

"ALONGSIDE THE BEST"?

The Future of the Canadian Forces

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At the beginning of the twenty-first century, the Canadian Forces face a range of challenges. Reduced defense spending, uncertainty regarding missions and tasks, and the lingering effects of recent scandal have resulted in a significantly diminished military. In the midst of a rapidly emerging "revolution in military affairs" (RMA), the Canadian Forces (CF) are poorly positioned to introduce next-generation weapon systems.¹ At the same time, Canada's allies, in particular the United States, have undertaken dramatic defense modernization programs. It is this divergence—Canada's reduced military capability at a time of swiftly advancing technology—that will be the focus of this article. Specifically, the article will examine the degree to which the Canadian Forces are currently interoperable with its allies, and the steps that need to be taken if they are to remain a viable fighting force in the future. It will suggest that rather than maintaining the current (largely fictitious) goal of "multi-purpose, combat capable" forces—as called for in Canada's 1994 defense white paper—the CF

needs to prioritize among the services to ensure that at least one maintains a wide range of interoperability capabilities.²

The service that can make the best case for first priority is the navy, as a result of its modern fleet, widespread political support, and broad range of missions that it can undertake.³ While this will not be an easy decision for the Department of National Defence (DND), a failure to make it will have enormous

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consequences, as a “rusted out” military will be incapable of carrying out Canadian defense and foreign policy goals. In addition, given the importance that Canada places on participating in multilateral operations, it is critical that Canada maintain at least some meaningful capacity to do so.⁴

As a preliminary, “prioritization” should be defined. In the context of this article, it refers to a process whereby one service receives the majority of the department budget and, in particular, the preponderance of the capital equipment budget. The prioritized service is able to field more modern equipment over a shorter time frame than would otherwise be the case. Prioritization does *not* mean that the other two services would disappear or that they would not receive funding for their own reequipment programs. On the contrary, they would remain vital in the contemporary strategic environment, and both would retain valuable capabilities. However, given Canada’s limited security spending (to be examined below) and the enormous cost of modern defense equipment, it will simply not be possible to modernize all three services adequately. Prioritization will produce one service capable of undertaking a broad range of missions and tasks; the other two will focus, if they are to remain viable, on one or two primary missions—missions that do not require disproportionate funding.

Over the last decade, military technology has been transformed, a development with which all countries have had to deal. At one end of the spectrum is the United States, which because of its economic power, global responsibilities, and enormous defense establishment has eagerly embraced military change.⁵ Indeed, the U.S. military has long emphasized advanced technology in pursuit of its strategic and military objectives, and thus the current RMA is entirely consistent with traditional American thinking.⁶ While recognizing that pursuing the RMA will be an expensive undertaking, the United States has demonstrated that it is committed to maintaining the world’s most advanced defense force. The 2002 U.S. defense budget is \$340 billion, roughly equivalent to the combined total spent by all other countries.⁷

The response of U.S. allies, however, to these changes has been less certain. To begin with, there has been considerable frustration that the long-hoped-for (and much anticipated) “peace dividend” at the end of the Cold War proved so fleeting. While defense spending in Europe and Canada had never reached the level that it did in the United States during the four-decade dispute with the Soviet Union, the allies had nonetheless relentlessly emphasized military preparations and forces, and they consequently expected that once the conflict ended, substantial military reductions could finally be achieved. Even the realization that the post-Cold War environment would remain unstable and prone to periodic violence did not appreciably alter this belief. Thus by the mid-1990s, when

advanced technology promised to transform military forces (and threatened to render existing forces obsolete), there was a palpable sense of frustration that large-scale defense expenditures would now be required.

Yet as even a cursory glance at European and Canadian defense preparedness and spending reveals, this military investment has not taken place in those nations. The modest allied reaction to the RMA can be linked to two critical factors—the general weakness of many Western countries in the technologies that are fuelling the RMA, and an unwillingness to spend the money required to field advanced defense forces. With regard to the first point, it is widely acknowledged that U.S. companies are at the forefront of the information revolution; as such, it is they that most often develop advanced technologies that have military applications.⁸ In general, U.S. technology and defense companies are stronger and more competitive than their European and Canadian counterparts. American companies are usually the first to innovate and to bring important new technologies to market, which in turn feeds the major defense contractors a continuing stream of new designs and systems.⁹

As for the second point, none of the major European allies or Canada seems prepared to spend the resources necessary to field state-of-the-art defense forces. While the United States consistently devotes between 3 and 4 percent of its gross national product to defense, most European allies spend between 2 and 3 percent, while for Canada the figure is an embarrassing 1.2 percent.¹⁰ Further, in contrast to the United States, the allies have not demonstrated a willingness to increase defense spending substantially post-11 September 2001, a failure that will result in an even larger spending divergence in the future (indeed, prior to the terrorist attacks, concern was mounting over the continued defense spending *cuts* in several European countries).¹¹ Lastly, the issue is not just how much—or, more accurately, how little—Europeans spend on defense but what they spend their money on. Thus, while the European allies collectively spend approximately 60 percent of what the United States does (i.e., about \$180 billion), they do not have 60 percent of U.S. capabilities.¹² As Ethan Kapstein has recently noted, “Europe seems to get ‘less bang for the buck’ than the United States.”¹³

The result is a growing “capabilities gap” between the United States and its allies, one that shows no sign of diminishing. This gap was first noted at the time of the Gulf War, but it was the 1999 Kosovo conflict that clearly revealed a significant difference in the capabilities of U.S. and European defense forces (not to mention the virtual chasm that existed between U.S. and Canadian forces).¹⁴ In spite of widespread European and Canadian recognition and discussion of the problem since that time, the gap has not closed; defense cuts continue to downgrade military forces.¹⁵

On both sides of the Atlantic there is considerable concern over this gap and growing unease over its implications. Such concern led the American Defense Science Board, a senior advisory panel, to undertake a study in 1999 that examined how U.S. allies were coping with rapid technological change and whether there were any steps that the United States could take to ease the transition.¹⁶ Contrary to the popular view that a rampaging unilateralism has overtaken Washington, there is a widespread American acceptance of the importance of working with coalition partners in international security issues. The United States has realized—perhaps somewhat reluctantly—that it is compelled for diplomatic as well as practical reasons to ally itself with other actors.¹⁷ This circumstance has applied not only to operations under the authority of the United Nations or Nato but also in the context of ad hoc coalitions, like the present campaign in Afghanistan.¹⁸ However, in spite of this recognition, allied military weakness may prove to be the Achilles' heel of such operations. Indeed, there is growing concern in the United States that such weakness may ultimately increase the risks to American troops, a prospect that could make future strategic cooperation difficult.

Similarly, Nato officials, after a lengthy period of apparent indifference, now seem to appreciate the dimensions of the problem. In the most recent reflection of this newfound awareness, Nato's secretary general, Lord George Robertson, warned in February 2002 that if the capabilities gap "[is] allowed to increase, it will mean there won't be coalitions in the future because the Americans will not be able to operate [with the allies]."¹⁹ In essence, Robertson's warning was a restatement of one he had made during the Kosovo war, when he had spoken of a "two speed" alliance, in which Europe would be unable to participate in missions that the United States led.²⁰

It is difficult to overstate the significance of these warnings or, even more importantly, their sources. There is now recognition within Nato that the inability of allies to work together on the battlefield will undermine—and perhaps ultimately doom—the alliance. The United States might restrict its role in alliance missions to providing the advanced logistics, lift, and airpower that it alone can supply. Tension could arise if European and Canadian armies, accordingly, find themselves disproportionately responsible for the dangerous manpower-intensive tasks that can lead to significant casualties.²¹ Further, the United States might feel that it is entitled to have a say in alliance decision making commensurate with the fact that it provides the bulk of military assets.²²

It is against this backdrop that the debate over Canada's defense preparedness and interoperability with the United States is taking place. To many observers, Canadian defense weakness means that Canada will become a U.S. ally in

political terms only, unable to make meaningful military contributions to multilateral coalitions; some critics would suggest that this day has already arrived. However, Canada's difficulties in cooperating with the U.S. military and in dealing with advanced defense technology are similar to those of many other American allies and, given the extensive history of defense cooperation between the two countries, constitute a troubling development. Indeed, since 11 September 2001, the issues related to interoperability have taken on a new urgency in the North American context, as the various Canadian agencies dealing with border issues, law enforcement, and intelligence have begun to integrate themselves formally around joint tasks with their American counterparts.²³ Perhaps most importantly, a new regional military structure, U.S. Northern Command, responsible for American homeland defense, became operational on 1 October 2002. NorthCom's area of operations will include not only the United States and Canada but Mexico and parts of the Caribbean as well. It is apparent that this new command will create additional pressure upon the two countries' militaries to cooperate.²⁴

Viewed from a broader perspective, then, the Canadian experience with advanced military technology and interoperability is an interesting case study in how U.S. allies are adapting to the emerging military and strategic environment. In this regard, while virtually all Western militaries now acknowledge that some form of RMA is taking place (and most are trying to identify strategies for dealing with it), their forces are evolving in very gradual, measured ways. Thus, examining how one key U.S. ally is adapting will tell us much about the challenges that other actors may face. Most crucially, it will offer lessons useful to Washington in how to approach allies who wish to participate in multilateral operations, and it will offer guidelines as to the types of capabilities that allies can be expected to provide.

The first section of this article examines interoperability itself—what it is and why it is important. It also briefly looks at recent developments that have made interoperability such a major concern for the militaries of many countries. The next part will focus on Canadian defense capabilities in each of the three services and upon the modernization programs that are presently under way, by way of determining which service is best positioned to take advantage of the RMA and what steps need to be taken. The last section offers concluding observations and findings, as well as suggestions on strategic development in light of the events of 11 September 2001 and the subsequent U.S.-led war on terrorism.

INTEROPERABILITY IN THE CANADA-U.S. CONTEXT

While the concept of interoperability may appear to be relatively straightforward, in practice interoperability is almost always controversial and difficult to

realize.²⁵ It is therefore important to have a clear definition of what interoperability is and of why its achievement can be so problematic.

According to a recent RAND Corporation study, interoperability “is a measure of the degree to which various organizations or individuals are able to operate together to achieve a common goal.”²⁶ Thus interoperability is not necessarily a military concept but has applications across the business, political, and strategic worlds. For the purposes of this article, though, interoperability will be examined in its military sense, and hence a more precise definition is required. The U.S. military defines interoperability as “the ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces, and to use the services so exchanged to enable them to operate effectively together.”²⁷ This notion of seamless cooperation and efficiency is the hallmark of an interoperable fighting force. This definition includes issues related to standardization, integration, cooperation, strategy, and defense production.²⁸

Military interoperability can be further defined at the operational and technical levels.²⁹ *Operational interoperability* addresses support to military operations, focusing on people and procedures. Implementation of operational interoperability involves testing, certification, training, and force configuration. This definition encompasses the entire spectrum of military operations.³⁰ *Technical interoperability* is essential to achieving operational interoperability. Rather than focusing on people, however, technical interoperability stresses communications and electronics equipment, ensuring that information can be relayed quickly and efficiently.³¹ On the modern battlefield, rapid communications are a necessity for effective operations—information related to weapon systems, software and associated operating systems, and intelligence at the command level. In a worst-case scenario—two militaries with identical weapons as well as common training and procedures but incompatible communications and data networks—cooperation will be difficult and the result could be errors, mistakes, and missed opportunities.

In a general sense, the ultimate goal of interoperability is not to ensure that all contributors to a coalition will necessarily deploy similar military forces or weapon systems but rather to achieve a practicable level of cooperation between their contingents.³² As Danford Middlemiss and Dennis Stairs have recently argued in a study on interoperability in the Canadian context, “from the military point of view, the overarching objective is thus to make a militarily relevant and effective contribution to multinational security efforts at the maximum possible level of efficiency.”³³

But definitions and descriptions alone cannot convey the critical role that interoperability plays in the contemporary military environment. Recent operations in Iraq, Bosnia, and Kosovo, as well as evidence from experiments and

exercises, point to the dramatic improvement in operational effectiveness that can be achieved by using advanced command, control, communications, computers, and intelligence systems and sharing information in a timely manner. A “common operating picture,” along with the associated decision-support capabilities, can have enormous effects on the pace and nature of military engagements.³⁴

This is not to suggest that achieving interoperable defense forces is a simple task. On the contrary, the challenges posed by differing force structures, weapon systems, and training techniques highlight the problems of realizing interoperability in practice. A recent U.S. study that examined forty coalition operations identified a long list of difficulties, including divergences between U.S. and allied forces, differences in decision-making procedures, and communications discrepancies.³⁵

In addition to such apparent obstacles, a wide range of “soft factors” can make effective cooperation virtually impossible. Such factors can include disagreement over or misunderstanding of goals, priorities, and rules of engagement; commitment of national forces to incompatible tactical, organizational, or other professional doctrines; and outright policy disputes.³⁶ Such sources of divergence can create havoc in the field, particularly when the individual contingents involved are not large enough to be self-sufficient.

However, no discussion of the challenges to interoperability should mask the real benefits that it offers, particularly to smaller countries. Most significantly, interoperability enables a country with only modest military capabilities to contribute in a meaningful way to multinational operations.³⁷ Such contributions tangibly demonstrate a commitment to resolving the conflict at hand. Perhaps most critically, interoperable military forces offer visibility to other countries, and they can generate political “IOUs” from coalition partners and allies alike, chips that can be cashed in at some future point.

At the same time, though, interoperability has political costs, arising especially from the perception of reduced sovereignty and a general impression of weakness resulting from acknowledgment that one’s military is no longer able to act independently. Thus, for example, multilateral missions may involve a significant loss of decision-making power for the smaller coalition powers and create an impression that a country has little say in how its forces are used.³⁸ Furthermore, a history of successful military interoperability may create pressure to participate in future missions, even those that do not have strong domestic political support, as defense ties are created and military alliances forged.

