca/en/home/organization.page>.

¹⁵⁹ Sean M. Maloney, “The Mobile Striking Force and Continental Defence, 1948-1955,” *Canadian Military History*, 2, no. 2 (1993): 75–88, <http://scholars.wlu.ca/cmh/vol2/iss2/10>.

the North, the impacts of climate change have led to its domestic role increasingly becoming to protect the nation from floods and fires rather than foreign soldiers.¹⁶⁰

In terms of domestic self-defence, Canada is only required to maintain a *Constabulary Force* to perform demonstrations of national sovereignty in the north, and more critically, support domestic security and humanitarian operations. Despite the primacy of defending Canada and supporting the defence of North America, the third theme of Canadian defence policy – engaging in voluntary expeditionary operations in support of international political objectives – is the main design driver for the Army. *SSE* states that the Army needs the equipment, doctrine, and training required to successfully integrate with, or lead, allies in coalition operation, conceivably anywhere along the spectrum of conflict.¹⁶¹ The ability to lead a coalition operation speaks to a desire for the CAF to demonstrate international leadership in pursuit of national political objectives. This desire however is at odds with the limited capability of the Army, which does not have the full suite of required capabilities to effectively operate in, let alone lead, modern combat operations. In the taxonomy presented in Chapter Three, a major distinguishing factor between a *Major* and *Minor Alliance Partner* is that a major partner holds most of the capabilities required to conduct combat operations, while a minor partner has a limited range of capabilities and can only fight effectively once enabled with those missing elements. The inability to lead in high conflict operations also reduces Canada's ability to execute independent action, requiring the building of international consensus to achieve national goals. As a G-8 nation, Canada is clearly interested in demonstrating

¹⁶⁰ Lee Berthiaume, "Disaster Relief a Threat to the Canadian Army's Fighting Edge, Commander Says," *The National Post*, January 20, 2020, <https://nationalpost.com/news/canada/disaster-relief-threatens-to-hinder-canadian-armys-readiness-for-combat-commander>.

¹⁶¹ Canada, *Strong, Secure, Engaged*, 36.

international leadership, but having failed to secure UN Security Council seats in both 2011 and 2021, and facing criticism for failing to deliver on promised commitments to UN peacekeeping missions, it seems unable to translate its objectives into action.¹⁶²

Missions

The vision of Canadian Army capability expressed in *SSE* seems unambiguous: troops ready to conduct high-end war-fighting against an advanced adversary.¹⁶³ At the same time, the examples of tasks offered include capacity building, humanitarian assistance, disaster relief, and peace operations, none of which are active combat operations. Canadian soldiers have not participated in conventional combat operations since the Korean War; while the Army certainly strained the boundaries of the campaign theme of security in battles in Afghanistan, the reality is that it has not faced a peer, or near-peer, armed force in battle since 1953. Although it was certainly prepared to fight against the Soviet Union through the Cold War, the likelihood of the Army participating in high-end combat now seems increasingly remote. That is not to say that the heightened global risk of great power competition erupting into warfare as identified in *SSE* is inaccurate, just that the Canadian Army has slowly been bled of the capabilities it would require to play a major role in those hostilities since the end of the Cold War.

The Army is currently executing two operational deployments that were initiated as a strategic response to Russian aggression in Europe: leading the NATO Enhanced Forward Presence Battle Group (eFP) in Latvia; and a capacity building mission in the Ukraine. The Russian battle plan for future conflict was well telegraphed in their 2014

¹⁶² Marta Canneri, “Is Canada Back? Trudeau’s Peacekeeping Promises Are Not Enough,” Council on Foreign Relations, May 29, 2018, <https://www.cfr.org/blog/canada-back-trudeaus-peacekeeping-promises-are-not-enough>.

¹⁶³ Canada, *Strong, Secure, Engaged*, 36.

invasion of Crimea, and yet the Canadian Battle Group contribution consists of an understrength infantry battalion group that is not fundamentally dissimilar to its counterpart that fought the COIN campaign in Afghanistan.¹⁶⁴ The battle group lacks air defence even though it is well established that Russian forces threatening Latvia would make heavy use of multiple layers of UAVs to direct overwhelming fire from rocket and missile artillery.¹⁶⁵ It's own UAV capability is extremely limited, employing a single system that Ukrainian soldiers have already identified as ineffective against Russian electronic warfare countermeasures and may which even allow adversaries to track and target the launching point for the aircraft.¹⁶⁶ Most curiously, despite having purchased new tanks to fight the Afghan counterinsurgency in 2007, none have been deployed to the Latvia Battle Group to deter a conventional peer army from invading.

A broad view of the Army since the Korean War reveals a force that has showed determination and proficiency in executing tasks in the first three-quarters of the spectrum of conflict, primarily peace support and security operations, but has not executed operations at the right edge of the spectrum, combat with a peer force, in almost seventy years. Had the Government desired to employ the Canadian Army in combat, it could have participated in the 1991 Gulf War liberation of Kuwait, or in the invasion of

¹⁶⁴ Chris Thatcher, "Unit Cohesion: Latvia Battle Group Proving Its Resilience and Resolve," Canadian Army Today, January 29, 2020, <https://canadianarmytoday.com/unit-cohesion-latvia-battle-group-proving-its-resilience-and-resolve/>.

¹⁶⁵ Paul Cramers, "Long Live the King (of Battle): The Return to Centrality of Artillery in Warfare and Its Consequences on the Military Balance in Europe," FINABEL European Army Interoperability Centre, October 29, 2019, <https://finabel.org/long-live-the-king-of-battle-the-return-to-centrality-of-artillery-in-warfare-and-its-consequences-on-the-military-balance-in-europe>.

¹⁶⁶ Joseph Trevithick, "America Is Still Training Ukrainian Troops to Fly a Drone They Hate," The Warzone, April 4, 2017, <https://www.thedrive.com/the-war-zone/8921/america-is-still-training-ukrainian-troops-to-fly-a-drone-they-hate>. The Army has used the RQ-11B Raven since 2014, employing it as a unit-level asset operated by artillery and armoured regiments, despite its origins as a squad level UAV for the U.S. Army. While the more capable RQ-21 Blackjack was acquired in 2017, technical issues and aircraft crashes have prevented the UAV from being deployed on operations as of 2021.

