

*Transforming National
Defence Administration*

Transforming National Defence Administration

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The Claxton Papers

The Queen's University Defence Management Studies Program (DMSP), established with the support of the Canadian Department of National Defence (DND), is intended to engage the interest and support of scholars, members of the Canadian Armed Forces, public servants, and participants in the defence industry in the examination and teaching of the management of national defence policy and the Canadian Armed Forces. The program has been carefully designed to focus on the development of theories, concepts, and skills required to manage and make decisions within the Canadian defence establishment.

The Chair of the Defence Management Studies Program is located within the School of Policy Studies and is built on Queen's University's strengths in the fields of public policy and administration, strategic studies, management, and law. Among other aspects, the DMSP offers an integrated package of teaching, research, and conferences, all of which are designed to build expertise in the field and to contribute to wider debates within the defence community. An important part of this initiative is to build strong links to DND, the Canadian Armed Forces, industry, other universities, and non-governmental organizations, in Canada and in other countries.

This series of studies, reports, and opinions on defence management in Canada is named for Brooke Claxton, Minister of National Defence from 1946 to 1954. Brooke Claxton was the first post-Second World War defence minister and was largely responsible for founding the structure, procedures, and strategies that built Canada's modern armed forces. As defence minister, Claxton unified the separate service ministries into the Department of National Defence; revamped the *National Defence Act*; established the office of Chairman, Chiefs of Staff Committee, the first step toward a single Chief of Defence Staff; organized the Defence Research Board; and led defence policy through the great defence rebuilding program

of the 1950s, the Korean War, the formation of NATO, and the deployment of forces overseas in peacetime. Claxton was unique in Canadian defence politics: he was active, inventive, competent, and wise.

A NATIONAL-LEVEL TRANSFORMATION

Canada's future defence policy and military capabilities were defined in the spring of 2005 by the appointment of General Rick Hillier as Chief of the Defence Staff and the government's promise of a significant, multi-year funding allocation to national defence. Both of these decisions signal an intention to radically transform and rebuild the Canadian Forces – objectives confirmed in the 2005 Defence Policy Statement. Reaching these goals, however, is not assured and greatly dependant on how national policy and the transformation of the Canadian Forces are administered, not only within the Department of National Defence, but also in other government departments and in the central agencies which are responsible for significant programs related to national defence. Bringing policy intentions and administrative outcomes together, therefore, is the next great challenge for the Minister of National Defence.

The present structure for defence administration was built mainly during the 1970s to manage cold war policies and commitments. In 2003, then Minister of National Defence, John McCallum, commissioned a report entitled *Achieving Administrative Efficiency* which concluded that despite incremental changes over many years and the best efforts of officers and officials, the Canadian Forces, the Department of National Defence, and, by implication, other government departments and the central agencies:

are not well positioned, from a management perspective, to meet the strategic-level challenges [they are] facing. The Committee believes that without fundamental transformation of the national-level management framework and practices of the Department of National Defence and the Canadian Forces, the CF will not be able to transform itself rapidly enough to adapt to Canada's changing security environment.¹

If any new defence policy is to succeed, the government must review not only military structure, command arrangements, and doctrine, but also every major aspect of the defence organizations, processes, and

methods as the essential first step to transforming of the Canadian Forces. The aim should be nothing less than to build, from the ground up if necessary, a modern, proficient, government-wide system of defence administration appropriate to the demands facing the Canadian Forces and responsive to the needs of the government and Parliament.

The purpose of this *Claxton Paper* is to illustrate the deep difficulties in the present system of defence administration, and to suggest principles, ideas and approaches aimed at the restructuring and realignment of defence administration in support of the transformation of the Canadian Forces and defence policy generally. Chief among these suggestions is the notion that the purpose of defence administration is to create, equip, and sustain the combat capabilities of the Canadian Forces efficiently and economically with the resources provided by governments. A transformation of defence administration must reform organizations, personnel establishments, and other resources and direct them towards this primary purpose.

Skilled combatants – well trained and experienced people – are the precious and most expensive element of any operational capability. A transformed system of defence administration would build the most efficient way to regulate and supervise all aspects of recruitment, training, and retention of skilled combatants so as to develop as strong a combat-capable force as possible from the total strength of the Canadian Forces.

The degrees to which national resources allocated to defence policy create useful combat capabilities is the true measure of administrative efficiency in DND and the Canadian Forces. The reallocation of resources and effort from low to high priority missions to enhance combat-capabilities for national defence is the putative defining feature of the new policies of defence transformation. A transformed system of defence administration would be designed, therefore, to efficiently and effectively reallocate defence resources and people from the low to the high priority missions in a continuous effort to keep the sharp end of the Canadian Forces more combat capable, relevant, and responsive to Canada's defence needs.

Canada's national defence is the principal responsibility not only of the Canadian Forces and the Department of National Defence, but of government as a whole. But in many cases defence policy and the needs of the Canadian Forces clash with other departments' policies, interests, and procedures, thereby delaying defence planning and adding costs to or even upsetting the production of combat capabilities. A complete defence

review would seek to identify the full scope of defence administration across the government and to recommend ways to realign and reform authority, responsibilities, and procedures for defence administration to increase the pace of defence transformation and the rebuilding of defence capabilities.

National Defence Headquarters is constructed on concepts first introduced in 1972. Changes in organization and administrative procedures since that time have been mostly incremental and conditioned by the direction that the basic structure of National Defence Headquarters could not be reordered. A review of defence administration should clarify the structural and procedural needs for the central administration of defence policy and eliminate burdensome government-wide demands on the Canadian Forces and the Department of National Defence. The review should also recommend ways to place authority for all aspects of defence administration as close as possible to the Chief of the Defence Staff and the Deputy Minister of National Defence, who, together, are ultimately accountable for the efficient implementation of defence policy.

Changing the government's policy intentions into credible outcomes cannot be accomplished if administrative organizations and methods are unsuited to the task. A *national-level* review of the administrative framework for national defence should aim to bring forward fundamental recommendations to streamline and modernize defence administration in Canada to ensure that the transformation of defence policy and the Canadian Forces proceeds quickly, efficiently, and economically. The government has committed billions of dollars for Canada's national defence. It would be shameful and perhaps dangerous to national security if "the machinery of government" wasted, through poor administration, these dollars and this unique opportunity to build a responsive, relevant, and modern armed force for Canada.

This monograph follows issues and difficulties raised in the 2003 *Claxton Paper*, "Canada without Armed Forces?", which presented the spectre of a cascading collapse of Canada's military capabilities in five to ten years.² That paper showed, beyond question, that years of operational over-commitment and under-investment in national defence had taken the Canadian Forces to a perilous point of no-return, where many essential capabilities would fail before they could be rescued. What then is the state of play some eighteen months later?

Claxton 6, “Transforming National Defence Administration”, begins by setting out a conceptual framework for the transformation of defence administration in Canada. It is not an essay suggesting more cuts or ways of “doing more with less.” But rather a modest suggestion to overturn entirely the way national defence is administered. The point of the discussion is not to describe how to make failed efforts more efficient, but to stimulate others to answer the question: “If we had to transform and rebuild the Canadian Forces in five years, how would we do it – present administrative policies be damned?”

The paper describes from recent empirical evidence, mostly derived from National Defence Headquarters sources, several pressing difficulties largely unsolvable by present policies and procedures. Dr. Christopher Ankersen tackles the central question of capabilities – how are they defined, developed, and used. He makes the clear case for looking at military capabilities as “systems of systems” and then joins this description to the idea that capabilities are inseparably defined by capacity. It may seem obvious – though some past defence policy decisions would throw such an assertion into doubt – that capabilities without some capacity or mass provide a mere token that cannot be sustained in even limited engagements. Defence planning and the strictures of national procurement policies often overlook this fundamental relationship and allow mere tokens to parade as viable capabilities.

The intricacies of defence budgets, for all their importance, are seldom reviewed beyond their bare bottom line. However, Howard Marsh – a self-confessed “factoid” – looks more deeply into recent defence budgets to find “spending trends” and discovers some startling anomalies. He reviews with the reader issues of distribution, costs-to-capabilities, a budgeting process that tends towards inefficiency, and the “rank creep” within NDHQ which satisfies some officials and officers but produces no observable increase in basic output. Defence transformation will require not just new money, but new ways to allocate it to serve the fundamental purposes of national defence. Marsh carefully lays out the major pillars for such a system.

Many citizens, including members of the Senate Committee on National Security and Defence, were more than a little surprised to hear senior officers and officials declare that the government’s offer to recruit 8,000 new members for the Canadian Forces could not be achieved in

less than five years. Christopher Ankersen examines this difficulty and other “personnel” questions, and concludes that, given current policies, officers and officials may well be right and that other more serious impediments to increasing the effective strength of the Canadian Forces are sitting in the background. These impediments must be removed, but first leaders must acknowledge that the system is broken and then develop a long-term personnel strategy to match the vision of a new, transformed Canadian Forces.

Finally, Brian MacDonald examines how Canadians might go about “closing the gap” between policy intentions and policy outcomes. In particular, he addresses the question of how one might rapidly ‘recapitalize’ the defence portfolio so as to rescue the Canadian Forces from the structural disarmament that now seems inevitable. “Accrual accounting” is not a term that easily slides from everyone’s lips; however, MacDonald provides a clear explanation of how this technical process might provide, over time, a way towards building future capabilities within present budgetary expectations. He then carries these concepts into other critical problem areas of procurement, Canadian Forces base operations, and defence capabilities planning.