As far as Canada and the CF are concerned, interoperability has long been a major goal. Since 1945, Canadian governments have accepted that the country’s military forces are incapable of defending the country on their own and that as a result cooperation with the United States and other allies is necessary. Canada

was therefore a major supporter of the North Atlantic Treaty in 1949 and signed an air defense agreement with the United States in 1958. Both treaties required Canada to train and field military forces that could cooperate effectively with allies, although throughout the Cold War (but particularly after 1970) there were persistent warnings that Canada's defense forces were inadequate and lacked the equipment and personnel necessary for sustained military operations.³⁹

The 1994 Defence White Paper reaffirmed the need for Canada to maintain diverse and capable military forces. The white paper rejected the argument that Canada required only a defense force largely focused around "constabulary" tasks;⁴⁰ instead it held 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, able to fight 'alongside the best, against the best.'"⁴¹ The white paper left no doubt that Canada needed a modern defense establishment, one that could cooperate with a U.S. military that was the world leader in introducing and deploying sophisticated military technology.⁴²

Since that time, in spite of significant defense spending cuts, the goal of an interoperable CF has been reiterated on several occasions.⁴³ In 1999, DND released a major planning document intended to mould defense strategy for the first two decades of the new century. Titled *Shaping the Future of Canadian Defence: A Strategy for 2020*, the study established both short and long-range goals for the Canadian military. Among those goals was to "strengthen [Canada's] military relationship with the U.S. military to ensure Canadian and U.S. forces are interoperable and capable of combined operations in key selected areas."⁴⁴ In addition, it identified three targets for the next five years: to manage interoperability with allies so as to permit "seamless operational integration at short notice"; to develop a program to adopt new doctrine and equipment compatible with Canada's "principal allies"; and to expand the joint and combined exercise program to include "all environments and exchanges with the U.S."⁴⁵ While interoperability was explicitly discussed in only one of the eight core objectives identified for the CF, "it is hard to resist the conclusion," as one observer recently noted, "that [interoperability with the United States] is the [objective] that matters most."⁴⁶

The goal of interoperability was reaffirmed in *Strategic Capability Planning*, released in June 2000 by the vice chief of the Defence Staff. It noted that by "achieving the goal of interoperability with U.S. forces in particular, who are currently and for the foreseeable future setting the standard for advanced military equipment, [the Canadian Forces] will almost certainly be capable of operating effectively with the rest of [Canada's] major allies, providing significant flexibility in [Canada's] approach to foreign affairs."⁴⁷

Lastly, in *At a Crossroads* in 2002, the chief of the Defense Staff again gave priority to interoperability. This report noted that “maintaining interoperability remains key to the future relevance of the CF” and highlighted common training practices, the establishment of joint doctrine, and participation in the Multinational Interoperability Council (which aims to enhance interoperability through “improved data exchange and operational information”).⁴⁸

In sum, interoperability is a primary goal of the Canadian Forces.⁴⁹ However, at a time when the pace of military innovation is dramatically increasing, achieving interoperability in practice poses serious challenges.

FORCE STRUCTURE AND SERVICE MODERNIZATION PLANS

The Canadian Forces today suffer the consequences of decades of neglect, inadequate funding, and questionable decisions regarding force structure. As a result, they are in a relatively poor position—at least in comparison to many other Western nations—to field interoperable defense forces and to take advantage of the RMA. At best, they can pursue what some observers have called a “niche” RMA strategy, while fielding specialized forces that offer interoperability capabilities.⁵⁰

The Department of National Defence was slow to recognize the military changes brought about by the revolution in technology.⁵¹ Inertia seemed to be the primary DND response until around 1998, when a belated effort to study the revolution in military affairs began.⁵² This response was slow not only in comparison to most of Canada’s allies but came more than a decade after the Pentagon first began to recognize and study the RMA.

The combination of the slow departmental response with limited defense budgets has, in turn, meant that all three services have been sluggish in developing RMA plans. However, one area that has witnessed significant change in the CF is command and control. Over the past few years, numerous new bodies have been established, including a Joint Imagery Centre, an Intelligence, Surveillance, and Reconnaissance Fusion Centre, and a Joint Operations Group.⁵³ As can be seen from these examples, the notion of “jointness,” which many believe to be a key component of the RMA, has been eagerly adopted by DND. An additional step has been the amalgamation of the 1st Canadian Division Headquarters with the Joint Force Headquarters, to create the Canadian Joint Force Headquarters.⁵⁴ While limited in terms of capabilities, each of these new structures demonstrates some recognition that a transformation in command and control is required in the RMA environment.

DND has also signified its intention to create a new, highly mobile ground force. In 2000, the minister of national defense announced the CF’s plan to establish “a combat-ready strike force to respond swiftly to global crises to prevent the loss of innocent life and strengthen Canada’s influence with its allies.”⁵⁵ This

force similarly seems to be an attempt at creating a more RMA-relevant force, as rapid response has been shown to be crucial in the post–Cold War strategic environment.

In spite of these changes and plans, however, the services themselves have very limited abilities to restructure themselves to take advantage of changes in military technology. Each of the services—but in particular the air force and the army—has dated or even antiquated equipment and is unlikely to acquire advanced weapons platforms in the near future. The implications of this development have so far gone largely unrecognized in DND;⁵⁶ this, however, cannot continue much longer, at least not if the department intends to formulate a coherent defense strategy. To put it simply, a moment of truth is coming for the Canadian military, which would be wise to consider the options and make its choices well before decisions are effectively made for it.

The Army

Of the three services of the CF, the army is in the worst shape militarily, presently the least able to carry out its stated missions, let alone accept new ones. It also suffers from dated equipment and political indifference. The result is a force uncertain of its present and future, and an unlikely candidate to receive priority.

The army today numbers about twenty-three thousand personnel, or about 40 percent of the total CF.⁵⁷ This numerical strength should not come as a surprise, given the wide range of tasks the army (theoretically, if not in practice) performs, ranging from conventional warfare at one end of the conflict spectrum, to peacekeeping and other low-intensity conflict (LIC) missions, and more recently, to domestic tasks like fighting floods.⁵⁸

However, it is peacekeeping that has become most important for the army over the last several decades. Successive Canadian governments have emphasized peacekeeping, and there is a widespread international perception that the army has been geared specifically toward the task.⁵⁹ In addition, the declaratory Canadian emphasis—at least during the five-year tenure (1996–2000) of Foreign Affairs Minister Lloyd Axworthy—on “soft power” and “human security” has given peacekeeping and other LIC tasks priority over more traditional army missions.⁶⁰ The result is an army with a combat capability that has been systematically reduced for decades.

The prominence of peacekeeping (and related peace-support operations) can be seen most dramatically by examining the number of such missions that the Canadian Forces have accepted in the recent past. Canada participated in nineteen United Nations and non-UN peacekeeping assignments between 1947 and 1986; that number ballooned to over twenty-five between 1988 and 2000.⁶¹ The acceptance of so many missions has created considerable strain for the army,

which has frequently found it difficult to provide the forces pledged by the government.⁶²

Peacekeeping, however, is essentially irrelevant to the RMA, a fact having major implications if the army is to remain interoperable with the land forces of Canada's allies. This is not to suggest that RMA weapons can play no role in peacekeeping or other LIC missions; nonetheless, the technological requirements of advanced military platforms, combined with the emphasis on sensing equipment, simply do not translate well at the low end of the spectrum and may even be counterproductive in some cases.⁶³

Peacekeeping aside, the army is largely incapable of carrying out its present commitments and would require a complete overhaul to become more RMA relevant. The army's standing field forces consist of three mechanized brigade groups. Each group is composed of three infantry battalions, an armored regiment, an artillery regiment, and an engineer regiment, along with combat support and combat service support.⁶⁴ While each brigade should number about six thousand personnel, their current strength is actually about 4,500 (a figure that is reached only with the inclusion of hundreds of reservists). Further, while each should be capable of operating without assistance, the reality is that were a Canadian brigade group deployed, it would be heavily dependent on additional resources provided by allies, especially for fire support, engineers, and electronic warfare.

The term "mechanized brigade group" is a peculiarly Canadian one and thus deserves additional comment. A brigade is a basic army formation; a brigade group is more comprehensive. A mechanized brigade group is based predominantly on infantry but is equipped with a variety of fighting vehicles. These vehicles normally include tanks and armored personnel carriers, as well as long-range howitzers and other artillery. This combination of firepower and mobility allows the group, ideally, to undertake a broad range of operations.⁶⁵

For overseas engagements, the army is supposed to be able to field a single "Sabre" brigade group, which consists of mechanized infantry battalions, an armor regiment, armored reconnaissance, an engineer regiment, and a service battalion. Such a brigade has a complement of six thousand personnel and would be augmented by air defense and tactical aviation. Units drawn from the three field brigades would form the Sabre brigade, which, it is envisaged, would operate as part of a larger multinational or binational force and would necessarily be able to integrate its combat functions with those of the larger formation.⁶⁶ However, the Sabre brigade is not designed to take part in high-intensity combat, only low-to-middle-level engagements. Thus, if it were ever deployed—which it has never been—particular care would have to be taken to ensure that it

was not placed in a sophisticated warfare environment, a restriction that obviously reduces its utility.⁶⁷

As to what would constitute an appropriate conflict for the brigade, there are grounds for concern. According to the army, “low-level operations” involve terrorism or some form of insurgency (with the application of the minimum necessary force), while a “midlevel operation” is another term for limited war, like the Gulf War or the 1999 Kosovo campaign, where the use of force is localized and noncontinuous. Lastly, “high-intensity conflict” refers to total war. However, in the twenty-first century, it is not at all clear that such terms have much meaning or that they delineate operationally distinct missions. Put simply, as 11 September has demonstrated, terrorism can inflict enormous devastation (indeed, should terrorist groups get hold of weapons of mass destruction, the results could be indistinguishable from those of total war), and the fight against terrorism requires an array of capabilities and strategies. Further, the proliferation of sophisticated conventional weapons in the 1980s and ’90s means that even substate actors and terrorist groups may now possess significant military capabilities; consequently, considerable caution must be employed when engaging them. Thus the operational distinctions that Canada seems to assume may no longer exist. The net result is that the constraints limiting the Sabre brigade must be interpreted so broadly as to all but preclude its participation in operations against any country or actor with modern defensive capabilities.

The question of whether the Canadian Forces are even capable of deploying the Sabre brigade is an open one. While officially DND maintains that it can fulfil all its commitments, the army has acknowledged that deploying the brigade would require its “entire focus” and could require the withdrawal of Canadian peacekeepers overseas.⁶⁸ In addition, should the unit suffer significant casualties, finding replacements would pose an enormous challenge, one that would quickly overwhelm the manpower reserves (such as they are) of the army. Further, the army lacks strategic lift; the CC-130 Hercules transports (to be examined below) would be hard pressed to carry much of the brigade’s equipment.⁶⁹ Lastly, regular training in the Canadian army has been funded at the subunit level only; adequate training at the battle group and brigade levels is lacking.⁷⁰

Doubts regarding the Sabre brigade were raised anew in August 2002, when it was reported that DND had considered deploying it to Afghanistan as part of Canada’s commitment to the U.S.-led war on terrorism.⁷¹ However (as noted below), concern over the CF’s ability to maintain and operate the brigade, acknowledged inability to provide adequate medical supplies, and insufficient logistical support led to a decision to send a much smaller contingent. The controversy has led to renewed speculation regarding the future of the brigade and

the desirability of maintaining a “capability” that the Canadian Forces, in reality, cannot exercise.

With regard to equipment, the army—perhaps not surprisingly, given its inability to engage in high-intensity combat—must make do with a long list of outdated weapon systems. Indeed, the army itself has provided the most damning critique of its capabilities. In a 1998 report, the Land Forces Command noted that “the Army’s ‘core’ combat capability remains constrained by obsolescent and obsolete 1960s and 1970s equipment that impose limitations on the tasks that can be undertaken with acceptable risks and is becoming increasingly expensive to operate and maintain.”⁷²

The army’s primary combat weapon system remains the Leopard I main battle tank, acquired in the mid-1970s. While a sophisticated tank at the time it was introduced, the Canadian Leopard has not been regularly upgraded; it is essentially unchanged from the original model. With a (relatively) small 105 mm main gun and no reactive armor, the Leopards are a marginal weapon at best on the modern battlefield. Given the dramatic changes that have occurred in tank technology over the last twenty-five years, the Leopards would prove easy targets in virtually any combat environment. They are presently, at last, getting badly needed renovations, but few defense observers believe that they will be appreciably strengthened as a result.⁷³

An additional army deficiency is the lack of tactical aviation. Unlike the United States (with its AH-64 Apache), Canada has never owned a dedicated attack helicopter. Instead, it assumes that allies will provide such capabilities. Canadian army helicopters primarily perform reconnaissance and transport missions.⁷⁴ To accomplish such tasks, the army acquired in the mid-1990s a hundred Griffon helicopters, a platform based on a commercial civilian design (by Bell Helicopter). The program has been plagued by controversy, uncertainty, and deficiencies that have been well documented.⁷⁵ Indeed, in the summer of 2002, a quarter of the Griffon fleet was temporarily grounded after a fatal accident in which a tail-rotor blade disintegrated.⁷⁶



Developmental Leopard 2

There are too many additional army equipment deficiencies to list here. However, among the most glaring are the lack of an IFF (identification, friend or foe) system to reduce the possibility of “friendly fire” accidents, limited mine-detection and clearing capabilities, few intelligence assets, and an inadequate capacity to decontaminate personnel in the event of exposure to nuclear, biological, or chemical weapons.