Iraq in 2003 alongside its U.S. and U.K. allies. While the decision not to participate in either campaign in Iraq may have been political, the decision not to deploy the Army's most significant element of combat power, the Leopard 2 tank, to the Latvian deterrence mission is puzzling. If the decision was taken to avoid the cost and complexity of deploying tanks, it suggests that the Army could not deploy them in a conventional peer conflict either. If the decision was instead taken to reduce the political tension with Russia, however, it is as clear a signal as ever likely to be found that no Canadian government is willing to risk the physical, economic, or political costs of committing the Canadian Army to peer combat operations, short of a massive international conflagration in which its participation was inevitable. Unfortunately, the lack of will to conduct combat operations has not been accompanied with an imposed constraint against investing in capabilities required for major combat, which leaves the Canadian Army with the appearance of a deeply unserious force. It could be argued that an Army that speaks with pride of the importance of combined arms manoeuvre alongside its fleet of modern tanks, despite having no air defence or counter-UAV capability, and less capable UAV platforms than ISIS,¹⁶⁷ is a force that has been blinded by the pursuit of prestige forces and completely lost sight of the capabilities required for modern combat operations.

While the Army is addressing some of these deficiencies through modernization projects, the force is already years behind major adversaries, and increasingly behind

¹⁶⁷ Thomas Braun, "Miniature Menace: The Threat of Weaponized Drone Use by Violent Non-State Actors," Wild Blue Yonder, September 14, 2020, <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/2344151/miniature-menace-the-threat-of-weaponized-drone-use-by-violent-non-state-actors/>. The author deployed to Northern Iraq in 2015-16 as part of Operation IMPACT, and personally experienced the use of weaponized commercial drones by ISIS that greatly exceeded the capabilities of the RQ-11B Raven UAV that was being used in theatre at the same time by CAF elements.

emerging, regional, and non-state power capabilities. Although the Canadian Army has been focused on maintaining its ability to fight in conventional peer combat alongside allies, it would have better served the national interests of the country had it been developed into a fully rationalized *Limited Intervention* force capable of unilateral action within the campaign themes of peace enforcement and security operations.

Threats

The selection of a viable threat model around which to design the optimal Canadian Army is challenging. There is no question that an army able to participate meaningfully in conventional peer combat needs to fully embrace its most likely adversaries as pacing threats; however, it is simply unrealistic to expect that the Canadian Army would ever have the resources required to effectively counter regional powers such as Russia and China. In that context, the CAF's reliance on capability-based planning (CBP) is understandable but nonetheless flawed.

SSE identifies billions of dollars of planned investments in capabilities for both the Canadian Army, Royal Canadian Air Force, and Royal Canada Navy, but represents only the most urgent and important acquisitions as identified by service planners, and not a full modernization of the entire force. Defence planners are asked to identify the most important capabilities they will need to fight a future war, but not given the resources to acquire all the capabilities they would need to effectively execute that campaign. Compounding the challenge of selection, the scope of capabilities required to fight a modern war is expanding rapidly every year. U.S. Army planners are now working to integrate space and cyber effects into their combat brigades; developing a multi-layer comprehensive air and missile defence system; and simultaneously pursuing extreme

range artillery and missile fires.¹⁶⁸ The U.S. can afford to continually assess and acquire the required capabilities to fight at the leading edge of battle, but Canada cannot. Instead, when an unconstrained spectrum of CBP scenarios are applied to constrained resources, it results in the selection of a ‘grab bag’ of prioritized capabilities for modernization and investment, creating a discordant force with an incoherent combination of advanced and obsolete capabilities.

Barring a significant increase in investment in Army equipment, a prudent response is a refinement of CBP methodology. The Army may continue to employ a CBP paradigm, but it must be bounded by specific direction that constrains the acquisition of unnecessary equipment, but also forces the identification of the full range of equipment required to operate within the assigned scenarios. Examples of refined CBP scenarios might include undertaking unilateral limited interventions for security campaigns, as per France’s Op SERVAL in Africa, or participating within conventional peer combat in a NATO framework in a specific and precise function, rather than a general-purpose combat capability. Just as the Army’s precise Cold War commitments in Europe allowed the 1989 defence policy to make targeted and relevant investments in capabilities, a negotiated specialization in NATO could allow Canada to master a limited operational role within the Alliance. However, this would also force it to acknowledge its limited ability to meaningfully participate in high-end combat.

¹⁶⁸ “The Future Force in Multi-Domain Operations - by LTG Eric Wesley,” YouTube video, 1:32:14, posted by U.S. Army Joint Modernization Command, 27 Jan 2020, <https://www.youtube.com/watch?v=RItpEV0enYU>. MDO is a complex of doctrine and capability development programs initiated by the U.S. Army to fight China in the Pacific region. MDO is designed to counter the Chinese anti-access, area-denial weapons that are intended to deny U.S. forces access to the air and naval support they have come to rely upon in joint warfighting doctrine.

Scale and Scope

Regardless of the type of force it aspires to be, there are undeniable challenges of scale and scope within the organization and capabilities of the Canadian Army. At the macro level, the Army's regular force fighting echelon is composed of three medium weight combat brigades, supported by a single combat support brigade. An additional eleven brigades exist in the reserve force; however, as an entirely light force lacking any armoured vehicles, modern heavy weapons, or even sufficient basic ground transportation, they are unsuited to conventional combat operations. In contrast, the U.S. Army fields a total of 14 heavy, nine medium weight, and 35 light fully equipped brigade combat teams between its Active and National Guard components.¹⁶⁹ Among potential adversaries, the Chinese People's Liberation Army fields 78 combined arms brigades,¹⁷⁰ the Russian Army fields the equivalent of 40 manoeuvre brigades,¹⁷¹ and the Iranian Army has at least 50 brigades including a mix of light infantry, mechanized infantry, and armoured.¹⁷² A skeptical analysis would suggest that there is little point in Canada maintaining forces focused on high-intensity conflict simply due to the insurmountable disparity in force sizes, even within the context of coalition operations.

Within the Army's three brigades, there are further concerning questions of scope. As discussed in Chapter Two, the Canadian Army has fought several policy battles to

¹⁶⁹ United States. "The U.S. Military's Force Structure: A Primer," United States (Washington, D.C.: Congressional Budget Office, July 29, 2016), <https://www.cbo.gov/publication/51535>, 18.

¹⁷⁰ United States. "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2020," United States (Washington, D.C.: United States Department of Defense, Aug 21, 2020), <https://media.defense.gov/2020/Sep/01/2002488689/-1/-1/1/2020-DOD-CHINA-MILITARY-POWER-REPORT-FINAL.PDF>, 40-43.

¹⁷¹ Keith Crane, Olga Oliker, and Brian Nichiporuk, *Trends in Russia's Armed Forces: An Overview of Budgets and Capabilities* (RAND Corporation, 2019), <https://doi.org/10.7249/RR2573>, 30-34.