Despite important changes in organization, capability plans and future budget promises, along with the ascent of a new cohort of leaders within the Canadian Forces, the downward spiral of Canadian Forces capabilities continues. Neither vision nor hope can substitute for dollars spent and political will carried forward. Defence dollars and the strong will of the Minister of National Defence, the Chief of the Defence Staff, and the Deputy Minister of the Department of National Defence will not suffice either, for they do not and cannot control the government-wide processes that produce defence outcomes. This fact of national defence administration takes us back to the conclusions of John McCallum’s efficiency study – “without fundamental transformation of the national-level management framework and practices of the Department of National Defence and the Canadian Forces, the CF will not be able to transform itself rapidly enough to adapt to Canada’s changing security environment.”

This *Claxton Paper* addresses major failings in the policy process today and asks implicitly: “If we were to halt the fall of defence capabilities and transform the Canadian Forces in the next five years, then what impediments would we have to knock aside?” The question remains to be answered even in this era of hopeful visions and strong wills.

This study grew from the dedicated work and fine insights of the authors and from the conference, *The New Defence Agenda: Transforming Defence Administration in Canada*, held in Ottawa in April 2005. Particular thanks for the production of *Claxton 6*, “Transforming National Defence Administration” is due Dr. Richard Gimblett, who brought the initial research papers into a publishable volume and added his own important insights to the central theme. John Marteinson very skilfully edited the text, suggesting changes in tone and substance as he did so. Alain Pellerin, ably assisted by Sarah Noble, helped manage the conference and the detailed organization of the research team. The authors thank as well Mark Howes and Valerie Jarus for their continued, accomplished efforts to change the work of ‘mere scholars’ into an attractive, readable product. Finally, we all thank Lois Jordan for her unflagging good spirits and willing support to the Chair of the Defence Management Studies program at Queen’s University and for her particular efforts to see that the conference and this work actually came to fruition.

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CHAPTER ONE

Transforming Defence Administration

Douglas L. Bland

In the defence white paper, *Defence in the 70s*, the government declared, “it is not possible simply to state ‘defence requirements’ and call that the defence budget.”³ Rather, it was argued, defence decisions, including budgetary decisions, ought to be based on a judgement and selection of “defence activities” appropriate for the defence of Canada. The dichotomy, of course, is false: creating an appropriate defence of Canada (today, just as in 1970) requires governments to make decisions where ‘requirements’, ‘activities’, and ‘budgets’ are intertwined. In other words, an ‘appropriate’ national defence is the product of decisions shaped by political, strategic, budgetary, and public administrative factors, all considered and balanced within the context of ‘the facts of national life’.

Too often, a comprehensive defence policy statement can be biased if DND officials or senior officers emphasize one or only a few factors while dismissing or diminishing the importance of others. *Defence in the 70s*, for instance, attempted to separate requirements, activities and budgets, and consequently the policy failed. In 1987, the Mulroney government declared its defence policy in *Challenge and Commitment: A Defence Policy For Canada*,⁴ and failed almost immediately because its objectives and costs were unbalanced and unsupportable in any public forum.

The essence of defence policy is to define defence objectives, identify resource requirements commensurate with those goals, establish the rules governing the uses of force, and provide the processes by which the civil authority will oversee the armed forces and defence officials. The object of defence administration is to establish, equip, and sustain the Canadian Forces so as to produce as much useable coercive force as is possible from the resources provided by the government. While strategic

analysis, goal setting, resource allocation and public oversight are essential components of defence policy, the key to building defence capability is effective and efficient public administration. But the mere recognition of this fact does not guarantee the desired result of ‘appropriate’ defence. Obviously, inefficient and wasteful administration will degrade, not enhance, defence capabilities.

Defence policy statements and public discourse in Canada usually concentrate on objectives and the end uses of armed forces. Some ‘expert’ commentary and public studies direct attention to budgetary matters, but most often as raw numbers and percentage spending compared with other government programs – guns versus butter – or the defence efforts of other states, or supposed international norms (for example, as a percentage of Gross Domestic Product [GDP]). Occasionally, the Office of the Auditor General of Canada decries wasteful defence administrative practices. Yet most of these criticisms are abstracted from the whole and are overshadowed by the assumption that, if only governments could find the answer to what it is that we want the Canadian Forces to do and provide the funds to do it, then every other matter would fall faultlessly into line. This type of reasoning is, of course, the strategist’s delusion.

Public administration ought to efficiently change ideas into action and outcomes commensurate with policy intentions. Where public (or, in this case, defence) administration fails to meet this purpose, then policy has little chance of success and will usually fail, sometimes spectacularly. What then is the purpose of defence administration in Canada? Where is it practised, who is accountable for successes and failures, and what impediments do present governmental methods, rules, and procedures place between defence policy and an appropriate national defence? More positively, are there other ways of doing business that would yield better outcomes?

PURPOSE, PEOPLE AND PROCESS

Purpose. To declare that ‘getting more bang for the buck’ is the object of defence administration does not get one very far, but it is not a wholly inane aphorism. Nations maintain armed forces for one purpose: to have an instrument to apply coercive and, if necessary, deadly force on others in the pursuit of the government’s objectives. Why otherwise would the force be armed? Certainly, armed forces can serve society and gov-

ernments in other ways, but these other ways are usually peripheral to the military's reason for being. Most of these ancillary tasks, moreover, can be performed better by others, and at less cost than by military units that might be assigned to them as secondary duties. The first aim of defence administration, therefore, is to turn national assets into more 'bang' – more useful, coercive force – and to hold that force in high states of readiness and sustain it during military operations.⁵

If the primary goal of armed forces is distracted by other government objectives, then defence administration also will become distracted, perhaps seriously so. For instance, if defence administrators are directed to produce military capabilities but only so as to benefit home-based industries, then they will expend considerable administrative resources – time, people, money, and managerial skills – in pursuit of this industrial policy, when less effort might have been needed to buy the purely military capability directly from the best source. When portions or all of the authority and responsibility for this type of policy falls outside the defence department (as in this example to Industry Canada, among others), then more administrative resources and effort will be consumed in 'coordinating' strategies and fighting 'turf-wars'. The reproduction at Appendix A of the pertinent Public Works and Government Services Canada (PWGSC) web page illustrates this precise problem.⁶

Extrapolating this case, additional time will be spent preparing and managing dual-purpose proposals and contracts with industries, other government departments, the central agencies, and publicly defending decisions for or against some home-based industrial, regional, or political interest. Even if governments provided resources to cover these additional duties, senior officers and officials responsible for defence procurement are individuals who at times are overwhelmed by interests, competition, and regulations far removed from the straightforward business of procuring the most appropriate capability, efficiently, at the least cost.

Indeed, evidence in a host of government reports and studies illustrates plainly that defence administrators and the defence procurement system are overwhelmed by procurement policies and procedures directed at goals far removed from defence policy. These impediments add cost and years to defence decisions, and in some cases produce inferior outcomes in all respects. Other similarly stark examples abound in Canadian defence administration, in financial, personnel, materiel, infrastructure,

and reporting policies, to suggest only a few. In each case, to some degree, the demands of public administration drag the primary purpose of defence administration from its duty, which is to provide the greatest output of coercive capability from the national resources provided for this purpose.

People. Skilled combatants are the essential component of armed forces; with their weapons and equipment they constitute ‘the sharp end’, the coercive force of defence policy. These people are the most difficult component of the Canadian Forces to acquire and retain, especially in periods of conflict. Manpower is also the most costly element of any defence capability. Poor defence administration creates administrative drag that hinders the development of skilled combatants. Administration that takes members of the Canadian Forces away from primary military combatant functions robs Canada of national defence capabilities. During the First World War, wealthy citizens were asked, “Do you have someone digging your garden when they ought to be digging trenches?” Canadians today might ask, “Are there sailors in Ottawa manning desks when they should be at sea manning ships?”

The Canadian Forces establishment of 60,000 people and some 21,000 public servants provides for every duty, function, and service of national defence. Defence policy, no matter the size of these separate establishments, ought to aim to create and retain as high a percentage of skilled combatants and essential combat support personnel from this total as possible. Defence administration today misses the goal.

Every member of the Canadian Forces who is taken out of combatant status by administrative requirements not directly related to operational capabilities defeats an appropriate defence effort.

Today, a variety of programs, military preferences, public policy demands and other impediments drain military personnel away from operational duties. Although many public servants are critical players in essential defence roles, all too many others fill positions (and add costs to the defence budget) purely to service administrative functions and central agency policies that are only tangential to the production and sustainment of defence capabilities. As the Defence Minister’s Advisory Committee on Administrative Efficiency reported in 2003, a ‘re-think’ of defence administration would “identify activities that not only need not be done in NDHQ, but simply need not be done at all.”⁷

Since the nature of combat has changed significantly since Canada's last major experience of it, it is difficult to know for certain what administrative tasks are essential to combat capabilities or how many troops are required to meet them. Then too, no one quite knows which public servant occupies a DND post important to the purposes of national defence and which is a position important only to satisfy the needs of some other department or central agency. What is known, however, is that "an organization that should be focusing on strategic thinking and decision-making has become mired in administrative detail and processes."⁸

On a grander scale, then, we might add other questions to those posed earlier. What might result if defence administration were overhauled so as to remove all policies and procedures that served no direct operational purpose? If the first recruiting, classification and employment priority went to direct operational requirements, then how many people could be reallocated to the combatant ranks? Arguably, Canadian Forces combat capabilities would rise even as the cost for military personnel remained the same. If the public service ranks of DND were scrubbed to remove all who serve non-essential purposes, and their positions and salaries were allocated to the Canadian Forces, then surely defence capabilities would increase while total defence cost would remain nearly static. Ought not this notion to be a central plank in the government's defence policy?