Ironically, the incapability of Canadian land forces to wage high-intensity warfare and their marginal utility in midlevel operations effectively reduce the importance of army interoperability. A force has little need to ensure that its

equipment and training allows seamless integration into a larger formation if it cannot take part in most of that formation's operations. As Joel Sokolsky has recently noted, there are different levels of interoperability, of which the highest (which he calls "a seamless fusion of military forces") is required in "high intensity combat operations." For various LIC missions, Sokolsky argues, "a lower level of interoperability [is] necessary."⁷⁷

This is not to suggest, however, that maintaining an interoperable land force is not a professed goal of the Canadian army, for it clearly is. The value of comparable training procedures and doctrines has been highlighted by the Canadian participation in the war in Afghanistan and the deployment there of 850 soldiers of Princess Patricia's Canadian Light Infantry. Prior to their arrival, the commander of the U.S. forces in southern Afghanistan said that the integration of the two countries' forces would be "seamless";⁷⁸ this characterization, defense analysts explained, would result from common training practices.⁷⁹ The Canadian troops left Afghanistan in July 2002, after only six months, but there is widespread acceptance that they performed a valuable mission—primarily, assisting U.S. forces in capturing remaining al-Qa'ida and Taliban fighters and securing the Kandahar airport—and made a major contribution to the larger war effort.⁸⁰ The interoperability achieved in Afghanistan was the result of years of careful planning and reflected a strategic decision to bring Canadian army operational procedures in line with those of the United States (at least to the extent possible, given Canadian military weakness).⁸¹

As for modernization plans, a few army initiatives can be noted. The army is taking some initial steps to develop a capacity to function on the emerging "digitized" battlefield.⁸² The Iris Tactical Command, Control, and Communications System consists of handheld and vehicle-mounted radios that will provide a secure communications capability. Further, the Situational Awareness subsystem will show unit commanders where all friendly and enemy vehicles are, with pinpoint accuracy.⁸³ The army is also in the process of modernizing its armored fighting vehicles, an important step in the creation of a more mobile force.⁸⁴

With regard to plans to reshape the army, a study prepared in 2000, *Army of Tomorrow*, outlined a blueprint for a transformed Canadian land force.⁸⁵ The document calls for a more technology-dependent army, utilizing advanced sensors and precision weapons, and capable of participating in joint and combined operations. Perhaps most critically, it calls for a much smaller force, with only two brigades and a significantly reduced artillery corps.

An even more important army blueprint was released in May 2002 by the service's commander, Lieutenant General Mike Jeffrey. In a document titled *Advancing with Purpose*, Jeffrey called for a radically reformulated Canadian army, one that would be based around units of one hundred soldiers instead of the present seven-hundred-man battalions.⁸⁶ Jeffrey's plan would create a

much more flexible structure and would place considerable emphasis on the readiness of light infantry and on command and communications functions.⁸⁷ While the plan certainly represents a bold rethinking of the size and purpose of the army, it is difficult to overstate the financial impetus behind it; as Jeffrey has noted, “I don’t see a better way unless of course someone has got a lot more money to build me a lot bigger army.”⁸⁸

These initiatives aside, inadequate equipment, uncertain strategic goals, and near-constant manpower reductions have produced a service in crisis, as many have observed.⁸⁹ For example, in 1999 the Conference of Defence Associations, a pro-DND lobby group, stated that “the Canadian Forces, especially the army, are on the verge of collapse.”⁹⁰ As noted, the army itself has been surprisingly candid, accepting that it is in a “fragile” state, with erosion beginning to set in.⁹¹ In short, the prognosis for the army is bleak. The emphasis on peacekeeping has resulted in a force that can take part in only low-level combat, quite a contrast to the role the Canadian army played in the last century’s two global conflicts.⁹²

The Air Force

Like the army, the Canadian air force is battling equipment obsolescence and declining capabilities. Recent engagements, particularly Operation ALLIED FORCE over Kosovo in 1999 (the Canadian portion of which was called Operation ECHO), demonstrated serious interoperability concerns, concerns that placed allied aircraft and their crews in potential danger. Given the prohibitive cost of replacements for the ageing CF-18s, the limited roles that the present aircraft can perform, and questionable political support, the air force also is a poor candidate for prioritization over the other services.⁹³

The decline of the air force has been particularly dramatic since 1994. That year’s white paper outlined a series of steps necessitated by the reduction in defense spending. Most critically, expenditures on fighter forces and their support were to be reduced by 25 percent. To achieve those savings, the air force was required to retire its CF-5 fleet, cut its fighter-related overhead, reduce annual authorized flying hours, and scale back the number of operational CF-18s, the sole remaining combat aircraft in its inventory.⁹⁴ As a result, measured by the number of personnel (thirteen thousand), the air force today is the smallest it has been since 1948.⁹⁵

Canada’s 138 CF-18s were purchased in the early 1980s and are the original A/B models produced by the American manufacturer McDonnell Douglas. A second version of the plane, the C/D model, was produced in the late 1980s and early 1990s and included a large number of improvements over the original. In 1998, the Boeing Corporation—having purchased McDonnell Douglas several years earlier—began manufacturing the third variant of the aircraft, the E/F

(nicknamed “Super Hornet”), a model that became operational in 2002.⁹⁶ All F-18s in the active inventory of the United States are already at the C/D standard and will be upgraded to E/F by mid-decade. In contrast, most CF-18s have never been upgraded (although a current modernization program will be examined below), with the result that many of their systems are approaching obsolescence and are facing serious challenges in supportability and the availability of spare parts.⁹⁷

Canada’s CF-18s have taken part in two major conflicts in the last decade. In the Gulf War, twenty-four CF-18s were deployed to perform defensive combat air patrols; in the war’s later stages the aircraft also performed sweep and escort missions—the first time since the Korean War that Canadian aircraft had been involved in offensive air operations.⁹⁸ In 1999, eighteen CF-18s were deployed to



CF-18s

Aviano, Italy, where they took part in ALLIED FORCE. Canadian aircraft played an active part in the bombing campaign, one of only five Nato countries to do so (the others being the United States, Britain, France, and Germany).⁹⁹

With regard to Operation DESERT STORM, there were numerous interoperability problems associated with the CF-18. For example, Canadian aircraft were deficient in tactical air communications equipment. Specifically, the CF-18s lacked the Link-4 ship-to-aircraft datalink system, necessary for secure transmissions with the Aegis anti-air-

craft cruisers that guarded the coalition surface fleet. Until the problem was resolved by an upgrade arrangement negotiated with the United States, it delayed Canadian engagements against hostile Iraqi aircraft.¹⁰⁰

The Canadian sweep-and-escort missions in the Gulf raised two different sets of problems. The first stemmed from a lack of secure voice radio communications, which forced a change in coalition bombing missions to higher altitudes for greater protection against enemy missiles and artillery.¹⁰¹ The second problem was inadequate refuelling capability. At the onset of the operation Canada deployed a refuelling aircraft, a converted Boeing 707 nicknamed “Husky One,” to support the CF-18s. But after sixteen consecutive days of operation, the aircraft was grounded due to hydraulic problems. This became a serious matter for the CF-18s, as most of the coalition tankers in the region had nozzles that were incompatible with CF-18 refuelling probes.¹⁰²

Additional problems were experienced with the Canadian bombing effort. Most critical was a lack of precision-guided munitions (PGMs). Canadian CF-18s had not been reconfigured to carry the new, more accurate ordnance and as a result were limited to dropping “dumb” bombs against Iraqi artillery and vehicle convoys.¹⁰³ A further difficulty involved doctrinal differences and tactical-

level training. For example, Canadian pilots had not been trained to perform high-altitude bombing, a problem that was rectified only through extensive training and exercises.

The air force spent the years following DESERT STORM addressing some of the problems that had been identified, but there were some notable failures, with the result that many of the same issues resurfaced during ALLIED FORCE in 1999. For example, Canada (still) did not have a strategic air-to-air refuelling capability; it was wholly dependent on the United States in this respect.¹⁰⁴ Further, Canada had acquired only a limited number of laser-guided PGMs prior to the campaign;¹⁰⁵ Canada did not acquire any satellite-guided munitions.¹⁰⁶ In addition, Canadian aircraft lacked night-vision devices and helmet-mounted bombsight “cueing” systems, the absence of which degraded the safety of their maneuvering and the effectiveness of their bombing. Most critically, Canada still had no secure voice communications—it was the only Nato country that did not—a failing that forced the entire allied air effort to use single-frequency (and thus jammable) equipment.¹⁰⁷ An air force assessment of the campaign concluded that “we could not repeat the same level of activity, and in most scenarios we would not be permitted to participate to the same extent, due to our increasingly outdated equipment.”¹⁰⁸

In 1999, with the CF-18s approaching the ends of their expected service lives in five to ten years, the air force introduced a plan designed to keep the aircraft flying until approximately 2020. The Incremental Modernization Program (IMP) has a budget of eight hundred million dollars (U.S.) and is now well under way. The project consists of ten independent ventures, including enhanced computer capabilities, new electronic warfare systems, and an improved radar suite.¹⁰⁹ However, even after all the upgrades are completed (in 2008), the CF-18s will have been brought up only to the operational standard the U.S. F-18s attained almost twenty years ago. Even more worrisome, with the introduction of the F-22 Raptor in the United States in 2005 and the Joint Strike Fighter (JSF) in 2008 (and the expected gradual retirement of the F-18s), U.S. aircraft standards will by then have been entirely transformed, well beyond the capability of the CF-18s.¹¹⁰ In addition, the air forces of many of Canada’s allies will receive new aircraft over the next decade, making effective cooperation increasingly unlikely.¹¹¹ Lastly, with price tags of ninety million dollars (U.S.) per aircraft for the F-22 and about fifty million for the JSF, both aircraft will be far too expensive for the CF to purchase (barring an unexpected and massive defense spending increase).¹¹²

For transport, the air force has thirty-two turboprop CC-130 Hercules aircraft. Their most important function is to carry cargo, but they can also be used to carry passengers, and they have a marginal capability for aerial refuelling. The

Hercules is also the principal fixed-wing search-and-rescue aircraft of the Canadian Forces.¹¹³

In service since the 1960s (although some were purchased in the early 1970s), the Hercules, like many other Canadian weapons platforms, are nearing the ends of their operational lives. Indeed, DND recently acknowledged that only a third of the fleet is available for daily operations; the majority require nearly continuous repairs.¹¹⁴ The retirement of the Hercules will pose a particularly daunting challenge, as these highly versatile aircraft have been depended upon for virtually all deployments of CF personnel abroad.

While a comprehensive modernization program could extend the life of the Hercules force for perhaps ten years, a replacement aircraft will have to be purchased in the next few years if DND is to maintain a transport capability past 2010. The obvious candidate is the C-130J Hercules, a modernized version of the venerable aircraft. However, it costs about seventy million dollars (U.S.) per plane and has cargo limitations; the government has to date not approved any such purchase.¹¹⁵ A second possibility is a limited acquisition of more expensive Boeing C-17 Globemasters, an aircraft that is now widely used by the U.S. Air Force.¹¹⁶ Despite the cost of either option, purchasing a replacement aircraft for the Hercules has become a top priority of DND; the *2001–2002 Report on Plans and Priorities* declares that “develop[ing] options to enhance [Canadian forces’] deployability, including strategic lift” is a primary objective of force structure modernization.¹¹⁷

Finally, despite attempts to emphasize the air force’s nonmilitary capabilities, airpower runs inherently counter to the “soft power” view of the world that prevails within the Liberal government, particularly the Department of Foreign Affairs.¹¹⁸ As a result, the air force is unlikely to attract significant political support any time soon.

The air force, then, is facing a difficult period. Its sole combat plane is verging on obsolescence, it has no strategic lift capability to speak of, and its transport aircraft are ageing and increasingly error prone. All this will seriously impede the efforts of the Canadian air force to become functionally interoperable with the U.S. Air Force. There is little question that in the opening stages of future conflicts (as in the Persian Gulf, Kosovo, and Afghanistan) the United States will look to utilize its airpower, a capability that no prospective enemy can match. Indeed, it has been recently observed that “across the spectrum of conflict, air supremacy is now the *sine qua non* of U.S. military activity, the arm of choice and the enabler and protector of all other arms.”¹¹⁹ Thus Canada’s air weakness may effectively negate its ability to participate in U.S.-led military operations.

Certainly, if it were up to DND, Canada would retain a sophisticated air combat capability and would remain a potential air coalition partner of the United

States. One could argue that the Incremental Modernization Program is designed with precisely this in mind. However, if this is indeed the air force's intent, the IMP is not sufficient, nor is it apparent that any country of Canada's size and resources could do much better. Combat aircraft are presently undergoing a revolution in terms of performance and capabilities, a transformation not experienced since the late 1940s and early 1950s, when jet engines and air-to-air missiles were first introduced. Only countries with large and sophisticated militaries (the United States, Britain, France, Israel, and perhaps one or two others) will now be able to field first-rate air forces.

Other nations are left with the options of either operating second-tier air arms or concentrating on noncombat air missions (for example, command and control or aerial surveillance). Given U.S. air superiority over both friends and foes alike, the question needs to be asked: do allies of the United States *need* to operate advanced combat aircraft? It is highly unlikely that any Western country would feel obliged to go it alone against a prospective foe; fielding and maintaining advanced combat aircraft in order to do so are now very demanding and expensive tasks. In any case, the choice will be difficult for Canada, a country with a long and proud record of aerial service.¹²⁰

Canadian CF-18s have played no part in the bombing campaign over Afghanistan. Their inability to operate from U.S. aircraft carriers was the official reason given.¹²¹ An additional explanation, however, may have been that the United States desired the assistance of only forces that would add appreciably to the campaign.

The Navy

The navy is in the best shape of Canada's three services, and it is the obvious candidate for prioritization. It enjoys relatively modern equipment, strong political support, and a strategic mission that is broadly consistent with Canadian foreign policy goals. In addition, it has an excellent working relationship with the U.S. Navy, perhaps the closest of any American ally. A decision to prioritize the navy will not only allow it to purchase badly needed equipment but will ensure a strong Canadian naval presence well into the future.

The navy's major warships are twelve *Halifax*-class frigates, four *Iroquois*-class destroyers, two fleet support vessels, and four submarines. In addition, it operates a maritime aviation force of thirty Sea King helicopters and twenty-one long-range patrol aircraft.¹²² Lastly, the navy has recently acquired twelve maritime coastal defense vessels.

The frigates are the pride of the fleet. Delivered between 1992 and 1998, they can perform a variety of roles, depending on the circumstances, against under-surface, surface, or air threats. A *Halifax*-class frigate can search some thirty-two

thousand square kilometers (about 12,400 square miles) of ocean in about ten days, before it requires refuelling.¹²³ To detect and track submarines, and to extend the range of territory that the frigate is able to scout, each frigate carries one Sea King helicopter (examined below). The frigates are quite heavily armed with an array of missiles, guns, and defensive systems.