¹⁷² United States. "Iran Military Power: Ensuring Regime Survival and Securing Regional Dominance," United States (Washington, D.C.: Defence Intelligence Agency, August, 2019), <https://www.hsdl.org/?abstract&did=831646>, 72-75.

preserve and modernize its fleet of tanks. The utility of 100 tanks comes into question though when compared to their doctrinal employment. A single U.S. Army Armoured Brigade Combat Team is equipped with 87 main battle tanks alone,¹⁷³ while a British Armoured Infantry Brigade is equipped with 56.¹⁷⁴ The ability of the Canadian Army to usefully employ just 100 tanks across its three brigades, while simultaneously maintaining a tank training schoolhouse, and concurrently managing their maintenance and serviceability is dubious. The situation is no better with artillery. The entire artillery force of the Canadian Army is 37 M777 howitzers to equip both the field force and training system; a single U.S. medium brigade is equipped with 18.¹⁷⁵ The list of modern combat equipment that the Canadian Army lacks entirely is equally damning but speaks to an undeniable truth: the Canada 21 Council's 1994 premonition that the Army would become a miniature scale model of a serious force has come true.¹⁷⁶ The fundamental problem is that the Army has never been seriously directed to constrain its ambitions to fight in major combat, and has thus found every opportunity (even in a third-world counterinsurgency) to continue to invest in conventional heavy combat capabilities. This has incurred tremendous opportunity costs to transition the force towards a more specialized and modern structure.

As a small Army with a constrained funding envelope, three options for the force have been offered throughout modern history. First in 1947, it became a scaffold force –

¹⁷³ United States, "The U.S. Military's Force Structure," 24.

¹⁷⁴ "Equipment - Combat Vehicles," The British Army, accessed April 12, 2021, <https://www.army.mod.uk/equipment/combat-vehicles/>.

¹⁷⁵ David Pugilese, "Canadian Army's Stock of M777 to Stay at 37," The Ottawa Citizen, June 14, 2009, <https://ottawacitizen.com/news/national/defence-watch/canadian-armys-stock-of-m777-howitzers-to-stay-at-37>.

¹⁷⁶ Canada 21 Council. *Canada 21: Canada and Common Security in the Twenty-First Century*. Toronto, ON: Centre for International Studies, University of Toronto, 1994.

assigned simply to continue to exist and incubate skills in case they were again required. By 1969 it had become a specialized force, fully committed to a narrowly defined major combat role defending against a Soviet mechanized rifle division. Finally, in the wake of the Cold War, despite the pressure to adopt a new specialization as a peace enforcement and security force, the Army instead became a scale force, containing a token quantity of every major capability - truly a general-purpose, combat capable force in scope, but lacking in scale. The Army today remains a scale force that is under intense pressure to adapt to rapid changes in warfighting. The Army's own *Modernization Strategy* released in December 2020 acknowledges that "the Army we have is not the Army we need," and yet still insists that the employment of tanks is the vital ground for a modern and relevant Canadian Army.¹⁷⁷ The Canadian Army's refusal to imagine that the future of land combat might not involve tanks continues an unbroken theme since its leadership helped to sabotage politically directed efforts to purchase a lighter replacement in 1969.¹⁷⁸ This insistence stands in stark contrast to the United States Marine Corps (USMC) which has embraced modern technology, abandoned tanks entirely, and replaced them with light vehicles armed with precision missiles.¹⁷⁹ As the Army seeks solutions to expand its own cyber, intelligence, signals, and space liaison elements, it will be challenged to maintain its traditional organizations while simultaneously remaining competitive against

¹⁷⁷ Canada. Department of National Defence. A-PP-106-000/AF-001, *Advancing with Purpose: The Canadian Army Modernization Strategy*, 4th Ed. (Ottawa, ON: HQ Canadian Army, 2020) 19.

¹⁷⁸ Frank Maas, "From a Beetle to a Porsche: The Purchase of the Leopard C1 Tank for the Canadian Army," *Canadian Military Journal*, 16, no. 4 (2016): 16–27, <http://www.journal.forces.gc.ca/vol16/no4/PDF/CMJ164Ep16.pdf>.

¹⁷⁹ Megan Eckstein, "Early Experiments Are Proving Out Tank-Free Marine Corps Concept," USNI News (U.S. Naval Institute, February 10, 2021), <https://news.usni.org/2021/02/10/early-experiments-are-proving-out-tank-free-marine-corps-concept>.

adversaries now making overwhelming investments in long range fires, unmanned vehicles, electronic warfare, and anti-access defensive systems.¹⁸⁰

The Ideal Canadian Army

Upon assuming the role of Defence Minister in 1963, Paul Hellyer was immediately struck by the impossible challenge of meeting Canada's NATO commitment of a full division in Europe when it would require the forward deployed brigade to be reinforced by two additional brigades, from Canada, across the Atlantic Ocean in the middle of a potentially nuclear Third World War.¹⁸¹ His solution was to reshape the Army at home into a lighter, agile, and readily deployable force that could be rapidly transported by air throughout Europe, or to peacekeeping missions around the world. By 1971, it became official defence policy to disband all armoured and mechanized units in place of an all air-transportable force. The technology of the 1970s was not yet ready, however, to allow a light force to survive against the mechanized and armoured Soviet divisions facing NATO, and a series of failed efforts ultimately resulted in the enduring commitment to tanks as a cornerstone of the Army.

Fifty years later however, the concerns of both Paul Hellyer and his successor Leo Cadieux have borne out, and technology has caught up to their ambitions. The Army's tanks are modern and capable, but no longer forward deployed. They remain trapped in Wainwright, AB, and Fredericton, NB, with the Army often unable to transport them from one side of the country to the other, let alone across the ocean.¹⁸² Regarding lighter

¹⁸⁰ Keir Giles, "Assessing Russia's Reorganized and Rearmed Military," Carnegie Endowment for International Peace, May 3, 2017, <https://carnegieendowment.org/2017/05/03/assessing-russia-s-reorganized-and-rearmed-military-pub-69853>.

¹⁸¹ Peter Kasurak, *A National Force: The Evolution of Canada's Army, 1950-2000* (Vancouver: UBC Press, 2013), 76.