Process. 'Feeding the goat' is a derisive comment used by Canadian public servants to describe their duty to provide endless reams of reports, returns, and information to the central agencies and commissioners, mostly found in the Treasury Board. Vast numbers of public servants and military personnel are engaged hours on end in producing administrative fodder on issues and policies large and small. Too often they toil for no reason related to the production of defence capabilities.

No one has to accept the argument that the sensible notion of public accountability demands a system that must spend great sums of taxpayers' money to achieve the desired result. In the case of defence policy, what is it that the civil authority really needs to know if it is to oversee the actions and decisions of senior officers and officials? What demands are not already stipulated in the *National Defence Act* and regulations, in the *Financial Administration Act*, and so on? No one knows, because no one has ever asked.

What is the cost to national defence – what resources are diverted from the production and employment of coercive force – by administrative procedures DND imposes on itself and the Canadian Forces? What is the cost to national defence – what resources are diverted from the production and employment of coercive force – by administrative procedures imposed on DND and the Canadian Forces by other government departments and central agencies with a hand in DND’s pocket? These are important questions of public administration and of defence policy. If the answer is that appropriate national defence is harmed by these demands, then they are questions that need to be addressed by the Minister of National Defence and the federal Cabinet immediately.

IDEAS IN ACTION

What fundamental ideas ought to guide the construction of a relevant, responsive system of defence administration in this new era of global instability? After all, it is sound ideas not mindlessly repeated processes that should form the link between policy and administration directed at producing an appropriate national defence. Fortunately, the conceptual framework for an efficient and effective system of defence administration in Canada is neither complex nor so startling as to overthrow the existing machinery of government.

The Defence ‘Deliverable’. The first idea that must be embedded in the machinery of government is that national defence is *not* a ‘deliverable’ produced by DND or the Canadian Forces. Rather, Canada’s national defence is the ‘responsibility’ of every Canadian, and in governmental terms it is a public good delivered by the government as a whole.

This notion redirects responsibility from one minister to the Cabinet and from one department and the Canadian Forces to every central agency and department. If the notion were properly interpreted, then the central direction of defence policy would follow, and many of the turf wars might be eased. Defence administration might be simplified if the central agencies were held to account for the efficiencies and inefficiencies their processes visit on attempts to produce an appropriate national defence.

Producing Coercive Force and Purpose. As argued earlier, the purpose of the Canadian Forces is to use coercive force at the direction of

the government. The purpose of defence administration is to produce and sustain military capabilities to this end as efficiently and effectively as possible. Assessments of defence administration, therefore, must be directed solely at measuring operational capabilities produced and sustained, and how efficiently (a ratio of resource inputs to capabilities outputs) these aims are achieved.

'Melt the Snowball'. In his indispensable work, *Military Concepts and Philosophy*, US Navy Admiral Henry Eccles describes "the logistic snowball":

The principle [of the logistic snowball] states that all logistic [and administrative] activities naturally tend to grow to inordinate size, and unless positive control is maintained this growth continues until, like a ball of wet snow, a huge accumulation of slush obscures the hard core of essential combat support and the mass becomes unmanageable. This snowball effect then permeates the entire structure of military organization and effort.⁹

An essential guiding principle for defence administrators, and therefore for their supervisors, is that the snowball must be kept small and every so often thrown roughly against the true purpose of the Canadian Forces so as to break off and let melt the administrative slush that will otherwise surely defeat the development and sustainment of core operational capabilities.

A Prejudice for Skilled Combatants. As all other societies have discovered, Canada requires a group of people under its control who are set aside from society to apply force in the resolution of social problems. That group is the Canadian Forces, select and unique people trained in and for combat. These are the people who must, in our society's interests and because of our society's bargain with them, be protected and valued. Moreover, they are at the heart of the purpose of our armed forces, and they constitute the most expensive component of every military capability. Because of that, their development, sustainment and care must be a central object of defence administration. Every military position removed from the group of skilled combatants must be challenged and, if found redundant to operational output, reallocated to that purpose.

Active Reallocation. As the purpose of armed forces is to apply coercive force at the direction of the government, all resources dedicated to the Canadian Forces and DND must be allocated to this fundamental need. Therefore, parts of the Canadian Forces required to generate coercive capabilities (for example, to train recruits), are obviously elements of the foundation of the Canadian Forces. Yet they too are in critically short supply, while the administrative ranks in NDHQ continue to swell. The distribution of resources today, between those who make a direct and measurable contribution to operational capabilities and those who do not, seems inappropriately weighted towards the latter group.

The reconstruction of the Canadian Forces and defence administration must be aimed at redressing this imbalance, not only in people but in all categories of effort and resources. The guiding administrative idea must be the reallocation of people and resources from the blunt end of the defence spear to the sharp end.

Such efforts will, invariably, be met with stubborn obstinacy and predictions of administrative catastrophe from entrenched non-combatant interests inside and outside the defence establishment. These shrill voices must be ignored and administrative backsliders removed from any responsibility for the administration of the national defence program. In time, a combat-biased reallocation policy would take effect, and by its own momentum sustain the fundamental principle of purpose. But senior leaders must be ever mindful of Eccles' reality – the slush on the snowball will always tend to accumulate.

THE UNIQUENESS OF DEFENCE ADMINISTRATION

The business of defence administration – the building and sustaining of combatant capabilities – separates the Department of National Defence and elements of the Canadian Forces from the business of other departments and central agencies. Defence policy is based on the premise that the government is willing to spend lives to achieve its policy ends. Members of the Canadian Forces understand and accept this 'unlimited liability', if only in the abstract most of the time. For their part, however, members of the Canadian Forces expect that they will not be put at risk unnecessarily or in situations beyond their capabilities. Keeping faith with this unspoken social contract, not administrative tidiness, is the real basis for a defence administration.

Enormous burdens are placed on senior officers and officials by the demands of this contract, and by the nature of modern military operations and the complexity of administering a policy with wide-ranging influence on other federal policies and programs in the dynamic of domestic and international affairs. Public administration ought to be the servant to these individuals, not their master.

Many of these factors are not unique to the Canadian Forces and DND, but they are also not entirely amenable to rules, regulations and operating norms applicable to other departments of government. Getting defence administration right is not a matter of how best to follow the rules flowing from the machinery of government, but rather how to protect Canada and Canadians at home and abroad most effectively in the circumstances of the moment, according to military definitions of efficiency.

The question for today, therefore, is what administrative concepts, norms and procedures can best deliver an appropriate national defence? From that, what structure of persons with authority, what organization, and what decision making procedures will best provide and sustain defence capabilities effectively and economically in peace and war (without changing fundamentally as circumstances change), while allowing for adequate parliamentary oversight of complex decisions? It is not at all obvious that the existing government structure and the centrally dictated procedures for the administration of policy provide the answers to these questions. Some might argue that they are the antitheses to what is needed in the circumstances, a heavy weight thoughtlessly placed on the backs of dedicated people to the detriment of the nation.

Parliament ought to examine these questions with the intention of finding and removing administrative impediments to national defence. The overseer has a responsibility not only to monitor his workers, but also to monitor and discipline those who impose themselves on their work. Even if unintentionally, these administrative impediments hinder the chances for success of our providers of national defence.

CHAPTER TWO

Capabilities and Capacities

Christopher Ankersen

Canada has not been at war for over 50 years, but since the early 1990s its armed forces have been called upon to perform war-like operations in many parts of the globe at a level of intensity far beyond what is normally associated with a time of peace. A considerable number of our servicemen have been injured in the process, and over a hundred have lost their lives. In an era of ‘continuous operations’ the Canadian Forces finds itself on the horns of a dilemma: it is being tasked to deploy frequently, at the limit of its ability to sustain itself both in terms of materiel and personnel, while at the same time it is trying to reinvent and repair itself so as to adapt to an ambitious mandate for the future. All this, though, is occurring against a backdrop of ‘business as usual’: peacetime rules for procurement and recruitment, for instance, act as brakes on the processes of both operations and regeneration. Beleaguered by traditional thinking and inertia from both within and without, the CF is in a critical phase from which it will be unable to exit for nearly a decade. Perhaps belatedly, however, a new defence agenda is beginning to take shape, guided by the concept of ‘transformation’.

Defence transformation, declared then-Secretary General of NATO Lord Robertson, is about three things: “Capabilities, capabilities, capabilities.” The future of the Canadian Forces is about nothing less. Whether the Canadian military is involved in close combat operations in the hills of Afghanistan, in maritime patrol and interdiction activities in the Straits of Hormuz, in air evacuation of Canadians from Haiti, in monitoring of air and sea approaches to Canadian territory, or in the provision of humanitarian assistance in Sri Lanka, the CF is only as effective today as current capabilities allow. And, in future, it will only be as effective as investments in new capabilities made today will allow.

While the CF possesses many attributes, the defining and essential capability is the ability to apply coercive force. Deadly force may not be the capability that is most often employed, but it is the use for which an armed force is brought into being in the first place. Many of the activities that the talented and dedicated men and women of the CF perform could be carried out by other agencies – be they Canadian or otherwise. In the final equation, however, the government and the people of Canada have only one organization dedicated to the application and management of armed force in pursuit of the national interest, and that is the military.