Frigate HMCS Vancouver

The destroyers, while hardly new (they were purchased in the early 1970s), have been extensively modernized and refitted over the years and are still effective warships. They have been outfitted with an area-air-defense system by which they can extend protection to other vessels—radars, an inventory of twenty-nine long-range surface-to-air missiles, and chaff launchers. The destroyers have also been fitted with command and control facilities that allow them to serve as flagships for Canadian or allied task groups.¹²⁴ This combination of modern air defense and command and control capabilities merited redesignation of these ships as guided missile destroyers (DDGs). It should be noted, though, that the destroyers are scheduled to be withdrawn from service at the end of the decade.¹²⁵

The navy's *Victoria*-class submarines are in the process of being introduced. Purchased (slightly used) from Britain in the mid-1990s, they offer an enormous improvement over the now-withdrawn *Oberon*-class submarines, which had been in service since 1963 and were effectively obsolete.¹²⁶ While the Russian navy does not pose the threat that the Soviet navy did during the Cold War, it retains a substantial submarine force, which still patrols off the North American coasts. The new submarines will provide valuable surveillance as well as antisubmarine capabilities.¹²⁷

Combined, these three warship classes offer Canada fairly robust presence and significant combat capabilities. Furthermore, and critically, they offer a high degree of interoperability with allied navies, and in particular the U.S. Navy. Perhaps the best example of this is the ability of Canadian frigates and destroyers to operate in U.S. aircraft carrier battle groups. Since the Gulf War, Canadian warships have frequently been integrated into such groups.¹²⁸ This has occurred most recently with Operation APOLLO (the Canadian designation for its contribution to the U.S. war on terrorism), where six Canadian warships—four frigates, one destroyer, and one supply ship—joined the U.S.-led fleet.¹²⁹ Extensive combined training allowed Canadian vessels to do so quite easily, a degree of interoperability that is highly unusual in the naval world.¹³⁰

Among their naval allies, the Americans consider the Canadian navy “high end.”¹³¹ With an emphasis on command and control along with intelligence and

surveillance, it has a demonstrated ability to undertake a broad array of missions. The navy's blueprint for the next several decades—a document entitled *Leadmark*—notes that during the Gulf War the Canadian task group commander was the only non-American warfare commander, a development that was possible because of the compatibility and interoperability of Canadian ships with those of the United States.¹³² Similarly, the upgraded destroyers and frigates have frequently played leading roles in multilateral operations.¹³³

In the area of maritime aviation, however, the navy is badly in need of modernization; these needs point to the advantages that naval prioritization would offer. The navy's maritime helicopter, the Sea King, is completely obsolete; it poses a danger to both its crew and nearby ships virtually every time it flies (which, given its enormous maintenance requirements, is thankfully not often).¹³⁴ In service since 1963, Canada's fleet of Sea Kings was initially slated for replacement in the early 1990s. However, upon election in 1993, one of Prime Minister Jean Chretien's first official acts was to cancel the helicopter project (and pay the hefty three-hundred-million-dollar U.S. cancellation fee). The government announced its intention to replace the fleet in 2000;¹³⁵ the timetable, however, remains unclear, and the Sea Kings

will likely be flying until at least 2008.¹³⁶ This is an embarrassment not only to the crews who are forced to keep these antiques in the air but more broadly to all Canadians, who are apparently content to ask CF naval aviators to fly aircraft that are poorly equipped, occasionally unstable, and incapable of operating in most combat environments.¹³⁷



Destroyer HMCS Iroquois

The other major naval aircraft is the CP-140 Aurora (an adaptation of the U.S. P-3 Orion), which is

also nearing the end of its operational life. In service since 1980, the Auroras perform an array of surveillance and reconnaissance missions, in addition to anti-submarine warfare tasks. As a result, however, they have been operated hard. Having exceeded the deadline set in the United States for their refurbishment, the Auroras have problems with corrosion and structural fatigue. In addition, the now-familiar Canadian practice of not upgrading aircraft has resulted in service and maintenance difficulties.¹³⁸

The problems associated with naval aviation notwithstanding, the Canadian navy is in surprisingly good shape.¹³⁹ Certainly, there is an element of luck involved; it was the navy's good fortune that it was the last service to undergo a major modernization program before the defense budget was effectively gutted in 1993. However, luck alone cannot explain the navy's balanced force—for that, credit must be

given to the navy's senior officers, who designed a fleet approach that combines several types of capabilities.

Another factor in the navy's favor is the broad range of operations that naval forces can perform. *Leadmark* divides naval functions into three basic roles—military, diplomatic, and constabulary.¹⁴⁰ Under military missions it lists command of the sea, sea control, sea denial, battlespace dominance, fleet-in-being, maritime power projection, and maritime maneuver. Among diplomatic roles, it identifies ten distinct missions, including preventive diplomacy, coercion, maritime interdiction, peace-support operations, civil military cooperation, and humanitarian assistance. Lastly, constabulary tasks comprise another six functions, among which are sovereignty patrols, aid to the civil power, search and rescue, and disaster relief.

This lengthy list of functions makes the navy ideally suited to carry out Canadian foreign policy. As noted earlier, contributing to international peace and security through multilateral operations remains a primary foreign policy goal of Canada, and among the three services the navy clearly offers the broadest array of capabilities to carry out this mission. As evidence, the Canadian navy has frequently de-



HMCS Victoria

ployed when regional or ethnic conflict is seen as requiring Western intervention. Thus, in the recent past, the navy has sailed to Southeast Asia to support operations in East Timor and participated in the embargo against Haiti; it is currently engaged in the Indian Ocean and Persian Gulf as part of the campaign in Afghanistan.¹⁴¹

Any decision to prioritize the navy would have an immediately beneficial impact, as badly needed modernization programs could then be undertaken quickly. In addition, because the

navy's primary warships are all relatively modern, replacement should not be an issue for at least another ten years.¹⁴² Even then, a decision could be made simply to retire (rather than replace) the destroyers. Lastly, given its impressive degree of interoperability with the U.S. Navy, the Canadian navy is well positioned to participate in a wide range of missions, from peace-support/humanitarian aid to sophisticated conventional warfare.

ALONGSIDE THE BEST, AGAINST THE BEST?

The decline of Canadian military capabilities has occurred with the apparent approval of much of the Canadian public. Defense commentators and what remains of the Progressive Conservative and Alliance parties have strongly criticized the Liberal government for its defense cuts.¹⁴³ Nevertheless, the reality is

that, as Canadians have repeatedly demonstrated, when it comes to proposed government spending increases, defense simply does not fare very well in comparison to programs like health care or education.¹⁴⁴

Nor does this seem likely to change in the aftermath of the terrorist attacks in New York and Washington on 11 September 2001. While the Canadian government has pledged to pay more attention to security issues, there is no indication that DND will be getting any significant infusion of cash as a result.¹⁴⁵ Indeed, since the attacks, not only has the government announced only minor increases in defense spending (of the additional five billion [U.S.] allocated for security in the 10 December 2001 federal budget, only eight hundred million spread over five years was earmarked for defense), but it has also declared that a defense policy review needs to be undertaken—a sign, many observers believe, that the government is finally prepared to acknowledge that the fiscal basis of the 1994 Defence White Paper can no longer be met.¹⁴⁶



CH-124 Sea King

icy review needs to be undertaken—a sign, many observers believe, that the government is finally prepared to acknowledge that the fiscal basis of the 1994 Defence White Paper can no longer be met.¹⁴⁶

If nothing else, though, 11 September has shifted public attention to the Canadian military in a way not seen in decades. The Canadian Forces have come under scrutiny not for their misadventures but for their capabilities, and the tools they have—and perhaps more importantly, do *not* have—to perform the tasks that are requested of them. While it is difficult to predict what might come of this newfound attention, it is worth noting that this debate is taking place against a backdrop of studies and reports that allege that Canada is a “declining” international power.¹⁴⁷ If it is to reclaim its status as a “middle” power, these analysts argue, it needs to start paying the expenditures in defense that are expected of an advanced, Western country that is a longtime member of Nato and a partner with the United States in the defense of North America.¹⁴⁸

DND must not only deal with antiquated equipment and inadequate funding but battle a political establishment in Ottawa that appears to do everything possible to discredit it. In a recent example, Prime Minister Chretien stated in a year-ending 2001 interview that people who call for increases in defense spending—who, it should be emphasized, include Canada’s auditor general as well as members of his own party—are essentially pawns of the arms industry. As the prime minister noted with his customary eloquence, “there is an industry that is very important that produces armaments for government . . . that [says] you should buy more of our stuff.”¹⁴⁹ The prime minister went on to state that the Canadian Forces are “well equipped” (a point he has made many times over the last few years) and to suggest that DND’s troubles have more to do with outdated strategies than with fiscal constraints.¹⁵⁰

There is no question, however, that years of budget cuts have left the CF in a precarious position. Despite the goals set in the 1994 Defence White Paper, Canada today cannot field military forces that can fight “alongside the best, against the best.” Over the course of the past decade, the Canadian Forces have lost significant combat capability; once lost, such capability is difficult to restore. As has been recently noted, “Neither flexible nor multipurpose anymore, the Canadian Forces, by gradual but incessant reductions, have been ushered in the direction of the glorified sovereignty protection and peacekeeping roles its fiercer critics had for a decade and more demanded.”¹⁵¹ Even the defense minister, John McCallum, has begun to acknowledge the severity of the situation, recently asserting that the CF have been stretched past the “breaking point.”¹⁵²

Nonetheless, Canadian foreign policy remains internationalist.¹⁵³ While the tenure of Foreign Affairs Minister Axworthy has ended, his successors, John Manley and, more recently, Bill Graham, have continued to stress the international role that Canada can play.¹⁵⁴ During much of the 1970s, the Liberal government’s emphasis on “human security” and “soft power” downplayed the importance of military assets, thereby making them broadly consistent with Canada’s declining capabilities. But those days seem to be (thankfully) over, as



CP-140 Aurora

Manley’s conception of foreign policy is far more dependent on traditional “hard power” resources and recognizes the linkages between political influence and military power. Indeed, Manley has even gone so far as to suggest that if Canada wants to be taken more “seriously” in world affairs, it needs to increase its military, an opinion that would have verged on sacrilege in Ottawa just a few years ago.¹⁵⁵

Further, Canada’s foreign policy internationalism is strongly supported by the public, a finding clearly supported by polling data. Respondents to one such poll apparently surprised researchers with the depth of their understanding, leading pollsters to conclude that “Canadians are passionate about world affairs, interventionist, and more united than one might have predicted.”¹⁵⁶ A majority of respondents indicated they would consider a Canadian military response appropriate in the event of another Iraqi invasion of Kuwait or a Rwanda-type genocide in Africa.

The disconnect, then, between Canada’s foreign and defense policy is clear. Simply stated, DND is incapable of fielding the forces required to match Canada’s foreign policy rhetoric, and it is unlikely to acquire those forces in the future. There are, however, steps that DND can take that will produce at least some degree of combat capability. The army and air force suffer from advanced equipment obsolescence; their prognoses for future interoperability are poor. On the

other hand, the navy has a reasonably modern fleet, can perform a wide array of missions, enjoys widespread political support, and already offers significant interoperability capabilities. A decision to give it priority, fiscal and otherwise, over the other services would give the Canadian Forces a significant capacity to participate in multinational coalition operations well into the twenty-first century.

Let us be clear, though. There is no satisfaction to be found in recommending that the needs of the navy be prioritized over those of the army or air force. As many observers have noted, the future strategic environment is uncertain, and the varied types of threats that Canada faces calls for broadly capable armed forces (like those envisioned by the 1994 Defence White Paper).¹⁵⁷ In an ideal world, Canadians and their government would take military matters seriously and ensure that the Department of National Defence was funded to carry out the tasks demanded of it. But Canada is not living in an ideal world, nor is it likely to enjoy one any time soon. Military spending in Canada is likely to remain low.¹⁵⁸ Accordingly, the government and DND must make some critical decisions.

There are indications that DND is beginning to appreciate the challenges and is finally starting to ask the necessary difficult questions. In a sustainability review conducted in November 2001, DND acknowledged that it was in a period of “relentless decline” and that “major trade-offs” might have to be made to ensure that some advanced capabilities are maintained.¹⁵⁹ “The current situation cannot endure. Either corrective action is taken now, or Defence will gradually become unable to meet its white paper commitments and respond to emerging challenges.” Most importantly, the report suggested that DND must begin making choices as to which capabilities it wishes to maintain—perhaps between numbers of personnel and investment in high-technology weapons platforms; between flexible, multipurpose forces and single-purpose “niche” forces; between preparation for domestic tasks and for international ones; and maintaining equal capabilities for the army, navy, and air force versus putting more resources into one service at the expense of the others. While the report made no recommendation, it noted that the time for making decisions is short and that the consequences of making the wrong ones would be severe.

The concept of trade-offs was also raised in *At a Crossroads*, the report released by General R. R. Henault, the chief of the Defence Staff, in June 2002. He concluded that “[DND] cannot invest in the new capabilities required to transform the CF and remain interoperable and well equipped *without divesting ourselves of capabilities* that have become less relevant to the twenty-first-century battlespace. The transition will be difficult.”¹⁶⁰ He offered no details as to which capabilities had become “less relevant,” but he documented the difficulties and challenges that both the army and air force face, while offering little but praise

for the navy—“ton for ton, the Canadian Navy is currently as capable as any navy in the world.”¹⁶¹

A decision to prioritize Canada’s navy also makes sense on strategic grounds. In this regard, the war on terrorism launched by the United States against the Taliban and al-Qa’ida in Afghanistan in October 2001 has revealed interesting changes in the way Western military operations are likely to be conducted in the future. A new style of warfare employing small teams of special operations forces on the ground supported by carrier-based and land-based aircraft may well displace U.S. ground and tank forces on the battlefield.¹⁶² Four assets appear to have been vital in the quick U.S. victory over the Taliban regime: special operations forces; long-range B-2 and B-52 bombers; “smart” weapons combined with digital communications;¹⁶³ and unmanned aerial vehicles, which now combine reconnaissance capabilities with limited strike roles.¹⁶⁴

Operation ENDURING FREEDOM has revealed that the United States will carefully screen multilateral participation in future coalitions. The Americans will likely welcome Canada’s participation in future naval task forces (provided its maritime forces remain capable and fully interoperable) but are unlikely to request its air or ground assets. At the very least, the campaign suggests that only countries that maintain highly sophisticated air and ground units will be “allowed” to participate in U.S.-led operations; Canada abandoned that standard some time ago.¹⁶⁵

In essence, Canada possesses armed forces with a marginal combat capability in the current strategic environment and little hope of becoming more combat capable in the future, while at the same time its government places a premium on interoperable forces that can take full advantage of the revolution in military affairs. Nor is the emphasis on interoperability likely to diminish; on the contrary, interoperable forces will remain critical to both the United States and its allies, especially in a coalition context.¹⁶⁶ As Lawrence Freedman recently predicted, “The most important allies of the United States will make an effort to stay abreast of [advanced military] technologies and to adopt them where possible, if only for purposes of interoperability. . . . It will become the subscription to be taken seriously as an ally.”¹⁶⁷

However, at least with regard to the United States, the need for interoperability in particular instances has more to do with American political concerns than strategic ones. Without doubt, the United States has the military assets required to conduct unilateral operations any time it perceives its national interests to be at stake (as it is essentially doing in Afghanistan).¹⁶⁸ But when core American interests are not directly threatened—as in Kosovo or the Gulf—Washington prefers to have allies on board before undertaking military operations.¹⁶⁹ Former secretary of defense William Perry has suggested, “The threat of military force . . . will be maximally effective when political conditions permit

the military force to be a broadly based coalition.”¹⁷⁰ But the primary criterion for joining U.S.-led coalitions is fielding defense forces that are broadly interoperable with American forces; offers of forces that have failed to remain interoperable will likely result in polite refusals—an understandable response, given the risks. Simply put, the United States is not willing to allow its preference for working with allies to weaken its own defense posture. If the allies—including Canada—wish to cooperate with the U.S. military, they must ensure that their capabilities are up to the challenge.¹⁷¹

The Canadian Forces have entered a critical period, one that will determine their force structure for the next several decades. At a time of fiscal challenge and dramatic technological change, continuing the present fiction of general-purpose combat forces is no longer sustainable. The events of 11 September and the resulting U.S.-led war on terrorism have highlighted the importance of a modern and capable military. The Department of National Defence needs to prioritize if it is to retain a viable fighting force. To be sure, such decisions will not be easy; they could spark internecine struggle within the military. Failure to make them, however, would largely ensure that the present disconnect between Canadian foreign and defense policy will become a permanent fixture of Canadian statehood.