¹⁸² Department of Defence, "Briefing Note for COS Army Strat, Force Mobility Enhancement (FME) – Initial Operational Capability/Final Operational Capability Delay, 13 Jul 17," Briefing note, Canadian

alternatives to tanks, the global arms market is now full of advanced precision missile systems that can not only defeat armour, but increasingly fill the role of artillery and ground attack aircraft.¹⁸³ As mentioned, the USMC has abandoned tanks in favor of missiles mounted to light vehicles, and the last global conventional conflict that occurred, between Azerbaijan and Armenia, saw a tank heavy force obliterated by a fleet of affordable Turkish-built armed drones.¹⁸⁴ Both former Defence Ministers would also likely be troubled to discover that while during their tenure the ability of the Army to fight in conventional peer combat revolved entirely around the tank, an army today demands more than just manoeuvre forces to be competitive – capable indirect fires, long-range precision strike, advanced ISR capabilities including multiple layers of UAVs, offensive and defensive electronic warfare, and full-spectrum air defence assets.¹⁸⁵

Ultimately, combat capability is an all or nothing undertaking; a combat capable force must possess the majority, if not all, of the critical capabilities required to compete in high-end combat against modern adversaries. Recent global experience has shown that former enabling technologies like drones are quickly becoming the decisive weapons of

Army Headquarters, Directorate of Land Requirements. While not legally required, DND policy is to comply with provincial regulations that demand special transportation permits for each province when a tank or armoured engineering vehicle is moved across Canada. As the heavy repair depot for the Army is in Montreal, and the only suitable training areas for tanks are in Wainwright, AB and Gagetown, New Brunswick, five separate permits are required to move a single tank from the largest armoured unit at CFB Edmonton to 202 Workshop Depot in Montreal, and six permits to move a tank from one training area to another. Labor disputes at the permit authority in Quebec have caused several tank movement crises since 2017 as permits could not be obtained in time to support major Army training exercises.

¹⁸³ Sebastien Roblin, “The British Army Secretly Sent Israeli Missiles to Iraq and Afghanistan,” *War Is Boring*, November 10, 2016, <https://warisboring.com/the-british-army-secretly-sent-israeli-missiles-to-iraq-and-afghanistan/>.

¹⁸⁴ David Hambling, “The ‘Magic Bullet’ Drones Behind Azerbaijan’s Victory Over Armenia,” *Forbes*, November 10, 2020, <https://www.forbes.com/sites/davidhambling/2020/11/10/the-magic-bullet-drones-behind--azerbajjans-victory-over-armenia/>.

¹⁸⁵ Andrew Radin et al., *The Future of the Russian Military: Russia’s Ground Combat Capabilities and Implications for U.S.-Russia Competition* (RAND Corporation, 2019), <https://doi.org/10.7249/RR3099>, 48-58.

conflict. If Canadian defence policy truly requires an Army that is combat capable against a modern adversary, then it must provide a pacing threat by naming that adversary and offering the full spectrum of resources required to meet it. If not, then policy must formally constrain the Army into specific types of missions and forbid it to waste any of its resources on capabilities that exceed those parameters.

As a three-brigade army among both allies and adversaries fielding forces orders of magnitude larger, there appear to be only two viable options for a coherent Canadian Army. First, it may continue as a *Minor Coalition Partner*, but must adopt a specific specialization that will allow it to adapt and excel in a useful role alongside more general-purpose allies. Alternatively, it can abandon the ambitions of major combat operations and instead become the lean, rapid response force envisioned in the 1960s and 1970s by leveraging modern technologies to replace heavy armoured forces with light vehicles and advanced precision strike weapons including missiles and drones. This light but still capable force would require all the critical capabilities, at the appropriate scale, to allow the Army to take unilateral action in campaign themes up to security operations, against less capable peers, as a *Limited Intervention Force*. In either scenario, the common element remains that the Army must give up its unbroken heritage as a conventional armoured manoeuvre force to become something at once less capable of fighting in conventional peer combat, but much more capable of meeting the defence needs of Canada. It is time at last for the tanks to retire, and for the scale model to be replaced with a constrained yet capable force with a clear, relevant, and actionable purpose.

CHAPTER 5 - CONCLUSION

Vision without action is a daydream, action without vision is a nightmare.

— Japanese Proverb

The study of Canadian defence policy from 1947 to 2017 reveals two dominant conditions: a country struggling to define the purpose of its armed forces in an ambiguous security environment; and alternately, a nation striving to find an appropriate, affordable, and meaningful role among greater powers in a well-defined paradigm of global security. In the wake of the Second World War, the CAF was reduced to a shadow of its wartime glory and set aside to incubate the martial skills of the nation should they be required again one day. The outbreak of the Cold War soon demanded that serious attention and significant resources be paid to the CAF – although the specific vision of the role that Canada’s armed forces, particularly its Army, would play amongst its NATO allies would be debated as the political leadership of the country changed over the decades. The end of the Cold War posed a similar challenge to policy makers that had been presented in 1947 – what was the purpose of the Army now that the existential threat to global security had passed?

Unlike in 1947, however, when American nuclear exceptionalism allowed a brief vision of a world without conflict, there was no such naiveté when policy makers began to craft the first post-Soviet defence statement in 1992. In preparation for the release of the 1994 *White Paper on Defence*, Defence Minister David Collenette solicited perspectives on what role the CAF could play in a new era that appeared free of the threat of great power conflict, but replete with instability and the threat of intrastate strife. Seeking a compromise between continuing the traditional role and capabilities of the

military and reorienting completely towards the needs of global stability the 1994 policy stated that the CAF would maintain a general-purpose combat capability - one force capable of meeting any requirement for the nation.

This paper aimed to examine the idea of the combat-capable force, seeking to define the limits of this role, and better describe the capabilities and limitations of a Canadian Army tasked to design, build, and maintain this force. In evaluating the Canadian Army specifically, it looked more broadly at the design considerations for any army and identified the types of armies that these criteria create, developing a taxonomy of the ten broad types of land combat forces that exist today. Finally, these design criteria were applied to the Canadian Army to determine what type of army it has been throughout its modern history, and what type of army it could be in the future to become a more capable force.

The design of an army is not fundamentally dissimilar from the design of any other object, policy, or campaign plan. The first question that must be asked is: what must the army be able to do? While generalities and platitudes do not allow the creation of effective or efficient designs in tangible objects, they all too often underpin policies and plans. In describing the role of the Canadian Army as a “general-purpose, combat-capable force,” successive Canadian defence policies since 1994 have failed to make foundational decisions about what national objectives the Army must be able to achieve. This void has allowed the Army to determine for itself what capabilities it believes it should invest in or sustain, wasting resources on irrelevant capabilities and failing to address critical capability gaps derived from a rapid global proliferation of advanced weapon technologies.