While much of the defence debate within Canada has centred on defining policies or allocating resources to DND, this chapter examines the nexus of these two streams of thought. To execute any policy adopted by governments, money must be converted into military capabilities appropriate to that policy. We can see from this definition, then, that capabilities are not merely about numbers of troops or ships or planes, even though people and equipment are essential to their development. Neither are capabilities solely about money, but money is required to create them. Capabilities are more than just assets or ‘platforms’, they are the effect that can be achieved through the use of these things. For instance, a tank is not a military capability in and of itself, but rather it is a building block that is used to construct a capability or an element in a whole host of other capabilities, such as mechanized combat teams. Some composite capabilities cannot be bought off the shelf; they must be nurtured and developed over time. Furthermore, they are not merely achieved ‘once and for all’; if they are not maintained, they can atrophy and may even disappear.

Take for instance the example of the Disaster Assistance Response Team (DART). It is comprised of personnel from a variety of fields: engineering, medical services, command and control, communications, and logistics. It is equipped with state of the art water purification and packaging technology, long-range communications gear, and emergency medical supplies. However, those people and that equipment do not equal a capability until and unless there is a way of getting them where they need to be. Only when the necessary ingredient of transportation is added does the DART truly provide the CF (and therefore the government of Canada) with a capability. Half a capability (or even 99 percent) is no capability at all.

Regardless of the particular defence policy in play at a given time, armed forces must be able to perform two principal tasks:

- Generate military capabilities; and
- Employ those capabilities in pursuit of stated government objectives.

An organization unable to carry out either of these tasks is ineffective and, therefore, irrelevant to the government and the people of Canada. Once a vision has been set out for the military (as has been done in the recent Defence Policy Statement and the accompanying statements by the Chief of the Defence Staff) the key to the creation of the capabilities that will see that vision turned into reality is effective administration.

CAPABILITY GENERATION

Capability generation is a process composed of the following basic functions:

- *People*: the recruitment, training, retention and management of personnel;
- *Things*: the design, development, procurement, and maintenance of equipment, systems, and infrastructure; and,
- *Ideas*: the creation, understanding, and dissemination of applicable knowledge in the form of doctrine.
- *Training*: the assembly of people, things, and ideas into usable units.

These functions are, of course, interrelated. For example, if there is no knowledge to pass on, then there can be no training. Similarly, without trained personnel, the best equipment is of no use. It is also clear that these functions rely on resources, but are not determined by resources alone. Simply throwing money at recruitment, for example, in the absence of a comprehensive strategy or plan to assemble them into units is unlikely to build real capability.

CAPABILITY EMPLOYMENT

Capabilities are developed so as to be employed. Again, the definition of capability stresses the idea of performance. In this regard, capabilities

are usually thought of in terms of ‘combat functions’, although these functions are applicable across the spectrum of military activity. Borrowing army terminology for the sake of example, the combat functions are generally held to be the following:

- *Command*: processing and communicating information, and providing direction.
- *Shield*: recognizing, avoiding, and countering threats.
- *Sense*: gathering information for use in other functions.
- *Act*: applying such skill (including the application of force) as is required to accomplish the mission.
- *Sustain*: providing forces with the necessary support in order that they might perform the other combat functions.

While it is evident that these functions entail, indeed require, equipment in order to be executed, they are not tied to any particular piece of equipment or type of vehicle or weapon. Furthermore, they entail much more than equipment: they are the fusion of people and things, of ideas, skill and equipment.

In this manner, the *generation* functions are intrinsically tied to the *employment* functions. A constant emphasis on employment without a corresponding investment in generation will lead to an erosion of overall capability. Such erosion means, by definition, a lessening in the ability of the armed forces to successfully accomplish its missions. The implication of this is simply that any policy requiring a military capability would fail without appropriate regard for the development and maintenance of that capability.

TECHNOLOGY AND CAPABILITY

Stating that capability is not tied to particular pieces of equipment (or ‘platforms’ in current jargon) is not to claim that such platforms are not important. In the previous example, we saw that a tank was not by itself a capability, that is, the ability to successfully accomplish a mission. However, without a tank, the ‘act’ and ‘shield’ combat functions might well be difficult to execute in a given scenario. That said, there may well be platforms other than a tank that would enable such performance; a different kind of vehicle, relying on speed, say, rather than armour,

might perform equally well or better. This process of replacement, though, is not infinite: there are qualitative differences between seemingly equivalent platforms. The ill-fated Iltis jeep, for example, provided deployed forces with the ability to move about their assigned area of operations. But, it was deemed to be lacking in protection for its occupants and was replaced by more capable vehicles, both armoured and conventional. At the same time, the capability of being able to move about and observe (the 'act' and 'sense' combat functions) could possibly be carried out using a variety of other means, such as unmanned aerial vehicles (UAVs) or helicopters.

The key to a capabilities approach, therefore, is not to be wed to specific platforms, but rather to focus on the 'effects' that a platform produces, and to seek the most efficient and economical ways to produce those effects. Returning to the tank example, it is conceivable that attack helicopters, unmanned combat aerial vehicles (UCAVs), or even a futuristic 'space-based' system could produce the same effects. Similarly, while the loss of the current Iroquois-class destroyers would denude the Canadian naval fleet of much of its operational command capability, it is not the destroyers themselves that are critical in this regard. Maintaining this important capability might be achieved in a number of ways. What is important is not a 'one-for-one' platform replacement program. Rather, a capability development program is effective if it fully appreciates the desired effect, considers the various means available to achieve it, and acquires this effect in conformity with the wider defence picture.

A capability-based approach cannot be accompanied with equivocation and euphemism. Capabilities not sustained are capabilities lost. An airplane fleet that cannot fly because of maintenance problems does not create capability. Army units that are 'hollowed out' through over-tasking and under-manning do not provide capability. Ships that are triple- and quadruple-hatted do not provide three or four times the capability that sufficient numbers of dedicated vessels would. Such dishonesty does not serve the interests of the CF or the country. An honest accounting must be conducted of what capabilities truly exist in the CF and which capabilities are needed.

CAPABILITY REQUIREMENTS

To generate and employ military capabilities demands two necessary ingredients.

Money, while not a panacea or a guarantee of military capability, is the foundation of capabilities. How it is acquired, allocated, and managed is a defence management and administration issue that has a profound impact on the CF's ability to discharge government policy. Without engaging in the ageless debate about 'how much is required', it is sufficient to say that funding should be commensurate with the effect desired, and, as far as possible, geared to long term capability development.

As suggested by the discussion of long-term funding stability, time is the second invariable ingredient in the development of military capability. It takes time to train people, acquire equipment, and develop and refine ideas. In all things military, practice and experience makes perfect, and only time can provide opportunities for practical experience.

CAPACITY AND CAPABILITY

The twin requirements for money and time lead to a further aspect of capability: capacity. The combat functions mentioned above describe the *breadth* of a military capability. The concept of capacity expresses *depth* – the how much, how often, and the dimension or space of the capability. There is a significant difference (in terms of capability) between being able to perform a function once, or only once in a while, or only with the help of others. This qualitative measure links military capability inseparably to capacity. For instance, an armed force may have the capability to command naval forces at sea, but its capacity may be limited to domestic operations, or to a certain number of ships, or for a specific period of time. These important qualifications are expressions of the capacity of that force to perform its capabilities.

By introducing the concept of capacity, it is possible to envisage a framework upon which decisions and priorities might be made. An armed force might need to have a wide array of capabilities, but each only in limited capacity. Conversely, it might be required for an armed force to field an abbreviated range of capabilities, but in each of these capabilities possess significant capacity.

The devil is, of course, in the detail, in getting the correct balance between capabilities and capacities. It is instructive to note that NATO has identified the following six capability areas as critical for the Alliance as a whole, and they serve as a good foundation for further discussion in the Canadian case:

- Strategic air and sealift;
- Deployable combat support and combat service support;
- Command, control, and communications;
- Intelligence, surveillance, and target acquisition;
- Combat effectiveness; and
- Chemical, biological, radiological, and nuclear defence.

These are descriptions of minimum requirements in both capability generation and employment functions. There is no single right way to produce these capabilities; focusing on platform replacement or acquisition is not enough. Money and time are necessary ingredients, but they alone are insufficient guides in a world of finite resources. Priorities, therefore, must be set and choices made. Saying that choices must be made, however, is easier than actually making them.

The Canadian Forces (and beyond it, the Department of National Defence, and the many agencies and departments with which they must work on a daily basis) is a complex system of systems. The transformation of the Canadian Forces will have to account for and take effect within this complexity. Building military capabilities at appropriate capacity will require money and time, but it will also require choices about ends, effects, and means. Insofar as the outcomes rest with agencies and departments of government outside the domain of the Minister of National Defence, choices will be made through “bargaining along regularized lines.” If the lines are knotted and tangled by bureaucratic politics or other impediments, then the effort may well be wasted and the outcome of ‘transformation’ may be incomplete or ineffective.

CHAPTER THREE

Public Administration of the Defence Budget

Howard Marsh

“Budgets are policy.” *Anonymous*

UNDERSTANDING THE BASIC FRAMEWORK FOR DEFENCE SPENDING

An examination of National Defence Estimates, departmental reports and spending trends reveals that, within a variance of one percent (\$100 million in \$10 billion), the Canadian government and the Department of National Defence spent the 2004 defence budget as shown in Table 3-1 below.¹⁰ The categories of spending are discussed below.