NOTES

1. While a topic of some controversy as recently as the mid-1990s, it is now widely accepted that an RMA is under way. Key studies include Eliot Cohen, “A Revolution in Warfare,” *Foreign Affairs*, March/April 1996; Lawrence Freedman, *The Revolution in Strategic Affairs*, Adelphi Paper 318 (London: International Institute for Strategic Studies [hereafter IISS], 1998); Michael O’Hanlon, *Technological Change and the Future of Warfare* (Washington, D.C.: Brookings Institution Press, 2000); and Admiral William Owens, *Lifting the Fog of War* (New York: Farrar Straus Giroux, 2000).
2. In general, Canadian defense white papers are completed every ten to twenty years, or when global conditions change in dramatic and unexpected ways. Over the last forty years, there have been four such papers in Canada—1964, 1971, 1987, and 1994. The intent is to offer a general guideline of defense policy for the Canadian government, a framework for strategy and major procurement programs. Doug Bland has reprinted all post-World War II defense white papers and released them in one volume. See Doug Bland, ed., *Canada’s National Defence*, vol. 1, *Defence Policy* (Kingston, Ont.: School of Policy Studies, Queen’s University, 1997).
3. The three services of the CF are officially known as Land Forces Command (the army), Maritime Command (the navy), and Air Command (the air force), the result of a departmental reorganization created during the divisive service-unification debate of the mid-1960s. (Land Forces Command is a more recent incarnation, the name having replaced “Mobile Command.”) This article will use the old service designations, a practice popular within the CF.
4. The *Canadian Defence Planning Document*, published by DND, identifies the fundamental missions of the CF. According to the 1997 report, contributing to international peace and security, which includes participating in

- a "full range" of multilateral operations, is one of the CF's primary defense roles. Similarly, according to the more recent *Report on Plans and Priorities, 2001–2002* (Ottawa: Department of National Defence [hereafter DND], 2001), "Canada has an obligation to contribute to international peace and security through organizations like the United Nations and [Nato]" (p. 2). For a recent look at Canada's participation in multilateral operations, see Doug Bland, "Canada and Military Coalitions: Where, How, and with Whom?" Institute for Research on Public Policy *Policy Matters*, February 2002.
5. This is not to suggest, though, that all of the military services have embraced change with equal enthusiasm. As Admiral William Owens, former vice chairman of the U.S. Joint Chiefs of Staff, has pointed out, the RMA threatens vested interests throughout the military, and it remains to be seen how open each of the services are to change; see Owens, *Lifting the Fog of War*; also see Elinor Sloan, *The United States and the Revolution in Military Affairs* (Ottawa: DND, Directorate of Strategic Analysis, 1998). A recent article examines how the U.S. Army is responding to the challenge and the inertia that must be overcome to design an entirely novel structure. See Peter J. Boyer, "A Different War: Is the Army Becoming Irrelevant?" *New Yorker*, 1 July 2002.
 6. Colin Gray has suggested that the fascination with technology lies at the heart of American strategic culture; see his *Nuclear Strategy and National Style* (London: Hamilton Press, 1986). For a more general discussion on strategic culture, see Peter Katzenstein, ed., *The Culture of National Security: Norms and Identity in World Politics* (New York: Columbia Univ. Press, 1996).
 7. In February 2002, the U.S. Department of Defense submitted its budget request for the 2003 fiscal year. The total amount requested, \$379 billion, represented a thirty-nine-billion-dollar increase (11 percent) over the 2002 budget; see "Huge Increase in Defence Spending," *Jane's Defence Weekly*, 6 February 2002. For recent reviews of U.S. defense developments, see Michael O'Hanlon, "Rumsfeld's Defense Vision," *Survival*, Summer 2002, and Lawrence J. Korb, "Are U.S. Forces Unprepared and Underfunded?" *Naval War College Review*, Spring 2002.
 8. See David Gombert, "Right Makes Might: Freedom and Power in the Information Age," McNair Paper 59 (Washington, D.C.: Institute for National Strategic Studies, May 1998), and David Gombert, Richard Kugler, and Martin Libicki, *Mind the Gap: Promoting a Transatlantic Revolution in Military Affairs* (Washington, D.C.: National Defense Univ., 1999).
 9. Gombert, Kugler, and Libicki, p. 12. This is not to suggest that there are no internationally competitive European and Canadian technology or defense firms but rather that their total number pales in comparison to those based in the United States. Major European and Canadian technology firms include Nokia, Ericsson, Nortel, and Alcatel; major defense firms include British Aerospace, the European Aeronautic Defense and Space Company (EADS), and Bombardier. Measured by either revenue or market capitalization, these firms are smaller than their American counterparts (including IBM, Microsoft, and Intel for the former category, and Boeing and Lockheed Martin for the latter).
 10. Among the European Nato allies, only Greece and Turkey spend over 3 percent of their gross national products on defense, while Belgium, Denmark, Italy, Germany, Luxembourg, and Spain all spend below 2 percent. One useful method of comparing defense investment and preparedness among countries is to examine how much each country spends per soldier. Using this criterion, the United States spends about \$180,000, the European Nato allies on average about \$110,000 (a figure brought down by the large militaries in some European countries), and Canada about \$120,000. Further, the United States spends about thirty billion dollars per year on advanced military information systems and in research and development for new defense-related technologies, three times the comparable European figure. See Richard Medley, "Europe's Next Big Idea: Strategy and Economics Point to a European Military," *Foreign Affairs*, September/October 1999, and Ethan B. Kapstein, "Allies and Armaments," *Survival*, Summer 2002.

11. Between 1992 and 2000, Nato European defense spending declined by 22 percent in real terms; the reduction in specific countries, most notably Germany and Spain, was far greater. For a discussion of the United States–Europe spending gap, see Malcolm Chalmers, “The Atlantic Burden-Sharing Debate: Widening or Fragmenting?” *International Affairs*, no. 3, 2001. As for defense spending developments since 11 September, the French government recently announced that it would increase spending by only 3.8 percent in the next fiscal year. See “France to Spend 3.8% More on Defence,” *Jane’s Online*, 8 August 2002 (www.jdw.janes.com).
12. As former U.S. secretary of defense William Cohen has noted, “NATO [European] countries spend roughly 60% of what the United States does and they get about 10% of the capability. That has to change.” Cited in David S. Yost, “The NATO Capabilities Gap and the European Union,” *Survival*, Winter 2000–2001.
13. Kapstein, p. 143.
14. See Yost and “Lessons from Kosovo: Military Operational Capabilities,” in *The Military Balance 1999–2000* (London: IISS, 1999). The British and French governments have produced their own studies on the capabilities gap; see, respectively, the Secretary of State for Defence, *Kosovo: An Account of the Crisis* (London: Ministry of Defence, 1999), and Ministère de la Defense, *Les Enseignements du Kosovo* (Paris: Delegation a l’Information, 1999). In January 2000, Lord George Robertson, the Nato secretary general, offered a devastating critique of European defense capabilities: “The Kosovo air campaign demonstrated just how dependent the European allies had become on United States military capabilities. From precision guided weapons and all weather aircraft to ground troops that can get to the crisis quickly[,] . . . [Europe] did not have enough of the right stuff. . . . Something is wrong, and Europe knows it.” Cited in Yost, p. 99.
15. The current European defense debate is taking place against the backdrop of the European Security and Defence Identity (ESDI), a pan-European force that should number sixty thousand personnel by 2003. For a discussion, see Alexander Moens, “Developing a European Intervention Force,” *International Journal*, Spring 2000, and Philip H. Gordon, “Their Own Army? Making European Defence Work,” *Foreign Affairs*, July/August 2000.
16. See “United States Worried by Coalition Technology Gap,” *Jane’s Defence Weekly*, 28 July 1998.
17. For a recent review of the difficulties involved in forging multilateral coalitions, see James P. Thomas, *The Military Challenges of Transatlantic Coalitions*, Adelphi Paper 333 (London: IISS, 2000).
18. Danford W. Middlemiss and Denis Stairs, “The Canadian Forces and the Doctrine of Interoperability: The Issues,” Institute for Research on Public Policy *Policy Matters*, June 2002, p. 20.
19. See “NATO: United States Should Share Technology,” *Washington Post*, 2 February 2002. Also see “The End of NATO? Europe Had Better Catch Up,” *New York Times*, 4 February 2002.
20. George Robertson, “Can Europe Keep Up with the Revolution in Military Affairs?” *RUSI Journal*, April–May 1999.
21. Elinor Sloan, *The Defence Capabilities Initiative and United States-NATO Relations: Responding to the Revolution in Military Affairs*, Research Note 99/07 (Ottawa: DND, Directorate of Strategic Analysis, 1999), p. 12. Also see Freedman, *The Revolution in Strategic Affairs*, p. 72.
22. This prospect was discussed by Lieutenant General Michael Short in testimony before the U.S. Senate Armed Services Committee in October 1999. General Short said that in the future the United States may say to its allies, “We will take the alliance to war and we will win this thing[,] . . . but the price to be paid is we call the tune.” See “General Wanted United States to Call the Shots in Kosovo” (*London Times*, 27 January 2000). The general’s remarks may have been linked to lingering American frustration at how the war in Kosovo had been prosecuted and the restraining influence that the allies (and in particular France) had had over the selection of targets. For a review of the conflict, see Anthony H. Cordesman, “The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo” (Washington, D.C.: Center

- for Strategic and International Studies, 1999), and Benjamin S. Lambeth, *NATO's Air War for Kosovo: A Strategic and Operational Assessment* (Santa Monica, Calif.: RAND, 2001). On American-French disagreements on target selection, see "France Acted as Group Skeptic," *Washington Post*, 20 September 1999, and "U.S. Military Acted outside NATO Framework during Kosovo Conflict, France Says," *New York Times*, 11 November 1999.
23. Ronald J. Diebert, "Uploading the 'Revolution in Military Affairs': War, Peace and Security in the Hypermedia Environment" (paper presented at the 2002 International Studies Association meeting, New Orleans, March 2002), p. 5. In July 2002, the Canadian and U.S. governments announced the creation of five new integrated cross-border enforcement teams, including police, immigration, and customs officers. See "Canada, United States Beef Up Border Security Teams," *Ottawa Citizen*, 23 July 2002.
 24. The announcement of the command has attracted considerable attention in Canada, as the commander of NorthCom will also serve as the head of NORAD. While Canada is unlikely to be asked to participate formally in its planning or command structure, NorthCom's very existence will emphasize the necessity of rapid response to potential security threats. Indeed, the news release announcing the command noted that the commander would have the task of "security cooperation and military coordination" with other nations; see U.S. Dept. of Defense, "Unified Command Plan," News Release 188-0, 17 April 2002; Kim Burger, "United States Unified Command Plan: The 'Most Significant Reform' in 60 Years," *Jane's Defence Weekly*, 24 April 2002; and "Plans for Closer Ties with U.S. Stalled," *National Post*, 30 April 2002. In August 2002, Canada's vice chief of the Defence Staff, Lt. Gen. George Macdonald, testified before a Canadian Senate committee that while no Canadian forces will be assigned to NorthCom, the new command will coordinate the response to any future continental security threat; see "Canada Won't Join Land-Sea Force," *Ottawa Citizen*, 15 August 2002. Shortly after this testimony, reports circulated that a binational "planning group" was being negotiated, one that would oversee the integration of one country's troops under the other country's command authority in the event of a terrorist attack; see "Canada, U.S. Near Troop Deal," *Globe and Mail*, 28 August 2002.
 25. In 1999 alone, the U.S. Air Force produced more than eighty directives, instructions, pamphlets, and planning documents on interoperability. Samuel J. Walker, "Interoperability at the Speed of Sound: Modernizing the CF-18 Hornet," in *Over Here and Over There: Canada-United States Defence Cooperation in an Era of Interoperability*, ed. David G. Haglund (Kingston, Ont.: Queen's Quarterly and the Conference of Defence Associations Institute, 2001), p. 252.
 26. Myron Hura et al., *Interoperability: A Continuing Challenge in Coalition Air Operations* (Santa Monica, Calif.: RAND, 2000), p. 7.
 27. As cited in *ibid.*, p. xiii.
 28. *Ibid.*, p. 7.
 29. National Research Council, *Realizing the Potential of C4I: Fundamental Challenges* (Washington, D.C.: National Academy Press, 1999), p. 65. Joel Sokolsky has noted a third type of interoperability, "political/cultural," which "examines why and how each country conducts military operations the way it does." See "Sailing in Concert: The Politics and Strategy of Canada-United States Naval Interoperability," Institute for Research on Public Policy *Choices*, April 2002, p. 8. The original reference is to Kenneth Gause, "U.S. Interoperability with Its High-End Allies" (paper written for the Center for Strategic Studies, Center for Naval Analyses, Arlington, Virginia, 2001).
 30. National Research Council, p. 65.
 31. *Ibid.*, pp. 65-7.
 32. Middlemiss and Stairs, p. 11.
 33. *Ibid.*, p. 12.
 34. National Research Council, p. 69.
 35. Hura et al., pp. 17-21.
 36. Middlemiss and Stairs, p. 12.
 37. *Ibid.*, p. 13. For an Argentine view of these advantages and other considerations, see Juan Carlos Neves, "Interoperability in Multinational Coalitions: Lessons from the Persian Gulf War," *Naval War College Review*, Winter 1995, pp. 50-62.