This paper proposes that to provide a meaningful framework for design, an army must be defined in terms of the purpose it achieves for its nation, the missions it must be capable of achieving, and the threats it must be capable of facing on those missions. Based on these three pillars of army design, this analysis proposed that there are ten specific types of armies that may be fielded, exemplified by different nations around the world today. When this design model is applied to the Canadian Army it reveals a discordant force that both maintains overly expensive and complex capabilities that it is unlikely to employ, and that simultaneously fails to invest in urgently required capabilities that have already been mastered by former third world nations. The current force development model of Capability Based Planning has not been constrained by a specific vision of the type of force that the Canadian Army must be, has failed to keep pace with developing adversary threats, and has consequently failed to deliver an army that can realistically achieve the lofty purpose assigned to it in Canada's current defence policy.

Defence policy describes the military structures, capabilities, and actions that are required from an armed force to meet the strategic objectives of its nation. When offered alongside the necessary human and financial resources, defence policy offers both a vision for the future of a military, but also a plan to realize it. When lofty ambitions are described without promising the resources required to achieve them, or worse – without acknowledging the significant deficiencies that currently exist in the force – then the policy is merely offering a dream. When the 1994 *White Paper on Defence* described a multi-purpose, combat-capable force, it offered an implausible but not impossible vision for the Canadian Army in a post-Soviet era where the Western military alliance

dominated the world through scale, scope, and a near monopoly on advanced weapons technologies. To maintain this vision in 2017 through *Strong, Secure, Engaged* is now firmly impossible. Interstate competition has intensified as a result of two decades of rapid proliferation of technologies, leaving the West increasingly at parity or even behind the capabilities of Russia and China. Canada is now outclassed by non-peer nations who have nonetheless emerged as technological superiors and already demonstrated the capacity to effortlessly defeat forces of equal capability to the Canadian Army.

Ultimately, the Canadian Army may be multi-purpose, but it is not combat-ready, nor is there a compelling argument to make that it should attempt to ready itself to participate in conventional high-intensity conflict against a capable adversary. Failing a massive investment in the scope of the Army, it has little to offer in its current three combat brigade structure to this fight. Nor can the Army achieve many of Canada's international security and stabilization ambitions with its current composition as it lacks critical capabilities required to take independent expeditionary action against the range of threats that exist today even in the lower three-quarters of the spectrum of conflict.

This paper suggests that Canadian defence policy has advanced an enduring delusion about the true capabilities of the Canadian Army. The source of this delusion warrants future research as it impacts the beliefs and actions of both Canadian politicians as well as senior military officers. Politicians for their part have frequently deflected critiques of underfunding the CAF by highlighting Canada's past military accomplishments and sacrifices, suggesting that for many the myth of Canadian military prowess may be equally as valuable as actually maintaining capabilities in physical form. As for senior military leadership, discounting cynical possibilities of preoccupation with

legacy and prestige leaves two immediate concerns: the professional military education system of the CAF is failing to observe, assess, and educate the force on dramatic changes in the developing technology and techniques of warfare; and, some element of the process through which national strategy is translated into defence policy and further developed into military plans, structures, and capabilities is fundamentally flawed. These problems may be related to the episodic nature of both military education and defence policy: each system must be able to continuously test and adjust the doctrine and design of the various branches of the CAF to adapt national objectives to global conditions. To remain relevant and responsive, both defence policy and the defence organization itself must be conceptualized as a process rather than a product.

If the Canadian Army is to be a serious force, one with an achievable vision, then the drafters of Canadian defence policy must reject the easy shorthand of “combat capable” they have employed since 1994 and make a deliberate choice of what type of army they wish Canada to field. Whether as a *Minor Alliance Partner* capable of contributing a depth of expertise and capability with a clear speciality within NATO, or as a lighter but broadly capable *Limited Intervention Force* capable of putting into action Canada’s national ambitions as a guarantor of stability and security around the world, a capable Canadian Army can only be achieved by constraining the ambitions of an Army that for too long has been allowed to look backwards to battlefields of the past rather than forward to those of the future.

BIBLIOGRAPHY

- Balasevicius, Tony. "Is It Time To Bring Back Threat-Based Planning?" The Mackenzie Institute, April 7, 2016. <https://mackenzieinstitute.com/2016/04/is-it-time-to-bring-back-threat-based-planning/>.
- Berthiaume, Lee. "Disaster Relief a Threat to the Canadian Army's Fighting Edge, Commander Says." The National Post, January 20, 2020. <https://nationalpost.com/news/canada/disaster-relief-threatens-to-hinder-canadian-armys-readiness-for-combat-commander>.
- Betts, Richard K. "The Delusion of Impartial Intervention." *Foreign Affairs* 73. New York, United Kingdom New York, New York: Council on Foreign Relations NY, 1994. <https://doi.org/http://dx.doi.org.cfc.idm.oclc.org/10.2307/20046926>.
- Bland, Douglas L. *Canada's National Defence, Volume 1: Defence Policy*. Kingston: School of Policy Studies, Queen's University, 1997.
- Bland, Douglas L. *Canada's National Defence, Volume 2: Defence Organization*. Kingston: School of Policy Studies, Queen's University, 1998.
- Bland, Douglas L, and Sean M Maloney. *Campaigns for International Security*. Montreal: McGill-Queen's University Press, 2004.
- Bland, Douglas L, and Sean M Maloney. *Campaigns for International Security*. Montreal: McGill-Queen's University Press, 2004.
- Boeke, Sergei, and Bart Schuurman. "Operation 'Serval': A Strategic Analysis of the French Intervention in Mali, 2013–2014," *International Affairs* 38, no. 6 (2015): 801–25. <https://doi.org/10.1080/01402390.2015.1045494>.
- . "Operation 'Serval': A Strategic Analysis of the French Intervention in Mali, 2013–2014," *International Affairs* 38, no. 6 (2015): 801–25. <https://doi.org/10.1080/01402390.2015.1045494>.
- Braun, Thomas. "Miniature Menace: The Threat of Weaponized Drone Use by Violent Non-State Actors," *Wild Blue Yonder*, September 14, 2020. <https://www.airuniversity.af.edu/Wild-Blue-Yonder/Article-Display/Article/2344151/miniature-menace-the-threat-of-weaponized-drone-use-by-violent-non-state-actors/>.
- Broers, Michael. "The Concept of 'Total War' in the Revolutionary--Napoleonic Period," *War In History* 15, no. 3 (2008): 247–68. <https://doi.org/http://dx.doi.org.cfc.idm.oclc.org/10.1177/0968344508091323>.