Table 3-1
An Overview of Defence Spending in 2004

<i>Categories of Spending</i>	<i>Amount \$Billions</i>	<i>Percentage of Total</i>
Authority Spending	\$ 1.20	9%
Defence Portfolio	\$ 1.00	8%
Managed Accounts (comprised of)	\$11.00	83%
• Executive	\$ 1.74	13%
• Operations (DCDS)	\$ 0.62	5%
• Maritime Forces	\$ 1.40	11%
• Land Forces	\$ 2.40	18%
• Air Forces	\$ 2.21	17%
• Strategic Support	\$ 2.64	19%
Total Defence Spending	\$13.20	100%

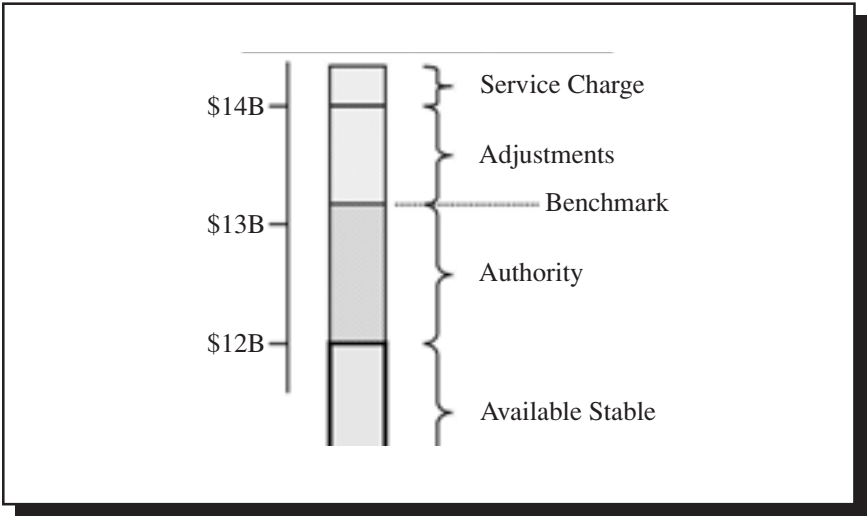
The Inflated Spending Factor. It is standard government practice to ‘increase’ the stated DND spending above the \$13.2 billion figure by adding \$800 million of ‘adjustments’.¹¹ Adjustments are, for the most part, unspent money that is carried forward from the previous budget year, but it also includes supplementary and special, time-limited allocations that DND administers. In addition the ‘cost of services without charge’ – services provided to the defence department by other government departments (OGD), estimated by those other departments at \$500 million – are also sometimes used to inflate defence allocations. When adjustments and OGD Service Charges are added to the \$13.2 billion defence allocation, one can inflate the nominal defence budget to \$14.5 billion.

Authority Spending. For the most part, this category comprises the cost of superannuation acts and government contributions to other employee benefit plans such as Employment Insurance. In FY 2004-05, for 62,250 full-time military members and 21,150 full-time civilian persons, DND was to have an amount of \$1.20 billion deducted from its allocation.¹² Authority spending is a bookkeeping transaction: it is an account from which the department cannot draw and to which its members have very limited access. In reality it is a tax on the Department of National Defence by central government for having employees. Not all of this is actually spent on benefits for retired members.

Given the high employee pension contribution level, the low percentage of military members who qualify for annuities, and their relatively short retirements (many military members die within a few years of retiring, but that is a topic for another study), the government has been able to withdraw over \$30 billion from the authority account since 1999. It is also very difficult for former military personnel to draw from Employment Insurance, since everyone retiring from the military either has an annuity or has departed of their own volition, and are, therefore, ineligible to claim benefits.

The \$13.2 billion allocated to defence for spending is thus effectively reduced by \$1.20 billion. The actual amount of money available for internal allocations is \$12 billion. See Figure 3-1, 2004 Defence Spending in Context.

Figure 3-1
2004 Defence Spending in Context



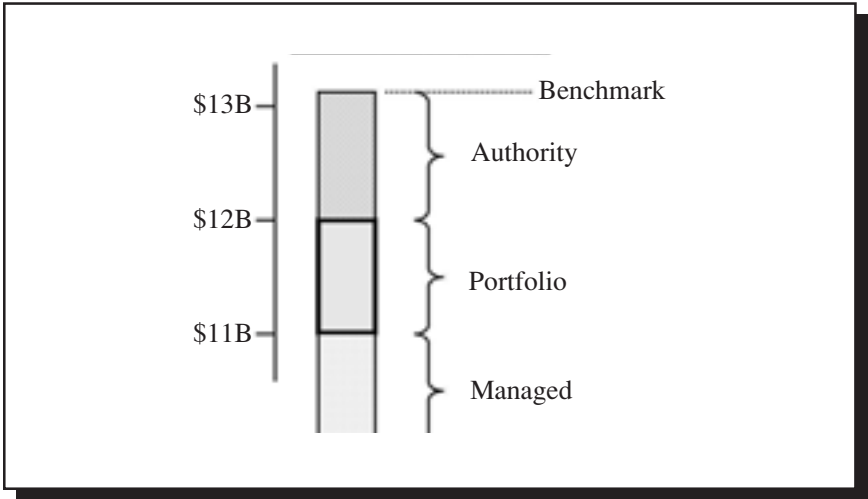
The Defence Portfolio. Within the available and stable funding envelope of \$12 billion, the Minister of National Defence is required to manage a ‘portfolio’ of activities. This designation is assigned to those components of national defence that are administered by the Minister, but whose budgets are largely governed by external determinants. These components are related to defence, but their contribution is difficult to quantify, and as such, this study has extracted the Defence Portfolio from the defence budget. *The Departmental Performance Report for the period March 31, 2003* provided the most comprehensive list of what makes up the Defence Portfolio (reproduced here as Table 3-2). Since then the reporting trend has been to mix the components of the Defence Portfolio into the categories of capability.

When the Defence Portfolio is subtracted from the funds available to the Department, the amount remaining – \$11 billion – is allocated to the “Senior Managers” who are responsible for defence capabilities. (See Figure 3-2: 2004 Defence Spending.)

Table 3-2
The Defence Portfolio (\$2004)

<i>Organization</i>	<i>Cost \$Million</i>	<i>Comment</i>
Communication and Security Establishment (CSE)	\$200	A cryptologic agency: signals intelligence and information technology security
Defence Research and Development Canada (DRDC)	\$260	Provides leading edge Science and Technology to the CF
National Search and Rescue Secretariat	\$12	It coordinates the multi-jurisdictional National Search and Rescue Program
National Search and Rescue Program (DND) only)	\$300 estimated	No longer listed in 2004 [\$284M in FY 2002/03].
Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP)	Zero cost to DND	OCIPEP now reports to Minister of Public Security and Emergency Preparedness
Office of the Judge Advocate General (JAG)	\$12	
Office of the Ombudsman	\$6	
Youth Programs: Canadian Cadet Program	\$175 estimated	Navy League, Army Cadets, Air Cadet League. No longer listed separately [\$167M FY 2002/03].
Junior Canadian Rangers	\$6 estimated	No longer listed separately [\$5.7M FY 2002/03].
Defence Portfolio Total	\$971	Round up to \$1.0 billion

Figure 3-2
2004 Defence Spending



For clarity, the \$11 billion 2004 defence spending, less authority and portfolio allocations is represented as Table 3-3, which serves as an intermediate step in understanding where the money is allocated internally.

The management and accounting practice within the Department is to maintain centralized control of most human and material resources but attribute the value of those resources to other senior managers. In this examination, the human, material and corporate accounts attributed to Maritime, Land, Air and Operations are shown. The other major groupings of accounts are Material, Human Resources (HR), and Executive (including Information Management (IM) and Infrastructure Environment (IE)). Twelve other senior manager accounts are not displayed here, but can be found at the Defence Management web-site.¹³ (See Table 3-4 for groupings of major managed accounts.)

Table 3-3
2003-2004 Actual Internal Allocations less Authority and Portfolio Spending

<i>Activity</i>	<i>Percentage</i>	<i>Dollars in Billions</i>	<i>Comments</i>
Executive	13%	1.30	
Maritime	5%	0.60	
Land	10%	1.12	
Air	4%	0.47	Air resources assigned to rotary and fixed wing Search and Rescue have already been accounted in Portfolio
Operations (DCDS)	4%	0.42	
Information Management (IM)	3%	0.35	
Human Resources (HR)	30%	3.30	Has been reduced by \$1.2B Authority and HR Portfolio of \$0.18B
Infrastructure Environment (IE)	2%	0.26	
Material	29%	3.15	
Total Available to Senior Managers	100%	11.00	

Table 3-4
Major Categories of Managed Spending (all figures in billions)

<i>Senior Manager</i>	<i>Direct Allocation</i>	<i>Human Resources</i>	<i>Corporate Accounts</i>	<i>Material Resources</i>	<i>Horizontal Totals</i>
Maritime	\$0.60	\$0.45	\$0.0001	\$0.35	\$1.40
Land	\$1.05*	\$0.95	\$0.05	\$0.35	\$2.40
Air	\$0.47	\$0.69	\$0.24	\$0.81	\$2.21
Operations (DCDS)	\$0.42	\$0.13	\$0.008	\$0.07	\$0.62
Strategic Material			\$0.05	\$1.57	\$1.62
Strategic HR		\$1.02			\$1.02
Exec, IM and IE	\$1.74				\$1.74
Vertical Totals	\$4.28	\$3.24	\$0.39	\$3.15	
Convergence Total					\$11.0**

Notes: *The earlier versions of DPOnline record \$1.12 billion. The Army Strategic Operations and Resource Plan (SORP) 2005 shows an allocation of \$1,050 million with \$44 million planned ‘overprogramming’.