38. Middlemiss and Stairs, p. 13.
39. The most widely cited such study was written by R. B. Byers, who in 1986 emphasized the CF's "commitment-capability gap." See "Canadian Security and Defence: The Legacy and the Challenges," Adelphi Paper 214 (London: IISS, 1986). Other major reports critical of the CF's capabilities included Gerald Porter, *In Retreat: The Canadian Forces in the Trudeau Years* (Ottawa: Deneau and Greenberg, 1978), and Joel Sokolsky and Joseph Jockel, "Canada: The Not So Faithful Ally," *Washington Quarterly*, Fall 1984.
40. This was the primary recommendation of a group organized by the University of Toronto. See *Canada 21: Canada and Common Security in the Twenty-first Century* (Toronto: Univ. of Toronto Centre for International Studies, 1994).
41. DND, *1994 Defence White Paper* (Ottawa: Minister of Supply and Services, 1994), p. 14.
42. In June 1996, the U.S. military's blueprint on advanced technology for the military was released. *Joint Vision 2010* identified four concepts that were expected to dominate the future battlefield—"dominant maneuver," "precision engagement," "full dimensional protection," and "focused logistics." See General John Shalikashvili, *Joint Vision 2010* (Washington, D.C.: Department of Defense, 1996). In 2000, DoD's follow-up document, *Joint Vision 2020: America's Military—Preparing for Tomorrow*, was published. While not significantly different from the earlier study, the new report emphasized the need for "full spectrum dominance," which is to be achieved through application of the four concepts identified in *JV 2010*.
43. DND's budget was reduced from eight billion dollars (U.S.) in 1993–94 to \$6.2 billion (U.S.) in 1998–99, a drop of almost 25 percent. While the budget has since increased back up to eight billion, defense spending, adjusted for inflation, remains below what it was almost ten years ago. In the most recent federal budget, tabled on 10 December 2001, defense spending was increased. However, the additional amount—eight hundred million dollars (U.S.) spread over five years—will not have a significant effect; for example, only two hundred million is dedicated to capital spending. In recent years, a chorus of politicians, defense officials, and observers have called for major increases in military spending. In the most recent such example, in May 2002, the House of Commons Defence Committee argued that DND required a further twelve billion dollars (U.S.) over three years to modernize equipment and contribute to international peace and security; see "Parties Agree: Military Needs \$18 Billion," *National Post*, 31 May 2002. Even Canada's auditor general, Sheila Fraser, has testified before Parliament that additional funding is required, stating that with every successive budget cut each service of the CF has "tried to perpetuate itself in an ever-leaner fashion." See "We Stand on Guard, Barely," *Ottawa Citizen*, 22 December 2001. Also see Sharon Hobson, "Canadian Government Urged to Review Defence, Boost Spending," *Jane's Defence Weekly*, 28 November 2001.
44. DND, *Shaping the Future of Canadian Defence: A Strategy for 2020* (Ottawa: DND, 1999), p. 6.
45. *Ibid.*, p. 10.
46. David Haglund, "Strategy 2020 and the Question of 'Continentalism,'" in *Over Here and Over There*, p. 37.
47. Vice Chief of the Defence Staff, *Strategic Capability Planning* (www.vcds.dnd.ca/dgsp/dda/strat/forward_e.asp).
48. R. R. Henault, *At a Crossroads* (Ottawa: DND, 2002), p. 26.
49. For a general discussion in the Canadian context, see Middlemiss and Stairs, and Sharon Hobson, "Canada Aims for Defense Interoperability with United States," *International Defence Review*, January 2001. Also see *Interoperability: The Challenge in 2010* (www.vcds.dnd.ca/dgsp/analysis/challenge_e.asp). Interoperability remains a key goal of the U.S. military. In October 1999, the Pentagon created the Directorate of Interoperability to oversee all interoperability activities and concerns.
50. A "niche" RMA strategy is one in which a country decides to focus on one type of defense force or capability (for example, logistical support) and effectively abandon—or at a minimum, downplay—other types of forces. Several commentators have argued that it is

only by pursuing single areas of capability that most U.S. allies will be able to cooperate effectively with American military forces. For a discussion in the Nato context, see David W. Read [Col.], "The Revolution in Military Affairs: NATO's Need for a Niche Capability Strategy," *Canadian Military Journal*, Autumn 2000.

51. See my "The American Revolution? The Response of Advanced Western States to the Revolution in Military Affairs," *National Security Studies Quarterly*, Autumn 1999, and *The Revolution in Military Affairs and Its Impact on Canada: The Challenge and the Consequences*, Working Paper 28 (Vancouver, B.C.: Institute of International Relations, Univ. of British Columbia, 1999). A recent book that examines the RMA's implications for Canada is Elinor Sloan, *The Revolution in Military Affairs: Implications for Canada and NATO* (Montreal: McGill-Queen's Univ. Press, 2002).
52. The primary DND document on the RMA is *Canadian Defence beyond 2010: The Way Ahead* (Ottawa: RMA Operational Working Group, DND, 1999). The report summarizes the findings of a DND-sponsored symposium held in the fall of 1998.
53. Gary Garnett [Vice Adm.], "The Canadian Forces and the Revolution in Military Affairs: A Time for Change," *Canadian Military Journal*, Spring 2001, p. 7.
54. Elinor Sloan, "Canada and the Revolution in Military Affairs: Current Response and Future Opportunities," *Canadian Military Journal*, Autumn 2000, p. 9.
55. See "Military Plans Rapid Reaction Force to Respond to Global Crises," *National Post*, 14 January 2000.
56. The same cannot be said for members of the Canadian civilian defense community. Several reports have criticized both the government and DND for failing to make decisions necessitated by Canada's small defense budget; see, for example, Joseph Jockel, *The Canadian Forces: Hard Choices, Soft Power* (Toronto: Canadian Institute of Strategic Studies, 1999); David Bercuson et al., *To Secure a Nation: Canadian Defence and Security in the 21st Century* (Calgary, Alta.: Centre for Military and Strategic Studies, Univ. of Calgary, 2001); and most recently, Jack Granatstein, "A Friendly Agreement in Advance: Canada–United States Defence Relations Past, Present, and Future," *Border Papers* (published by the C. D. Howe Institute), June 2002. There are indications, however, that DND may no longer be willing to accept the current situation silently. In the June 2002 report *At a Crossroads*, the department acknowledged that "the status quo is not sustainable." See "Military Pushed to Its Limit, Chief of Defence Staff Says," *National Post*, 11 July 2002.
57. In the 1994 Defence White Paper, the Canadian Forces were to maintain a full-time strength of sixty thousand personnel; by 2002 its strength had fallen at least 10 percent below that figure. Canada's auditor general recently reported that the military's current actual strength is closer to fifty-two thousand, because three thousand positions are "vacant" and another five thousand personnel have been designated as "non-effective" due to medical reasons, maternity leave, or pending retirement; see "Forces Personnel Woes Will Only Worsen," *Halifax Herald*, 17 June 2002. In recent years there have been numerous calls for an enlarged CF, most recently from the Senate Committee on National Security and Defence, which has suggested that the CF be increased to seventy-five thousand personnel.
58. In the 1990s, two domestic CF deployments attracted more attention than any prior international engagement since the Second World War. In 1997, about eight thousand personnel were sent to Manitoba to help fix dikes and evacuate people threatened by a series of devastating floods. The following year, sixteen thousand personnel were sent to parts of Ontario and Quebec after an ice storm—the largest operational deployment since 1945.
59. It is now fairly common for foreign observers to state that the Canadian Forces have become, in fact if not in practice, peacekeeping forces. In 1997 Lt. Gen. Sir Hew Pike, of the British army, declared that "the Canadians have surrendered any claim to be a war-fighting force. Their army . . . is now really just a peacekeeping force." Cited in Martin Shadwick, "British Candour, Harsh Reality," *Canadian Defence Quarterly*, Winter 1997, p. 34.
60. For Axworthy's perspective on these developments, see "Canada and Human Security:

- The Need for Leadership," *International Journal*, Spring 1997. For a more critical look at Axworthy's policies, see Dean Oliver and Fen Hampson, "Pulpit Diplomacy: A Critical Assessment of the Axworthy Doctrine," *International Journal*, Summer 1998.
61. Recent Canadian peacekeeping missions have included the UN Assistance Mission in Rwanda (UNAMIR), the Nato Implementation Force in the former Yugoslavia (IFOR), the Nato Stabilization Force in Bosnia (SFOR), the UN Support Mission in Haiti (UNTMIH), and the UN Mission in Sierra Leone (UNAMSIL). For details on current Canadian peacekeeping missions, see the DND Website, "Peace Support Operations" (www.dnd.ca/admpol/org/dg_is/d_pk).
 62. Since 1998 there has been increased awareness of the manpower strain created by peacekeeping commitments. For example, Canada's peacekeeping deployments to East Timor and Kosovo both had to be scaled back. Much of the difficulty results from the Canadian commitment to maintain 1,700 troops, or one enlarged battle group, in Bosnia. However, in reality two other battle groups are effectively committed as well—one in workup, the other newly returned and retraining. Given the army's small size—it has a deployable infantry of about eight thousand soldiers—this is a substantial responsibility; see "Imagine a Canadian Brigade," *National Post*, 23 October 2001. In July 2002, DND announced that it would reduce its Bosnian commitment by three hundred soldiers, a decision widely viewed as necessary given the army's limited size and resources; see "Canada to Reduce Its Presence in Bosnia," *DND News Release*, 15 July 2002. This announcement was followed up in November 2002, when Defence Minister John McCallum said that the Canadian Bosnian mission would end by 2007, a result of the "struggles and strains" the Canadian military faces. See "End Seen to Bosnian Mission," *Toronto Star*, 11 November 2002.
 63. See Steven Metz and James Kievit, "The Revolution in Military Affairs and Conflict Short of War," July 1994, on the U.S. Army War College Website at www.army.mil/usassi/ssipubs; and my *The Revolution in Military Affairs and Its Impact on Canada*, pp. 40–4.
 64. Jockel, p. 38.
 65. *Ibid.*, pp. 38–42.
 66. R. L. Bowes, "SABRE Brigade Group in 2010: A Command Imperative" (paper prepared for the Canadian Forces College, 1997).
 67. Jockel, p. 46.
 68. The phrase "entire focus" was used by Canada's army commander, Lieutenant General G. M. Reay, in a 1994 letter; see *ibid.*, p. 46.
 69. If the Sabre brigade were deployed, the Hercules would be the primary aircraft to transport it. However, the Hercules can carry neither the ten-ton trucks that are the mainstay of the army nor its M109 howitzers or Leopard tanks; see Jockel, pp. 61–2. The inadequacies of Canada's strategic lift capabilities were highlighted in January 2002 when the 850 troops committed to the U.S. war in Afghanistan were unable to get to the theater. In desperation DND considered chartering Russian transport planes; see "Ottawa Locking in Plans for Afghan Mission," *Toronto Star*, 24 January 2002. After much political wrangling, Canadian troops were ferried to Afghanistan by U.S. transport aircraft in February.
 70. A "battle group," a force of roughly a thousand personnel, is based on either an infantry battalion or an armored regiment. Canadian army doctrine states that a battle group is normally part of a brigade. For a discussion of the lack of training in the Canadian military, see Jockel, p. 52.
 71. See "Canada Scaled Back War Effort," *Ottawa Citizen*, 10 August 2002.
 72. *Land Forces Development Guide 1998* (Ottawa: Land Force Command, 1998), p. 7.
 73. The ninety-million-dollar (U.S.) upgrade will give the Leopards a thermal imaging sight and a new weapons control system. Among the critics of the program is David Rudd, executive director of the Canadian Institute of Strategic Studies, who has stated that the upgraded tanks will still be "outgunned" on the battlefield. See "\$140 Million Upgrade of Tanks Called Waste," *National Post*, 23 November 1999.
 74. The Griffons perform a range of other functions as well. The helicopters have been used to conduct surveillance, search and rescue, and medical evacuation, as well as to assist civilian authorities. See Sloan, *The Revolution in Military Affairs*, p. 135.