- Canada. Department of National Defence. *White Paper on Defence*. Ottawa: Queen's Printer and Controller of Stationery, 1964.
- . Department of National Defence. *White Paper on Defence: Defence in the 70s*. Ottawa: Information Canada, 1971.
- . Department of National Defence. *Challenge and Commitment: A Defence Policy for Canada*. Ottawa: Minister of Supply Services Canada, 1987.
- . Department of National Defence. *Defence Update: 1988-89*. Ottawa: Minister of Supply Services Canada, 1988.
- . Department of National Defence. *Canadian Defence Policy*. Ottawa: Her Majesty the Queen in Right of Canada, 1992.
- . Department of National Defence. *1994 White Paper on Defence*. Ottawa: Her Majesty the Queen in Right of Canada, 1994.
- . Department of National Defence. *Canada's International Policy Statement: A Role of Pride and Influence in the World (Defence)*. Ottawa: Her Majesty the Queen in Right of Canada, 2005.
- . Department of National Defence. *Canada First Defence Strategy*. Ottawa: Her Majesty the Queen in Right of Canada, 2008.
- . Department of National Defence. *Strong, Secure, Engaged: Canada's Defence Policy*. Ottawa: Her Majesty the Queen in Right of Canada, 2017.
- . "CFJP 01, Canadian Military Doctrine." Department of National Defence. Ottawa, ON: Canadian Forces Experimentation Centre, 2011.
- . Department of National Defence. B-GJ-005-500/FP-001, *Canadian Forces Joint Publication 01 (CFJP 01): Canadian Military Doctrine*. Ottawa, ON: Canadian Forces Experimentation Centre, 2011.
- . Department of National Defence. B-GJ-005-300/FP-001, *Canadian Forces Joint Publication 03 (CFJP 3.0): Operations*. Ottawa, ON: Canadian Forces Warfare Centre, 2011.
- . Department of National Defence. B-GL-300-001/FP-001, *Land Operations*. Kingston, On: Director Army Doctrine, 2008, 1-3.
- . Department of Defence, "Briefing Note for COS Army Strat, Force Mobility Enhancement (FME) – Initial Operational Capability/Final Operational Capability Delay, 13 Jul 17," Briefing note, Canadian Army Headquarters, Directorate of Land Requirements.

- . “Canadian Forces’ Casualty Statistics (Afghanistan) - Archived.” National Defence and the Canadian Armed Forces, June 20, 2013. <http://webcache.googleusercontent.com/search?q=cache:2ASpzDSol10J:www.forces.gc.ca/en/news/article.page%3Fdoc%3Dcanadian-forces-casualty-statistics-afghanistan/hie8w9c9+&cd=3&hl=en&ct=clnk&gl=ca>.
- . “The Canadian Armed Forces Legacy in Afghanistan.” Department of National Defence, September 21, 2018. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/canadian-armed-forces-legacy-afghanistan.html>.
- . “Past Operations: United Nations Protection Force (UNPROFOR).” Department of National Defence, December 11, 2018. <https://www.canada.ca/en/department-national-defence/services/military-history/history-heritage/past-operations/europe/canengbat-mandarin-harmony-cavalier-medusa-panorama.html>.
- . “Operation FREQUENCE.” Department of National Defence, September 4, 2020. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/current-operations/operation-frequence.html>.
- . “Canadian Armed Forces Operations in Bosnia-Herzegovina.” Canadian Armed Forces – Operations and Exercises. Accessed January 21, 2021. <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/canadian-armed-forces-operations-bosnia-herzegovina.html>.
- . “The Canadian Army of Today.” The Canadian Army, January 27, 2021. <https://army.gc.ca/en/home/organization.page>.
- . Parliament. “Facing Our Responsibilities: The State of Readiness of the Canadian Forces.” Standing Committee on National Defence and Veterans Affairs. House of Commons, May 2002. <https://www.ourcommons.ca/Content/Committee/371/NDVA/Reports/RP1032107/nddnrp04/nddnrp04-e.pdf>.
- . Parliament. “Wounded: Canada’s Military and the Legacy of Neglect,” Standing Committee on National Security and Defence (House of Commons, September 2005), http://publications.gc.ca/collections/collection_2011/sen/yc33-0/YC33-0-381-14-eng.pdf.
- . 2016 Spring Reports of the Auditor General of Canada, “Report 5—Canadian Army Reserve—National Defence” retrieved from https://www.oag-bvg.gc.ca/internet/English/parl_oag_201602_05_e_41249.html

- Canada 21 Council. *Canada 21: Canada and Common Security in the Twenty-First Century*. Toronto, ON: Centre for International Studies, University of Toronto, 1994.
- “Canada’s Role Shrinking in Kandahar.” *The Hamilton Spectator*. June 13, 2010. <https://www.thespec.com/news/2010/06/13/canada-s-role-shrinking-in-kandahar.html>.
- Cancian, Mark F. “U.S. Military Forces in FY 2020: Army.” Center for Strategic & International Studies, October 15, 2019. <https://www.csis.org/analysis/us-military-forces-fy-2020-army>.
- Canneri, Marta. “Is Canada Back? Trudeau’s Peacekeeping Promises Are Not Enough.” Council on Foreign Relations, May 29, 2018. <https://www.cfr.org/blog/canada-back-trudeaus-peacekeeping-promises-are-not-enough>.
- Casey, Michael. *Why the 2 MTW Must Go*. Edited by Steven Metz. Revising the Two MTW Force Shaping Paradigm. U.S. Army War College Strategic Studies Institute, 2001.
- Carl von Clausewitz et al.. 1984. *On War*. Princeton, N.J.: Princeton University Press.
- Chapman, Bert. “The Geopolitics of Canadian Defense White Papers: Lofty Rhetoric and Limited Results,” *Geopolitics, History, and International Relations* 11, no. 1 (n.d.): 7–40.
- Coombs, Howard G., and Michel LGen (Ret’d) Gauthier. *Campaigning in Afghanistan: A Uniquely Canadian Approach*. Edited by Bernd Col Horn and Emily Spencer. No Easy Task: Fighting in Afghanistan. Dundurn Press, 2011.
- Cramers, Paul, “Long Live the King (of Battle): The Return to Centrality of Artillery in Warfare and Its Consequences on the Military Balance in Europe,” FINABEL European Army Interoperability Centre, October 29, 2019, <https://finabel.org/long-live-the-king-of-battle-the-return-to-centrality-of-artillery-in-warfare-and-its-consequences-on-the-military-balance-in-europe>.
- Crane, Keith, Olga Olikier, and Brian Nichiporuk. *Trends in Russia’s Armed Forces: An Overview of Budgets and Capabilities*. RAND Corporation, 2019. <https://doi.org/10.7249/RR2573>.
- “Databank - GDP.” The World Bank. Accessed March 5, 2021. <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD>.