**Vertical and Horizontal totals vary by \$.05 billion. This is within 1% tolerance.

THE EQUAL APPORTIONMENT OF CENTRALIZED CONTROL

The current approach to managing defence monies, illustrated above, is believed to be detrimental to generating military capability in that its centralization and apportionment tends toward inefficiencies and function elevation. The four senior managers responsible for force generation and operations (the service chiefs and the Deputy Chief of the Defence Staff) have to compete with twenty-one other senior managers. A public affairs survey, for example, may be deemed equal in importance to combat boot replenishment. This practice of equal value apportionment results in only 60 percent of managed funds being allocated to force generation and deployment. It would seem that the other senior managers who should provide support for the tactical units of the Canadian Forces are now fed first.

Forty years ago, eight senior managers with many subordinate functions managed the Department. Over the years since then, at each opportunity directors and director generals have rationalized their elevation to senior manager status. For example, until the early 1990s, infrastructure, information systems and the media were, for the most part, managed by senior military officers. Now an Associate Deputy Minister (ADM) with higher remuneration administers each of those 'minor' functions. Increased status comes with commensurate staff and infrastructure augmentation, and a shift of resources from tactical accounts. Unchecked, this practice encourages self-important directors to seek to elevate the 'rank' level of their position.

The centralized control of budgets, instead of achieving efficiencies, demands massive coordination. At one time the three services managed most of their own affairs, but now they must persuade a host of other players to join them in force generation. At one time the military directors of personnel managed entry-level training to professional development; now they must barter with centralized personnel systems and professional development institutes. At one time an engineer colonel managed the Army's entire infrastructure; now that same officer must persuade others that, as owner of 50 percent of the realty assets, his voice counts.

AN ALTERNATIVE MODEL

The Canadian Forces exists to generate military capabilities that are useful to the government, and as such, the government should want to maximize its return, especially at lower rates of expenditure. With that in mind, it would thus seem that the manner of budget apportionment needs to be re-examined. Prior to 1968, DND and the Canadian Forces managed 200,000 people and spent a budget that was 3.5 percent of the Gross Domestic Product (GDP) with eight senior managers. In 2005, twenty-five senior managers manage 100,000 people and a budget that is 1 percent of GDP.

As a first step to administrative efficiency, 90 percent of the managed account funds should be allocated to the four principal force generators, and only ten percent held centrally. The four principals would then 'buy' goods and services that they deem necessary from existing managed accounts. Putting most of the money into the accounts of those who do the main service provision would likely result in hundreds of millions, if not billions of dollars being reallocated to primary purposes. Separate analysis has revealed that a modest transfer of \$1 billion from strategic to tactical accounts would sustain a fourth brigade and allow the acquisition of strategic lift resources.¹⁴

The current management of the defence budget elevates non-military objectives to the same status as military capability, and it is argued that this practice has contributed to the forty-year erosion of capability. Placing 90 percent of managed account administration in the hands of those who generate and deploy military capabilities would introduce a 'capability-centric' regime in DND.

How managers are allowed to spend their monies must also change. Regulations governing the public administration of budgets has created artificial barriers that promote inefficiencies. Money assigned to established practices of paying people and maintaining equipment is referred to as 'Vote 1' money. Funds assigned to the acquisition of new equipment is termed 'Vote 5' money. The rules for spending Vote 1 and Vote 5 monies differ considerably, and can create startling inefficiencies. The management and accounting of spending on the 2½-ton Diesel Cargo Truck B68 (the Medium Logistics Vehicle, Wheeled fleet) illustrates the absurdity of this budget allocation practice.

This 25 year-old truck is maintained with Vote 1 monies. It currently costs \$49,500 a year to operate each of them for 10,000 kilometers. As there are no Vote 5 monies to replace this old truck, it is likely to be maintained in service for another ten years even though it has become very expensive to acquire spare parts for this vehicle. The purchase, shipping, stocking and installation of spare parts cost \$38,900 per truck per year, and is the most expensive component of operating this 25 year-old vehicle. The Department is currently prepared to spend \$0.4 million (Vote 1) per truck on spares and repairs between 2005 and 2015.¹⁵

Given that there are over 2,500 B68 trucks, in total they will absorb over \$1 billion of Vote 1 money over the next ten years, while replacement of the entire fleet at market value would cost less than \$1 billion. Few of us would keep a car that cost \$500 a month to maintain when it could be replaced new at \$300 a month. Would it not be wiser to remove the artificial budget barriers that currently constrain the spending power of military managers?

The MLVW is small change compared to the current state of the CC-130 Hercules tactical air transport. The current fleet is 32 aircraft. Typically, only about one-third of these aircraft are serviceable, and, indeed, on some days the number of aircraft available to deploy can be counted in single digits. As a result of progressive metal fatigue, the operational fleet is managed by ‘crack propagation’ – if the crack in a wing spar is too long or growing too fast, the aircraft does not fly. When they do fly, the increasing likelihood of structural failure in-flight has required the imposition of passenger and cargo composition limits. These significant liabilities mean that the entire fleet can justifiably be categorized as a junk pile. Still, approximately \$385 million dollars was spent in 2004 to keep the fleet ‘in service’.

Spending almost \$400 million a year to maintain a failing capability is surely folly, but it is easier to spend that amount on an existing capability because it is funded by easy-to-obtain monies from Vote 1 operating accounts. Departments do not need to seek Cabinet approval to spend large sums of money to sustain previously approved capabilities.

Replacing the fleet requires spending Vote 5 capital acquisition money, which for sums over \$100 million requires difficult-to-obtain Cabinet approval. It is estimated that the entire Hercules fleet could be replaced by a combined fleet of modern tactical and strategic lift aircraft (for example, a combination of CC-130J models and C-17 Globemasters) for

less than \$4 billion – the minimum cost of maintaining the current fleet for another decade. An enlightened approach to the problem would be to grant the Department permission to divert the Hercules maintenance funds from the Vote 1 corral to Vote 5, and let them go shopping for a new fleet. Spending hundreds of millions a year to maintain a junk fleet when the same cash flow would obtain reliable airlift is an obvious solution, but the artificial classification of monies impedes wisdom.

CONCLUSION

The current public administration of the defence budget encourages bureaucratic expansion of the central staff, and increases the coordination effort required. Additionally, artificial barriers imposed on different pots of money along with spending regulations for those monies compels the Canadian Forces to maintain old equipment at enormous cost. Reallocation of the bulk of managed accounts to the four principal force generators, and removing the constraints on their spending of those funds, would provide the basis for an alternative model of defence budget administration.

CHAPTER FOUR

The Personnel Challenge in Defence Administration

Christopher Ankersen

Cynics would insist that everything said on the election trail should be treated, at best, as white lies, or, at worst, as patent balderdash. The Liberal Party's pledge to create a 'peacekeeping brigade' of 5,000 soldiers was one such promise.¹⁶ This time, however, the cynics got it at least partly wrong: the Liberals (now in power, albeit with a minority mandate) have followed through and the CF is indeed to be expanded, not only by 5,000 Regular Force personnel, but also by 3,000 Reservists.¹⁷

Certainly no one can be disappointed with this result: the pro-defence constituency must surely welcome the prospect of more military personnel being available for operations abroad and at home. Even those who view the CF only as a source of manpower that can provide human security and humanitarian relief around the world can find solace in the announced increase. Are the armed forces not overstretched? Are they not limited in the number of emergencies to which they can respond due to a lack of people? The answer, of course, is yes. The CF does indeed need more people if it is going to carry out its missions. This is even more pertinent now that DND has laid out its vision for an expeditionary force capable of mounting and sustaining two concurrent operations indefinitely.¹⁸ No matter what is asked of the CF, it needs people to function. And, the thinking goes, if some is good, more must be better.

The trick, then, is to get the much-needed people into the ranks of the CF as 'trained effectives'. But, a simple question confronts the Forces faced with such a seemingly straightforward mandate: *Where are they going to come from?* This question drives the analysis that follows.

The simple answer is to state that rapid expansion poses a significant challenge to the CF. There are four underlying reasons for this difficulty:

- The current personnel situation is not healthy;
- 8,000 new personnel is a very ambitious goal;
- The Canadian population cannot easily support increased recruitment on such a scale; and
- The existing CF Human Resource system is not prepared for such expansion.

This chapter will illustrate the nature of the challenge facing the CF by examining each of these points in detail. It will conclude with a series of recommendations for further study and immediate implementation.

THE CURRENT PERSONNEL SITUATION IS NOT HEALTHY

It is no exaggeration to claim that the CF is undermanned: despite a total authorized strength (TAS) of 60,000 – a figure which has been stable since the late 1990s after a series of reductions from Cold War levels of over 80,000 – the actual trained effective strength (TES) of the CF is approximately 52,700. The gap between these two numbers represents those personnel within the military who, for a variety of reasons – undergoing training, on medical leave, about to retire, etc. – cannot be counted as employable. There will always be a gap between authorized and effective strengths, but the desired effective strength of the CF is 54,500, meaning that the current difference is too large by nearly 2000. In simple terms this means that there are too few people in the CF to accomplish the many tasks assigned to it.