75. For example, the Griffon has inadequate lift capability, and its reconnaissance and communications platforms are very limited. DND has acknowledged some of these shortcomings, for instance that the Griffon cannot operate effectively in "icing conditions" (hardly a rare circumstance in Canada); see the DND Website, "Equipment: Vehicles—Griffon" (www.army.dnd.ca/LF/equip/veh/Griffon). The Griffon's weaknesses have also been discussed in several auditor general reports.
76. The accident occurred during a search and rescue mission in Labrador; the helicopter had not been designed to operate in harsh weather; see "'Antiquated' Choppers Put Rescue Crews at Risk, Author Says," *Ottawa Citizen*, 26 July 2002. Also see "Tail Blades Defective," *Halifax Herald Limited*, 15 August 2002.
77. Sokolsky, "Sailing in Concert," p. 9.
78. See "Canadians, Americans One Army, Officer Says," *Globe and Mail*, 18 January 2002.
79. See "Canadians Will Mesh Smoothly with American Troops in Afghanistan, Analysts," *Canoe News* (www.canoe.com), 14 January 2002.
80. The United States requested that the Canadian troops remain for an additional six-month term; the request was rejected because it would have stretched the army too thin, given its other commitments; see Sharon Hobson, "Canada Will Not Replace Afghan Battle Group," *Jane's Defence Weekly*, 29 May 2002. American admiration of the role performed by the PPCLI was made clear by the decision to recommend three Canadian snipers for a Bronze Star, for meritorious conduct in a combat zone. See "Get Moving on Snipers' Medals, U.S. Officer Says," *National Post*, 3 May 2002. On the question of the role the CF played in Afghanistan, in November 2002 reports surfaced that the Canadian mission had been plagued by poor planning and inadequate equipment. See "Afghanistan Mission Lacked 'Timely Direction,'" *Ottawa Citizen*, 9 November 2002.
81. See Granatstein, "A Friendly Agreement in Advance."
82. These Canadian programs have been necessitated by the U.S. plan known as "Army XXI" for an advanced land force, elements of which could be deployed before the end of the decade. See General Dennis J. Reimer, "The Army after Next: Revolutionary Transformation," *Strategic Review*, Spring 1999; Michele Zanini and Jennifer Morrison Taw, *The Army and Multilateral Force Compatibility* (Santa Monica, Calif.: RAND, 2000); and Walter Perry, Bruce Pirnie, and John Gordon IV, *The Future of Warfare: Issues from the 1999 Army after Next Study Cycle* (Santa Monica, Calif.: RAND, 2001).
83. Sloan, *The Revolution in Military Affairs*, p. 128.
84. The army has recently acquired approximately two hundred Coyote reconnaissance vehicles and is in the midst of purchasing 360 LAV III light armored vehicles. The Coyotes in particular have attracted considerable positive comment, and there is speculation that the United States may be considering them as well. For a review of the Coyote program, see R. F. Carruthers [Lt. Col.], "Coyote: Canadian Army Reconnaissance into the Next Century," *Canadian Defence Quarterly*, Spring 1998. The new vehicles are replacing Grizzly and tracked M113A1 armored personnel carriers, both of which are being phased out of service.
85. See "'Army of Tomorrow' Would Employ Fewer Soldiers," *National Post*, 6 April 2000.
86. *Advancing with Purpose: The Army Strategy* (Ottawa: Land Force Command, 2002).
87. See "General Pushes Plan for Major Army Overhaul," *Toronto Star*, 10 May 2002. In a speech outlining the proposal, Jeffrey said, "We do not have and probably will not have all of the resources required to address all of our problems." Also see Sharon Hobson, "Canadian Infantry Comes Out on Top in Restructure," *Jane's Defence Weekly*, 22 May 2002.
88. "General Pushes Plan for Major Army Overhaul."
89. In 2002, a series of news stories alerted the Canadian public to the extent of the manpower problem. See, for example, "Canada's Serious Troop Shortage," *Edmonton Journal*, 24 May 2002, and "Army Stretched Past Limit for Foreign Missions," *Edmonton Journal*, 13 May 2002.

90. See "Forces in Dire Straits, Claims Lobby Group," *National Post*, 19 November 1999.
91. These comments were made by Lieutenant General Jeffery. See "Canada's Troops Fight Budget Battle," *Toronto Star*, 26 January 2002.
92. See, for example, J. L. Granatstein, *The Generals: The Canadian Army's Senior Commanders in the Second World War* (Toronto: Stoddart, 1993), and R. J. Steel, *The Men Who Marched Away: Canada's Infantry in World War I, 1914-1918* (St. Catharines, Ont.: Vanwell, 1990).
93. Since it entered office in 1993, the Chretien government has viewed airpower as performing much the same role it did during the Cold War, despite the political and strategic changes in the post-Cold War environment. See Kim Richard Nossal, "Air Power and Canadian Foreign Policy in the Post-Cold War Era," in *Air Power at the Turn of the Millennium*, ed. David Rudd, Jim Hanson, and Andre Beauregard (Toronto: Canadian Institute of Strategic Studies, 1999).
94. *1994 Defence White Paper*, p. 48. The white paper recommended reducing the operational CF-18 force to between forty-eight and sixty aircraft; the higher figure has been adopted.
95. By way of comparison, the air force had 23,500 personnel as recently as 1989. David Kinsman [Lt. Gen.], "The Future of the Canadian Air Force," in *Air Power at the Turn of the Millennium*, p. 8.
96. For a discussion of the "Super Hornet," see John A. Tirpak, "The Three Fighters," *Air Force Magazine*, July 2001. Also see "All-in-One Super Hornet Flies Off to Test Its Sea Legs," *San Diego Union Tribune*, 24 July 2002.
97. Walker, p. 255.
98. For a general overview of Canada's Gulf War experience, see Jean Morin and Richard Gimblett, *Operation Friction, 1990-1991: The Canadian Forces in the Persian Gulf* (Toronto: Dundurn Press, 1997).
99. Canadian CF-18s flew a total of 678 combat sorties during the Kosovo conflict. In addition, Canadian aircraft flew in nearly 10 percent of the battlefield air-interdiction missions, among the riskiest but most significant missions of the war. For a review of Canada's role, see David L. Bashow [Lt. Col.] et al., "Mission Ready: Canada's Role in the Kosovo Air Campaign," *Canadian Military Journal*, Spring 2000.
100. Middlemiss and Stairs, p. 21.
101. Walker, p. 261.
102. *Ibid.*, p. 262.
103. *Ibid.*
104. Following its grounding in Operation DESERT STORM, Husky One was retired from active service. DND is planning, however, to modify two of its Airbus cargo planes to provide an air-to-air refueling capability by 2004. "Canada's Troops Fight Budget Battle."
105. Virtually the entire Canadian stockpile of PGMs was used in the conflict, and in the middle of the campaign DND officials feared that Canada might run out of them. "Canada's Military Feared Running Out of Bombs in Kosovo," *Ottawa Citizen*, 27 October 1999. Indeed, a recent report alleges that Canadian air force officials pleaded with their U.S. counterparts for an "emergency" resupply of laser-guided munitions within weeks of the beginning of Operation ALLIED FORCE. See "Understocked Forces Begged U.S. for Bombs," *National Post*, 21 October 2002.
106. In ten of the first twenty-one days of Operation ALLIED FORCE, poor weather resulted in cancellation of at least 50 percent of the strike sorties. See Cordesman, p. 7.
107. Bashow et al., p. 60. This failure resulted in an increased risk to all coalition pilots. Also see David Kinsman, "Canada's Air Operations in the Balkans," *National Network News*, Fall/Winter 1999.
108. As cited in Hobson, "Canada Aims for Defence Interoperability with United States."
109. The computer capabilities of the CF-18s have become the object of derision. During ALLIED FORCE, it was reported that the 1970s-era computers could malfunction if given commands "at a critical weapon release point." See "Old Computers Inhibit CF-18s Accuracy: Report," *Calgary Herald*, 31 May 1999.
110. For a look at the F-22, see John Tirpak, "The Indispensable Fighter," *Air Force Magazine*, March 2001. For a review of the JSF and the decision to award the contract to the Lockheed Martin proposal, see James Fallows, "Uncle

- Sam Buys an Airplane," *Atlantic Monthly*, June 2002.
111. Most of Canada's European Nato allies will be deploying new fighters by 2005. The Eurofighter Typhoon is a multinational project of the United Kingdom, Germany, Spain, and Italy. The aircraft is currently undergoing flight trials and is expected to become operational by mid-decade. In addition, France has recently developed the Rafale, an advanced fighter that is already in service.
 112. In February 2002, Canada signed a memorandum of understanding with the United States by which it committed itself to be an "informed partner" in the second stage of the Joint Strike Fighter development program, at a cost of a hundred million dollars (U.S.). It was reported that DND had estimated that it would cost about seven billion to reequip the air force with the new fighter (suggesting that DND is considering an eventual purchase of between sixty and eighty aircraft); see Sharon Hobson, "Canada Joins JSF Programme," *Jane's Defence Weekly*, 13 February 2002, and "Canada to Spend \$10.5B to Replace Aging Warplanes," *Ottawa Citizen*, 13 January 2002. In spite of these developments, the Canadian government is unlikely to allocate the financial resources required. Indeed, if this program were ultimately approved, there would be little funding available for any other CF procurement project for years. Further, if past experience offers any guide, the final cost of the JSF will be considerably higher than the current estimate.
 113. Jockel, p. 98.
 114. "Most Hercules Planes Not Ready to Fly," *Ottawa Citizen*, 24 November 2001.
 115. See Sharon Hobson, "Canada Includes C-130J as Transport Option," *Jane's Defence Weekly*, 13 June 2001.
 116. At a cost of about \$150 million (U.S.) per aircraft, the C-17 is easily the most expensive transport plane ever built. One option that DND is reportedly considering that would reduce the financial cost of a purchase is to "share" C-17s with the United States. Under the plan, Canada would buy or lease the planes but make them available to the U.S. military (or even private industry) when it did not need them; see "Canada's Troops Fight Budget Battle." In February 2002, it was reported that a split had developed within the air force between supporters of the new Hercules and those who preferred a small purchase of C-17s; see "Forces Chiefs Differ on Which Planes to Purchase," *National Post*, 12 February 2002.
 117. As noted in Sloan, *The Revolution in Military Affairs*, p. 136.
 118. The air force's Website devotes considerable attention to noncombat operations, including peacekeeping, humanitarian aid, international cooperation, and space policy: "The air force flies peacekeeping missions and conveys relief workers, emergency food and medical supplies to scenes of natural disasters or where armed conflicts have left little behind—*alleviating suffering and saving lives*" (emphasis in original, www.airforce.forces.ca/abroad).
 119. Walker, p. 275.
 120. For a history of Canada's air force, see Sydney Francis Wise, *The Official History of the Royal Canadian Air Force* (Toronto: Univ. of Toronto Press, 1980), and W. A. B. Douglas, *The Creation of a National Air Force* (Toronto: Univ. of Toronto Press and DND, 1986).
 121. See "Canada Sends Third of Fleet," *Globe and Mail*, 9 October 2001.
 122. Maritime aviation assets belong to the air force, but they fall under the operational command of the navy. A similar relationship holds for army tactical aviation.
 123. Jockel, p. 70.
 124. *Ibid.*, p. 71. Also see Sharon Hobson, "Slow Progress for Canada's *Iroquois* Destroyer," *Jane's Navy International*, 1 July 2001.
 125. They are former Royal Navy boats of the *Up-holder* class. Relatedly, the navy has been examining possible replacements for the destroyers for the past several years. One project it continues to study is the Command/Control and Area Air Defence Replacement (CADRE). Other options include transferring the command and control capabilities into several *Halifax*-class frigates, building entirely new hulls, or acquiring another type of ship. See Hobson, "Canada Aims for Defence Interoperability with United States."
 126. See Sharon Hobson, "Up-holder Class Submarines Resurface in Canada," *Jane's Navy International*, 1 November 2001.

127. In the summer of 2002, a series of reports detailing structural and operational problems with the submarines left the navy unsure of the wisdom of the acquisition. First, the navy discovered significant hull damage to one of the boats; shortly after, hairline cracks were discovered in the diesel hull-exhaust valves of two others. The various problems and repairs will result in a delay of at least two years before the submarines will be ready for active duty, now estimated to be 2004 at the earliest. See "New Submarine a Lemon, Navy Finds," *Toronto Star*, 23 April 2002, and "Cracks May Hold Up New Subs," *Halifax Daily News*, 12 May 2002.
128. As of 2001 (prior to Operation APOLLO), six Canadian ships had been integrated into U.S. naval forces in the Arabian Gulf alone. According to DND, "The Canadian Navy is the only foreign navy to successfully operate as part of U.S. carrier battle groups"; see "Canadian Navy Teams Up with U.S. Carrier Battle Groups" (www.dnd.ca/menu/canada-us/background). For a review of Canada-U.S. naval cooperation, see Sokolsky, "Sailing in Concert."
129. It should be noted, though, that by August 2002 the Canadian naval commitment had been reduced to three ships, a consequence of the navy's lack of enough personnel to maintain a significant overseas presence for more than six months; see Granatstein, "A Friendly Agreement in Advance," p. 9. Also see "Frigate Returns Home from War on Terrorism," CBC Website (www.cbc.ca), 18 August 2002.
130. See "Our Warships to Be Treated as 'American,'" *National Post*, 9 October 2001.
131. Sokolsky, "Sailing in Concert," p. 12.
132. Chief of the Maritime Staff, *Leadmark: The Navy's Strategy for 2020* (Ottawa: Directorate of Maritime Strategy, 2001), p. 129.
133. Sokolsky, "Sailing in Concert," p. 12.
134. Each Sea King requires twenty-five to thirty hours of maintenance for every hour it is flown. See Sharon Hobson, "Evergreen Sea King," *Canadian Defence Quarterly*, Spring 1998, p. 32.
135. The Maritime Helicopter Programme (MHP) has become mired in a seemingly endless process of contract specifications and requirements. Formal tenders, which had been expected to be issued in the fall of 2002 (some two years after the project was first announced), were not issued at that time; in fact, according to defense officials familiar with the project, the entire program may be in "limbo." The delay stems in part from the government's decision to split the contract in two—one for the airframe and the other for the electronics package—in spite of considerable evidence that doing so will significantly increase the total cost of the program. As a result, there are widespread allegations of political interference and indifference—hardly surprising, considering that the Chretien government is surely embarrassed by the entire project. Indeed, one of the leading bidders, EH Industries, has charged that the government has rigged the program to ensure that its helicopter, a version of the EH-101 that was canceled in 1993, is not selected. See "Chopper Contract 'Politically Driven,'" *Ottawa Citizen*, 1 December 2001; "Sea King Plan Cost \$13 Million, No End in Sight," *National Post*, 31 January 2002; and "Program to Replace Sea Kings in Limbo," *Ottawa Citizen*, 25 August 2002.
136. According to a recent DND report, delays in the MHP might require the Sea Kings to remain in service until 2010 or 2015, by which time they would be more than fifty years old. Until recently, the Canadian government had insisted that the new helicopters would be in service by 2005, in spite of unmistakable evidence that such a timetable was unrealistic. See "DND Warns of More Chopper Delays," *Ottawa Citizen*, 25 November 2001; "Pilot Shrugs Off Sea King Delay," *Halifax Daily News*, 7 June 2002; and Sharon Hobson, "Canada's MHP Falls Even Further Behind," *Jane's Defence Weekly*, 10 April 2002. In November 2002, news reports emerged of further delays in the MHP, and for the first time the government acknowledged that the existing timetable may be unachievable. See "Ottawa Warns of New Delay for Helicopters," *National Post*, 7 November 2002.
137. So much attention is focused on the Sea King's age and maintenance difficulties that the helicopter's design and equipment deficiencies tend to go largely unnoticed. In November 2001, *Jane's Defence Weekly* reported that the Sea Kings that were to join Operation APOLLO lacked the warning systems needed