- “Defence Expenditure of NATO Countries (2013-2020).” NATO Public Diplomacy Division. Brussels, Belgium, October 21, 2020.
https://www.nato.int/nato_static_fl2014/assets/pdf/2020/10/pdf/pr-2020-104-en.pdf.
- Eckstein, Megan. “Early Experiments Are Proving Out Tank-Free Marine Corps Concept.” USNI News. U.S. Naval Institute, February 10, 2021.
<https://news.usni.org/2021/02/10/early-experiments-are-proving-out-tank-free-marine-corps-concept>.
- Edmunds, Timothy. “British Civil–Military Relations and the Problem of Risk,” *International Affairs* 88, no. 2 (2012): 265–82. <https://doi.org/https://doi-org.cfc.idm.oclc.org/10.1111/j.1468-2346.2012.01070.x>.
- “Equipment - Combat Vehicles.” The British Army. Accessed April 12, 2021.
<https://www.army.mod.uk/equipment/combat-vehicles/>.
- Findlay, Trevor. *The Use of Force in UN Peace Operations*. New York: Oxford University Press, 2002.
- Giles, Keir. “Assessing Russia’s Reorganized and Rearmed Military.” Carnegie Endowment for International Peace, May 3, 2017.
<https://carnegieendowment.org/2017/05/03/assessing-russia-s-reorganized-and-rearmed-military-pub-69853>.
- Gosselin, Daniel. “Hellyer’s Ghosts: Unification of the Canadian Forces Is 40 Years Old - Part One,” *Canadian Military Journal* 9, no. 2 (n.d.): 6–15.
<http://www.journal.forces.gc.ca/vo9/no2/03-gosselin-eng.asp>.
- Hansen, Andrew. “The French Military in Africa.” Council on Foreign Relations, February 8, 2008. <https://www.cfr.org/background/french-military-africa>.
- Holtermann, Jay M. “The 15th Marine Expeditionary Unit’s Seizure of Camp Rhino,” *Marine Corps Gazette* 86, no. 6 (June 2002): 41–43.
- Kasurak, Peter. *A National Force: The Evolution of Canada’s Army, 1950-2000*. Vancouver: UBC Press, 2013.
- Kavanagh, Jennifer, Bryan Frederick, Alexandra Stark, Nathan Chandler, Meagan L. Smith, Matthew Povlock, Lynn E. Davis, and Edward Geist. *Characteristics of Successful U.S. Military Interventions*. RAND Corporation, 2019.
<https://doi.org/10.7249/RR3062>.
- Kieley, Marc. “No Umbrella for the Rain: Canadian Implications Following the Global Revolution in Reconnaissance-Strike Technologies,” *International Journal* (Toronto). 2021, In Press.

- “L’armée de Terre: Qui Sommes-Nous ?” Ministère Des Armées. Accessed March 3, 2021. https://www.defense.gouv.fr/english/node_64/l-armee-de-terre/qui-sommes-nous.
- Lang, Eugene. “Defence White Papers Have Had Short Lifespans Because of a Host of Factors. Will the Trudeau Government’s Latest Policy Statement Survive Longer?” Policy Options. Institute for Research on Public Policy, June 23, 2017. <https://policyoptions.irpp.org/magazines/june-2017/shelf-life-defence-white-papers/>.
- Leuprecht, Christian, Joel Sokolsky, and Jayson Derow. “Paying It Forward: Canada’s Renewed Commitment to NATO’s Enhanced Forward Presence,” *International Journal (Toronto)*, 74, no. 1 (March 2019): 162–71. <https://doi.org/10.1177/0020702019834887>.
- Lindberg, Michael, and Daniel Todd. *Navies and Shipbuilding Industries: The Strained Symbiosis*. Westport, CT: Praeger Publishers, 1996.
- Lloyd, Richmond M., and P. H. Liotta. “From Here to There—The Strategy and Force Framework,” *Naval War College Review* 58, 58, no. 2 (2005).
- Lundy, Mike, and Rich Creed. “The Return of U.S. Army Field Manual 3-0, Operations,” *Military Review* 97, no. 6 (2017): 14–21.
- Maas, Frank. “The Success of the Light Armoured Vehicle,” *Canadian Military History*, 20, no. 2 (April 30, 2012): 27–36. <http://scholars.wlu.ca/cmh/vol20/iss2/4>.
- Maas, Frank. “From a Beetle to a Porsche: The Purchase of the Leopard C1 Tank for the Canadian Army,” *Canadian Military Journal*, 16, no. 4 (2016): 16–27. <http://www.journal.forces.gc.ca/vol16/no4/PDF/CMJ164Ep16.pdf>.
- Macias, Amanda. “Russia Is Luring International Arms Buyers with a Missile System That Costs Much Less than Models Made by American Companies.” CNBC, November 19, 2018. <https://www.cnbc.com/2018/11/19/russia-lures-buyers-as-s-400-missile-system-costs-less-than-us-models.html>.
- Macnamara, W. D., and Ann M. Fitz-Gerald. “A National Security Framework for Canada.” Institute for Research on Public Policy, October 9, 2002. <https://irpp.org/research-studies/policy-matters-vol3-no10/>.
- Maizland, Lindsay. “China’s Modernizing Military.” Council on Foreign Relations, February 5, 2020. <https://www.cfr.org/backgrounder/chinas-modernizing-military>.
- Mazarr, Michael J., Katharina Ley Best, Burgess Laird, Eric V. Larson, Michael E. Linick, and Dan Madden. *The U.S. Department of Defense’s Planning Process: Components and Challenges*. RAND Corporation, 2019. <https://doi.org/10.7249/RR2173.2>.