Given the number of releases forecast for the next few years, the situation is almost certain to get worse. For example, in the core Army Combat Arms trades, releases amongst non-commissioned members (NCMs) in 2007 are expected to be twice the number of those released in 1982 (when the force was much larger), and over four times the number in the early 1990s.¹⁹ Other groups of trades are expected to confront similar patterns. There are many reasons behind such a rise in personnel attrition;

Figure 4-1 lists the reasons most commonly reported in a 2002 study conducted by the CF.²⁰

**Figure 4-1
Commonly Reported Reasons for Releases Amongst CF Members**

- Lack of resources and personnel
- Work overload, operational tempo concerns
- Frequent and long deployments
- Disruptions to the family
- Problems with postings and moves
- Poor leadership
- The negative influence of politics on the military
- Training problems
- Promotion problems
- Pay and benefit concerns
- Monetary incentives to stay
- Quality of life (QOL) concerns
- Loss of the sense that the CF is a family.

Whatever the reasons behind it, attrition on such a scale has produced severe shortfalls – ‘distressed’ trades – across the CF. In fact, as Table 4-1 illustrates, several key occupational groups are operating at, and are expected to continue operating at, release levels over 50 percent higher than is the historical norm.²¹ In short, these ‘red light’ trades are critically short of personnel and show few signs of improvement in the short- to medium-term. It is worth noting that many of these distressed trades are vital for expeditionary operations: the people who are at the ‘tip of the spear or who play important front-line support roles are leaving faster than can be managed.

Not only are certain trades seriously underpopulated, the entire personnel profile of the CF is distorted. The solid line in Figure 4-2 represents the ‘ideal’ profile by experience (expressed in ‘years of service’).

Table 4-1
Release Status by Occupational Group

<i>Occupational Group</i>	<i>2002-2006 Release Status</i>	<i>2007-2011 Release Status</i>
Air-General		
Air-Technical		
Electronics/Communications		
Engineering		
Flight Crew		
Land-Combat Arms		
Land-Maintenance		
Logistics		
Medical		
Sea-Combat/General		
Security/Intelligence		
Specialist		
Sea-Technical		
All		

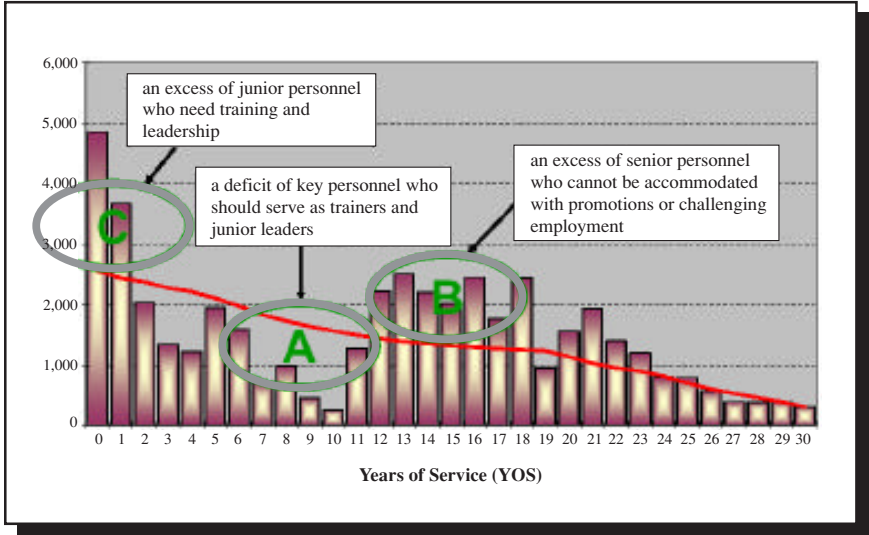
Key:

$\geq 50\%$ over normal release rate.

+10-50% over.

$\leq 10\%$ over.

Figure 4-2
CF Personnel Profile by Years of Service



Source: DND (ADM HR-MIL)

This ideal allows for an effective regime of leadership, supervision, training, and career progression. If significant parts of the CF have either too little or too much experience then problems arise; if there are too many junior personnel they may not get the required level of skilled supervision and leadership; if there are too many senior personnel there just are not enough of the ‘sought after’ jobs to go around, their talent and experience will be under used, and many will be dissatisfied. The ovals in Figure 4-2 point to bulges or ‘bubbles’ above and below the ideal line. Bubble C represents the overly large number of untrained junior personnel newly recruited in the CF, while Bubble B indicates the excess number of experienced personnel, especially in the upper end of the range when members may be past the prime age range for deployment.

While these two overages are worrying enough, the most important aspect of the distorted personnel profile is represented by Bubble A. As indicated in Figure 4-2, there is a dire lack of personnel with 4-12 years

experience – precisely the people in junior leadership positions essential to both training and operations. As a result, the CF is in the unenviable position of having to choose between fully manning its training schools or having its operational units at full strength.²² As operational tempo picks up again the future, this Hobbesian choice will be even more difficult to make: if the surge in training requirements takes place at the same time as a large operation, there simply will not be sufficient trained section commanders and junior officers to go around.

8,000 NEW PERSONNEL IS AN AMBITIOUS GOAL

The latest personnel targets for the CF are often spoken of as two distinct lots: 5,000 Regulars and 3,000 Reservists. In reality, a combined figure of 8,000 should be used because, regardless of which component a person enters, all recruiting takes place through the doors of the same recruiting centres and, therefore, strains the entire system.

As if the figure of 8,000 is not daunting enough, it only represents the desired end state: that is, trained, effective soldiers. But, in order to become fully trained, these personnel will have to overcome a series of ‘hurdles’ along the way:

- First, they must be attracted into the recruiting centres;
- Once convinced that joining the CF is a good idea, they must be tested, assessed and processed through the recruiting system, sometimes a lengthy process;
- Having passed all the necessary tests and examinations, they will be enrolled; and
- After enrollment, they must be trained at both the basic level and at the more advanced ‘occupational’ level, specific to the trade to which they were assigned.

As a result of attrition at the applicant and trainee stages (caused by such things as personal unsuitability, training failure, or medical problems), for the CF to end up with 8,000 trained effective personnel, it is known that approximately 48,000 people must be enticed to contact recruiting centres across the country.²³ It must be remembered that this figure represents an additional 48,000 Canadians, above the normal ‘steady state’ Recruiting Centre traffic of approximately 20,000 people per year

needed to produce the present annual intake of recruits. If the 48,000 potential applicants are spread fairly evenly over five years (as seems likely²⁴), and current standards and training processes are held constant,²⁵ this amounts to expecting a 38 percent increase in annual traffic through the Recruiting Centres – a tall order indeed.

INCREASED RECRUITMENT ON SUCH A SCALE UNSUPPORTABLE

This tall order is even more daunting if one considers the preferences of the potential pool of recruits – that is, the Canadian public. While the CF generally is perceived favourably by a majority of Canadians,²⁶ those ‘in favour’ are not always the ones who join. Indeed, when looked at in some detail, Canadians who support the military are over-represented by those over 60 years old, those with low incomes, and those with low levels of education. Conversely, those who are less than 35 years old, those with high incomes, and those with high levels of education are under-represented amongst supporters.²⁷ This trend is particularly worrying in an era where:

Many... trades now require higher levels of specialization and, consequently, higher education standards on entry, than they did in the past... [meaning] Defence has a smaller pool of potential recruits to choose from.²⁸

In stark terms, it is distressing to see just how small that pool is: no more than one out of every eight Canadians between 15 and 39 years old is even ‘somewhat interested’ in making the military a career of choice.²⁹ Combined with the implications in the previous section of this chapter, the 48,000 new persons required to enter the CFRCs must be drawn from a population in which only a few are favourably disposed to the CF. Therefore, practically every one of them must somehow be enticed to join.

The CF has begun to address this issue by increasing the money dedicated to advertising, as a means of increasing awareness in, and hopefully attracting people to, the CF. This year alone an additional \$7.7 million is being spent in this area.³⁰ However, it is not clear that advertising (or at least the advertising that has traditionally been used) is an effective method for increasing interest or support. Based on the general Canadian population, of those who saw an ad for the CF in 2002, 54 percent viewed

the CF as favourable, as opposed to only 51 percent for the portion of the population that did not see the ad. Even in the target (and supposedly media-savvy) demographic of 15 to 39 year olds, viewing an ad only made a 2 percent increase in favourability.³¹

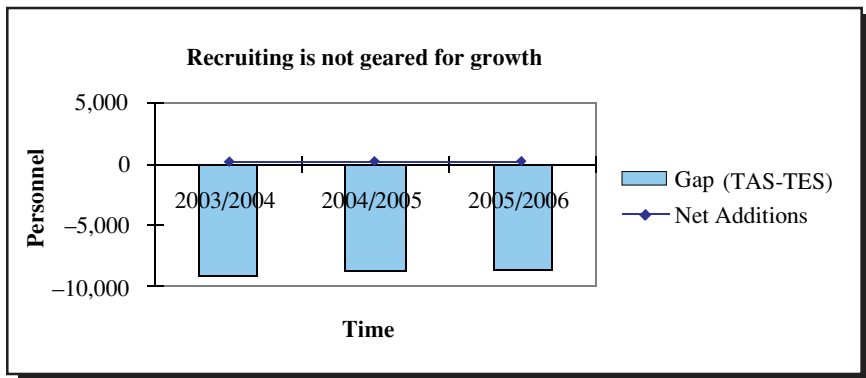
Given current awareness of and support for the military, and given the current attempts at marketing, it appears unlikely that an increase of 48,000 Canadians entering the recruiting system over five years is possible. At the very least, for such a campaign to work a significantly different strategy will need to be pursued.