- to defend themselves against missile attack, as well as modern communications equipment. See Sharon Hobson, "Canadian Helicopters Deployed with Limited Self-Defence," *Jane's Defence Weekly*, 21 November 2001.
138. For a discussion, see Ernest Cable, "Canadian Maritime Aviation: Requiem or Renaissance?" *Canadian Defence Quarterly*, Summer 1998.
139. See an additional paper by this author: "Strategic Ambitions and Fiscal Realities: Give the Navy Priority," *Policy Options*, April 2002.
140. See Chief of the Maritime Staff, chap. 3.
141. Sokolsky, "Sailing in Concert," p. 13.
142. The obvious exceptions are the two oiler/replenishment ships (AORs), whose main tasks include at-sea replenishment of other naval vessels and helicopter maintenance. The navy is currently considering a proposal to acquire an Afloat Logistics and Sealift Capability, represented by a ship that would combine capabilities for fleet replenishment, in-theater support to forces ashore, and strategic lift for the army. The navy is currently trying to get the program "fast tracked." For a discussion, see Bruce T. Irvie [Lt. Cdr.], "Afloat Logistics and Sealift Capability for the Canadian Navy," *Canadian Defence Quarterly*, Summer 1997.
143. Both the Progressive Conservative (PC) and Canadian Alliance (formerly Reform) parties have been badly hurt by poor leadership and scandal over the past decade. A "unite the right" movement has for the past several years been attempting to consolidate these two right-of-center political parties, but with little success. Indeed, such efforts appeared to come to an end in August 2002 amid mutual accusations and recriminations; see "Alliance, Tories Agree Unity Dead," *National Post*, 26 August 2002. Given the breakdown of voter preferences in Canada, it is difficult—if not impossible—to imagine the Liberals' losing a federal election as long as its two main rivals continue to split the opposition vote, an observation widely discussed by polling firms and political observers.
144. A recent *Maclean's* poll indicates that the Canadian public is finally beginning to appreciate the severity of the defense crisis. The poll reveals that 68 percent of Canadians are in favor of "substantially" increasing defense spending, although they continue to view peacekeeping as the military's primary defense task. The poll also shows that the military is just one of many institutions the public believes needs extra funding. See "In Search of Our Role," *Maclean's*, 31 December 2001–1 January 2002.
145. The response of the Canadian government to 11 September was measured. With regard to military action, Canada participated in the U.S.-led war on terrorism (as noted). As for domestic actions, the government introduced two anti-terrorism bills, both of which give the state strong powers. The government also announced a comprehensive review of continental defense agreements with the United States. In addition, in December 2001 the Canadian and U.S. governments reached a broad agreement on border issues, including surveillance, common enforcement measures, and increased cooperation on entry. For an American perspective on these developments, see "In Canada, a Sea Change Follows Wave of Terrorism," *Los Angeles Times*, 28 January 2002, and "Canada Debates Its Global Role amid Dwindling Military," *Christian Science Monitor*, 23 July 2002. It should be noted, though, that many of these steps appeared defensive, as the government has been battling a widespread perception that Canada is "weak" on terrorism. Indeed, American concern over Canada's lax immigration standards and unwillingness to take strong measures against known terrorists in Canada was a point of concern long before the attacks; see, for example, "Canadians Shun U.S. Efforts to Control Border," *Christian Science Monitor*, 8 February 2000, and "Border with Canada Must Be Tightened, U.S. Expert Says," *National Post*, 24 February 2000. For a more recent American look at Canada's continued reluctance to change its refugee policies, see "Bordering on the Ridiculous," *Washington Times*, 17 August 2002. For a critical overview of Canada's approach to immigration, see Stephen Gallagher, "The Open Door beyond the Moat: Canadian Refugee Policy from a Comparative Perspective," in *Canada among Nations 2002: A Fading Power*, ed. Norman Hillmer and Maureen Appel Molot (Don Mills, Ont.: Oxford Univ. Press, 2002).

146. "Eggleton Promises New Review of Defence," *National Post*, 10 November 2001. While (former) Defence Minister Art Eggleton was initially quite firm in his belief that a full-scale review was needed (which would undoubtedly lead to a new white paper), by the spring of 2002 the department's plans had become unclear, with some officials suggesting that a simpler program review would suffice. The confusion ended in July 2002, when the new defense minister, John McCallum, confirmed that he was more interested in a program review; see "McCallum Plans to Use the Internet for Defence Policy Review," *Kingston Whig-Standard*, 27 July 2002. As an aside, Eggleton was fired in May 2002 after reports surfaced that he had awarded his girlfriend a departmental contract.
147. The best example is the current edition of the *Canada among Nations* series, an annual volume published by the Norman Paterson School of International Affairs at Carleton University that examines recent Canadian foreign and security policy decisions and developments. The subtitle of the 2002 edition (cited above) is *A Fading Power*; several of its chapters deal with various aspects of Canadian decline.
148. The debate over Canada's status within the international community is a long and controversial one. One school, first popularized in Canada by Lester Pearson and the diplomat-scholar John Holmes, suggests that Canada's preference for multilateralism and skills as a negotiator, its lack of the capabilities of a great (or "principal") power, and the fact that it is too strong to be considered a minor (or "satellite") power make it an ideal "middle power." In the past few years, a new debate has emerged over whether the end of the Cold War has reduced the roles of middle powers, as larger actors are now more willing to undertake roles (like mediation and peace-keeping) they previously ignored. While the field is far too extensive to review here, a controversial recent article examines the literature and concludes that Canada has skillfully used its middle-power status to justify its role in the international community: Adam Chapnick, "The Canadian Middle Power Myth," *International Journal*, Spring 2000. For a classic formulation, see John Holmes, "Most Safely in the Middle," *International Journal*, Spring 1984.
149. "Armed Forces 'Well-Equipped,' Chretien Fires Back," *National Post*, 21 December 2001. The prime minister's allegations were reminiscent of the old "merchants of death" thesis, which for obvious financial reasons has never found much support in Canada.
150. The prime minister criticized Canada's military leaders for dated thinking, declaring that "we have to adjust to the new reality of 2001, but some are still thinking of the same strategy of 1939." Chretien further argued that contemporary conflicts highlight airpower ("It's all airplanes, it's all bombardment")—overlooking the fact that under his government the air force has been decimated.
151. Oliver and Hampson, p. 135.
152. See "McCallum Admits Forces 'Stretched,'" *National Post*, 27 July 2002.
153. For a critical look at Canada's commitment to internationalism, see Kim Richard Nossal, "Pinchpenny Diplomacy: The Decline of 'Good International Citizenship' in Canadian Foreign Policy?" *International Journal*, Winter 1998–99. Other observers have described Canada's foreign policy orientation as "selective internationalism"; see Jean-Francois Rioux and Robin Hay, "Canadian Foreign Policy: From Internationalism to Isolationism" (paper published by the Norman Paterson School of International Affairs, Carleton University, Discussion Paper 16, 1997).
154. In a cabinet shuffle announced on 15 January 2002, Manley became deputy prime minister and finance minister, while Bill Graham, the chairman of the House of Commons Foreign Affairs Committee for the past six years, was named the new minister of foreign affairs. Interestingly, though, Manley retained responsibility for handling U.S. relations in the area of border security, an obviously critical issue post-"9/11." While Graham is still in the early days of his tenure, his preachy, moralistic tone appears reminiscent of Axworthy. For a profile, see "Flamboyant MP Takes His Post and Prepares to Represent Canada before the World," *Globe and Mail*, 22 January 2002.
155. Manley attracted considerable attention in the summer of 2001, when he argued that Canada could not continue to sit in various

- international bodies and yet “go to the wash-room” whenever bills come due. He also said that Canada was “borderline in terms of [its] ability to influence situations that are unexpected.” For a profile, see “Manley Transformed by Tumultuous Year,” *National Post*, 27 December 2001.
156. See William Peters [Col.], “Beyond Kosovo: Will Canada’s Army Fight for the Western Alliance?” in *Transforming an Army: Land Warfare Capabilities for the Future Army*, ed. Shaye Friesen, DLSC Report 9904 (Ottawa: DND, Directorate of Land Strategic Concepts, 1999), p. 83.
157. Among recent studies, see Michael P. Noonin and John Hillen, “The Promise of Decisive Action,” *Orbis*, Spring 2002; William J. Perry, “Preparing for the Next Attack,” *Foreign Affairs*, November/December 2001; and John A. Nagl, “Hitting Us Where We Don’t Expect It: Asymmetric Threats to U.S. National Security,” *National Security Studies Quarterly*, Autumn 2001.
158. In August 2002, the defense minister, McCallum, noted in a letter sent to several strategic-studies organizations that there was a need to “redirect resources” so that future defense capabilities could be pursued. The comment was widely interpreted as indicating that the CF will not get any significant infusion of new funding in the near future; see “Minister Hints Forces Won’t Get New Money,” *National Post*, 2 August 2002. In addition, Prime Minister Chretien’s surprise announcement in August 2002 that he will resign in February 2004 will likely result in even more spending pressure, as defense is clearly not high on his list of priorities for solidifying his political legacy. See “PM’s Agenda Ignores Forces: Critics,” *Ottawa Citizen*, 28 August 2002. While McCallum has subsequently begun calling for increased defense spending, by late 2002 there were no indications that these efforts would yield results anytime soon. See “McCallum Seeks Huge Hike in Military Budget,” *National Post*, 25 October 2002.
159. See “Military in Relentless Decline,” *National Post*, 30 May 2002. The report is titled “Defense Policy Update: Sustainability.”
160. Henault, p. 33 [emphasis added].
161. *Ibid.*, p. 15.
162. See “High-Tech Weapons Change the Dynamics and the Scope of Battle,” *International Herald Tribune*, 28 December 2001; “Studying Lessons of Battle Success,” *Los Angeles Times*, 17 December 2001; “Special Forces’ High Profile Could Yield a Budget Increase,” *Washington Post*, February 4, 2002; Andrew Koch, “United States Appraises Lessons Learned In Afghanistan,” *Jane’s Defence Weekly*, 24 April 2002; and Michael O’Hanlon, “A Flawed Masterpiece,” *Foreign Affairs*, May/June 2002. In August 2002, a debate over how to overthrow Saddam Hussein’s regime in Iraq pitted those who called for a repeat of the “Afghanistan model” against those who maintained that any Iraqi operation would require hundreds of thousands of American ground troops, much like Operation DESERT STORM had eleven years earlier. For a review, see “Theater of War,” *Time*, 12 August 2002, and “Afghanistan Lessons Don’t Apply to Iraq, General Says,” *Washington Times*, 22 August 2002. Interestingly, the primary supporters of the new model are civilians, led by Secretary of Defense Donald Rumsfeld and Vice President Dick Cheney, while those emphasizing the need for a massive ground assault are military professionals (or former ones), led by Secretary of State Colin Powell and the chairman of the Joint Chiefs of Staff, Richard Myers. The issue was apparently resolved in November 2002, when it was reported that the U.S. military had finalized its invasion plan of Iraq, which would involve a total force of two hundred thousand personnel. See “War Plan for Iraq Ready, Say Observers,” *Washington Post*, 10 November 2002 and “Bush Approves Iraq War Plan, Large Force Seen,” Reuters News Service, 9 November 2002.
163. The newer Link-16 tactical data system has dramatically decreased the time required for the air force to locate and strike targets. See Phillip S. Meilinger, “Force Divider: How Military Technology Makes the United States Even More Unilateral,” *Foreign Policy*, January/February, 2002.
164. The emerging capabilities of UAVs were highlighted in February 2002 when a U.S. Predator drone fired a Hellfire missile at an Afghani convoy that may have included senior al-Qa’ida officials. The Predator’s live

- video feed, combined with the ability to fire its missile by remote control, gives the United States at least a limited capability to strike targets within seconds of their detection. See "CIA May Have Hit al-Qaeda Leader," *National Post*, 8 February 2002. This capability was further highlighted in November 2002, when a car carrying several al-Qa'ida officials in Yemen was similarly hit by a missile fired from a Predator. See "Sky Wars: Remote Targeting Changes the Nature of Warfare," *Times Online*, 6 November 2002 (www.timesonline.com).
165. Art Eggleton, then defense minister, was widely derided in November 2001 for saying that Canada would not send troops "into a condition in which they are unwelcome." The comment, made at a time when it was unclear whether the government would commit ground forces to Afghanistan, drew (largely negative) attention to the fighting capabilities of Canada's army; see "Troops Won't Go If They're 'Unwelcome,'" *Globe and Mail*, 20 November 2001. The 850 Canadian troops deployed to Afghanistan between February and July 2002 provided airport security, performed land-mine removal, assisted in tracking and capturing remaining Taliban and al-Qa'ida fighters, and helped protect aid operations. Their deployment did not indicate a major ground combat capability; they were neither equipped nor trained to fight in a high-intensity combat environment.
166. A recent British study examined the role the United Kingdom can play in coalition operations and the interoperability challenges that must be met for it to do so. See *Coalitions and the Future of UK Security Policy* (London: Royal United Services Institute for Defence Studies, 2000).
167. Freedman, *The Revolution in Strategic Affairs*, p. 48.
168. See U.S. Dept. of Defense, *Concept for Future Joint Operations: Expanding Joint Vision 2010* (Washington, D.C.: Joint Chief of Staff, 1997).
169. Jockel, p. 121.
170. William Perry, "Military Action: When to Use It and How to Ensure Its Effectiveness," in *Global Engagement: Cooperation and Security in the 21st Century* (Washington, D.C.: Brookings Institution, 1994), p. 236.
171. Secretary of Defense Rumsfeld has warned about the dangers of coalitions and the threat they may pose to effective military operations: "The mission must determine the coalition; the coalition must not determine the mission. If it does, the mission will be dumbed down to the lowest common denominator, and we can't afford that." Cited in G. John Ikenberry, "America's Imperial Ambition," *Foreign Affairs*, September/October 2002, p. 54.