- Maloney, Sean M. "The Mobile Striking Force and Continental Defence, 1948-1955," *Canadian Military History* 2, 2, no. 2 (1993): 75–88. <http://scholars.wlu.ca/cmh/vol2/iss2/10>.
- . "Force Structure or Forced Structure? The 1994 White Paper on Defence and the Canadian Forces in the 1990s," *Choices*, 10, no. 5 (May 5, 2004). <https://irpp.org/wp-content/uploads/assets/vol10no5.pdf>.
- "More Soldiers, Tanks Necessary to Fight Taliban: Ottawa." CBC News, September 15, 2006. <https://www.cbc.ca/news/canada/more-soldiers-tanks-necessary-to-fight-taliban-ottawa-1.570030>.
- Nimijejan, Richard. "Introduction: Is Canada Back? Brand Canada in a Turbulent World," *Canadian foreign policy journal* 24, 24, no. 2 (May 4, 2018): 127–38. <https://doi.org/10.1080/11926422.2018.1481873>.
- Nye Jr, Joseph. S. "Will the Liberal Order Survive?: The History of an Idea." *Foreign Affairs* 96. New York, United Kingdom New York, New York: Council on Foreign Relations NY, 2017. <https://search-proquest-com.cfc.idm.oclc.org/magazines/will-liberal-order-survive-history-idea/docview/1858034305/se-2?accountid=9867>.
- O'Rourke, Ronald. "Defense Primer: Geography, Strategy, and U.S. Force Design." Washington, D.C.: Congressional Research Service, February 11, 2021. <https://crsreports.congress.gov/product/pdf/IF/IF10485/15>.
- "Ottawa May Lease 20 New Tanks for Afghan Mission." CTV News, April 3, 2007. <https://www.ctvnews.ca/ottawa-may-lease-20-new-tanks-for-afghan-mission-1.235929>.
- Paris, Roland. "Are Canadians Still Internationalists? Foreign Policy and public Opinion in the Harper Era," *International Journal* (Toronto) 69, no. 3 (2014). <https://doi.org/10.1177/0020702014540282>.
- Pryce, Paul. "On Target: The Procurement of Canadian Artillery." NATO Association of Canada, March 10, 2015. <https://natoassociation.ca/on-target-the-procurement-of-canadian-artillery/>.
- Pugilese, David. "Canadian Army's Stock of M777 to Stay at 37." *The Ottawa Citizen*, June 14, 2009. <https://ottawacitizen.com/news/national/defence-watch/canadian-armys-stock-of-m777-howitzers-to-stay-at-37>.
- Radin, Andrew, Lynn E. Davis, Edward Geist, Eugeniu Han, Dara Massicot, Matthew Povlock, Clint Reach, et al. *The Future of the Russian Military: Russia's Ground Combat Capabilities and Implications for U.S.-Russia Competition*. RAND Corporation, 2019. <https://doi.org/10.7249/RR3099>.

- Rempel, Mark. "An Overview of the Canadian Forces' Second-Generation Capability-Based Planning Analytical Process." Department of National Defence. Defence Research & Development Canada, September 2010.
- Richter, Andrew. *Avoiding Armageddon: Canadian Military Strategy and Nuclear Weapons, 1950-1963*, Studies in Canadian Military History (Vancouver, CA: UBC Press, 2003), <https://deslibris.ca/ID/404043>.
- Roblin, Sebastien. "The British Army Secretly Sent Israeli Missiles to Iraq and Afghanistan." War Is Boring, November 10, 2016. <https://warisboring.com/the-british-army-secretly-sent-israeli-missiles-to-iraq-and-afghanistan/>.
- Sebastian, Sofia, and Aditi Gorur. "U.N. Peacekeeping & Host-State Consent: How Missions Navigate Relationships with Governments." The Stimson Center, March 2018. <https://www.stimson.org/wp-content/files/file-attachments/UN-PeacekeepingAndHostStateConsent.pdf>.
- Stone, J. Craig, and Solomon Binyam, "Canadian Defence Policy and Spending," *Defence and Peace Economics*, 16, no. 3 (2005): 145–69. <https://doi.org/10.1080/10242690500123414>.
- Szayna, Thomas S., Daniel Byman, Steven C. Bankes, Derek Eaton, Seth G. Jones, Robert Mullins, Ian O. Lesser, and William Rosenau. *The Emergence of Peer Competitors: A Framework for Analysis*. RAND Corporation, 2001. <https://doi.org/10.7249/MR1346>
- Thatcher, Chris. "Defining the TAPV." *Canadian Army Today*, December 5, 2017. <https://canadianarmytoday.com/defining-the-tapv/>.
- . "Unit Cohesion: Latvia Battle Group Proving Its Resilience and Resolve." *Canadian Army Today*, January 29, 2020. <https://canadianarmytoday.com/unit-cohesion-latvia-battle-group-proving-its-resilience-and-resolve/>.
- Thomas, Allan. "Change and Effect: The Evolution of Canadian Defence Policy from 1964 to 2017 and Its Impact on Army Capabilities." Canadian Forces College, 2018.
- Tomlin, Brian W., Norman Hillmer and Fen Osler Hampson. *Canada's International Policies: Agendas, Alternatives and Politics*. Don Mills: Oxford University Press, 2008.
- Trevithick, Joseph. "America Is Still Training Ukrainian Troops to Fly a Drone They Hate." The Warzone, April 4, 2017. <https://www.thedrive.com/the-war-zone/8921/america-is-still-training-ukrainian-troops-to-fly-a-drone-they-hate>.

- Troxell, John F. *Sizing the Force for the 21st Century*. Edited by Steven Metz. Revising the Two MTW Force Shaping Paradigm. U.S. Army War College Strategic Studies Institute, 2001.
- Trudeau, Pierre Elliot. "A Defence Policy for Canada," *Statements and Speeches*, 69, no. 7 (April 3, 1969).
- Ucko, David H. "When Intervention Works: The Instructive Case of Sierra Leone." *War on the Rocks*, August 31, 2016. <https://warontherocks.com/2016/08/when-intervention-works-the-instructive-case-of-sierra-leone/>.
- "U.S. - Soviet Relations, 1981-1991." Office of the Historian, U.S. Department of State. Accessed January 21, 2021. <https://history.state.gov/milestones/1981-1988/u.s.-soviet-relations>.
- United States. "Summary of the 2018 National Defense Strategy of the United States of America." Washington, D.C.: United States Department of Defense, 2018. <https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>.
- . "Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2019." United States. Washington, D.C.: United States Department of Defense, May 2, 2019. https://media.defense.gov/2019/May/02/2002127082/-1/-1/1/2019_CHINA_MILITARY_POWER_REPORT.pdf.
- . Department of Defense. TC 7-100.2, *Opposing Force Tactics*. Washington, D.C.: Department of the Army, 2011, 1-14
- . Department of Defense. JP 3-18, *Joint Forcible Entry Operations*. Washington D.C.: Joint Chiefs of Staff, 2018, vii.
- Waltz, Kenneth N. *Theory of International Politics*. Reading, Mass.: Addison-Wesley Pub. Co., 1979.
- "War of 1812 Facts." American Battlefield Trust. Accessed March 16, 2021. <https://www.battlefields.org/learn/articles/war-of-1812-faqs>.
- Woolf, Amy F. "Conventional Prompt Global Strike and Long-Range Ballistic Missiles: Background and Issues." Congressional Research Service, February 14, 2020. <https://search.proquest.com/congressional/view/app-gis/congresearch/crs-2020-crs-202463>.