THE CF HUMAN RESOURCE SYSTEM IS NOT PREPARED FOR SUCH EXPANSION

This last observation serves as the motif for the fourth area of difficulty: the current system is not capable of delivering on the ambitious goal of 8,000 trained effective personnel in five years. Radical changes are needed to what is essentially a system that was designed for stabilization, not growth.

If we look at the performance of the recruiting system over the past five years or so, we can see that, once adjusted for losses of personnel (as described above), the net addition of personnel to the CF has been only in the range of 150-300 people per year (see Figure 4-3).

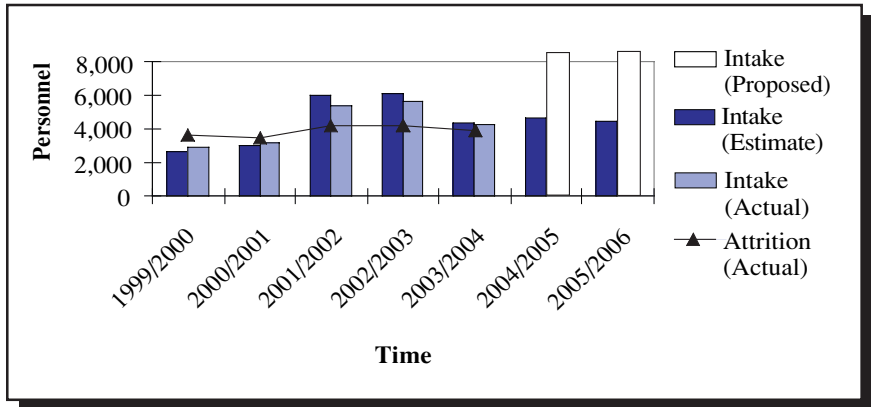
Figure 4-3
Net Additions to CF 2003-2006



This ‘replacement’ model of recruiting (bringing in only enough people to replace those who have been released) was not efficient even during the stability and predictability of the Cold War period. But, in the era of continuous operations throughout the 1990s it was barely adequate; and for the coming era of rapid expansion it will not suffice.

The current Human Resource system, however, is not just handicapped by its recruiting model. Partly because of this model, but also due to cutbacks and trade-offs, the training system is also ill-equipped for large scale expansion. As we can see in Figure 4-4, recruiting intake can be increased, as it was in 2001/2002 and 2002/2003. Indeed, in this period it was bringing in close to double the number of recruits from 1999/2000 and 2000/2001.

Figure 4-4
Recruiting Performance and Forecast 1999-2006



However, by doing so, the training system was effectively overwhelmed. Not enough instructors could be found to conduct the training, and waiting times between courses was increased. The result, according to the Vice Chief of the Defence Staff’s *Report on Plans and Priorities 2002-2003*, meant a scaling back in intake. While relieving some strains, this move created others:

Recruiting will not be maintained at the same levels of the last few years and has now been reduced to a level that exceeds Regular Force personnel attrition only slightly. This approach will allow for a slower, more affordable growth to recovery, and it will reduce the strain on the training system. The trade-off however is that this slower recovery rate will add pressure to the operational tempo in certain distressed military occupations. These occupations will be closely monitored to ensure that deployability is not limited.³²

What is of particular note is that, in order to meet the target of an additional 8,000 trained effective personnel, the total strain on the system over the next five years will be nearly double of what it was in 2001-2003 – a period when the CF believes they had outstripped their own capacity to train recruits.

Training capacity, of course, is not easy to create. At the heart of the training system are men and women – planners, programmers and instructors – among the best trained and most highly experienced members of the CF. While some are posted to training establishments as permanent staff, a great deal of the training system is dependent on ‘incremental’ staff. This means temporarily tasking instructors from operational units to come and pass on their expertise to trainees. To do so, the CF relies on junior and senior NCOs (Master Corporal/Master Seaman to Warrant Officer/Petty Officer 1st Class) and junior officers. Unfortunately, these people are already in short supply (recall ‘Bubble A’ in Figure 4-2 above). Increasing their ‘personnel tempo’ (that is the total amount of time they spend away from home, whether on operations, training or other tasking) does nothing to improve the chances of their remaining in the military.

As it currently exists, the CF personnel recruiting and training apparatus is not geared to large scale expansion. Over the years since the end of the Korean War, the CF became accustomed to a relatively static and predictable environment, where the role of recruiting was to offset predictable releases. Over the period since the end of the Cold War, as the CF has entered a more dynamic phase where it has seen prolonged periods of operations and the concomitant levels of personnel stress that have accompanied them, this system has been slow to adapt. Moving forward, as the dynamism is set to continue, and perhaps increase, significant changes must be brought about in order to recruit for growth, rather than replacement.

WHAT IS TO BE DONE?

The two inescapable ingredients for defence transformation are money and time. In terms of money, there does seem to be ‘good news’ in the recent budget. Over the next five years, DND has committed over \$3 billion to the issue of force expansion.³³ This money is sorely needed and will go a long way, if used appropriately, to creating the conditions for a dynamic and robust human resource management system.

However, in terms of time, the picture is not so rosy. Under current conditions, it is forecast that the CF will not be able to reach its desired trained effective establishment of 54,500 until some time in 2012.³⁴ Although the date of achieving TES is different, the VCDS acknowledges that progress on personnel recovery has slipped somewhat:

Recruiting could not be maintained at the high levels of recent years, and the target date set for achieving the desired Trained Effective Establishment was postponed from fiscal year 2005–2006 to fiscal year 2009–2010.³⁵

With net additions to the population of the CF in the neighbourhood of 150-300 per year, it is not hard to see why.

Furthermore, it takes time to ‘create’ trained effective soldiers. As the Vice Chief of Defence Staff states:

Although some corrective action is underway, attrition is likely to continue to exceed the CF’s ability to recruit, train, and retain personnel. Indeed, it currently requires an average of seven years to recruit and train a junior officer to an employable standard. (This period is approximately four years for Non-Commissioned Members.)³⁶

Unfortunately, the time available for training is not always well used, and all too often the men and women recruited for the CF spend excessive periods ‘awaiting training’. This in itself leads to attrition among the trainees: they get fed up and leave. One of the worst examples of training delay is pilot trainees newly graduated from Royal Military College: most have to wait approximately two years to even begin their advanced flying training where they qualify for their wings.³⁷ Unless changes are made to the current recruiting and training system, many of the people attracted

to the CF today will only just come 'on-line' as trained effective members of the military by the end of the five year planning period.

Delays in the training system can also have a significant impact on military capability. For instance, according to the Defence Policy Statement, by 2010 the CF will double its capability to deploy ground forces overseas.³⁸ However, as comments made by senior CF officers (including the CDS) indicate, this capability relies on the planned expansion of the military. Any delay in the arrival of the 5,000 additional trained effective Regular Force men and women means there will be a direct reduction in the proposed defence capability.

THE CF MUST ACT NOW TO MAKE SIGNIFICANT CHANGES

This analysis suggests that achieving the goal of increasing the CF by a total of 8,000 trained effective Regular and Reserve personnel will not be a simple task. Indeed, the enormity of the task at hand is not lost on the CF:

The increase in the size of the CF by 5,000 Regular Force and 3,000 Reserve Force personnel will enable the CF to better sustain operations at home and abroad and improve the operational effectiveness of the CF as a whole. Expansion of the CF is a major undertaking. Two major challenges are associated with this expansion: ensuring that training flow is programmed effectively and in a balanced manner, taking into consideration the particular training requirements for specialist occupations; and ensuring that, before we launch a major recruiting effort, we have the infrastructure, financial resources and equipment we need to recruit and train additional personnel.³⁹

The second challenge mentioned in this passage worthy of note. Before full-scale recruitment can begin, the entire recruiting and training system must be re-built. While this is a wise and necessary step, it means that creating the additional 8,000 trained effective personnel will not be a linear process, with evenly distributed intake over a five year period. As the CDS has remarked, it may be the case that the 'rebuild phase' could take two or three years, meaning the bulk of the 'intake and training phase'

would not occur for four or five years.⁴⁰ Such ‘back-end loading’ carries with it several risks. First, it is not assured that the funding promised in the current budget would withstand a change of government. Second, the longer it takes to begin the training process, the longer the effects of attrition have to take hold on the existing CF population. Finally, the farther into the future activities are scheduled, the greater the opportunity for large scale changes in the security environment to occur. For instance, if between now and 2010 the CF is committed to a large operation, or a number of smaller ones, either domestically or internationally (something which, given recent and current events, would not be out of the realm of possibility), it would be exceedingly difficult to focus on transformation and fix the systemic problems.

RECOMMENDATIONS

Several key recommendations can be made at this stage for the way ahead. First, the CF must recognize that transformation is not all about high tech ‘sexy’ images of the future. The real transformation that must come soon will involve the way the military ‘does business’. Getting the details right and removing the impediments that are working at cross-purposes to the military’s strategic aim is an important top-priority activity.

Second, just as *ad hoc* approaches to operations are to be avoided, so too are ‘emergency overrides’ and ‘work-arounds’ to be shunned. Fixing the personnel administration system within the CF must be part of a larger, long-term, truly strategic human resource plan.

Third, the CF should avoid ‘one size fits all’ centralized solutions. In some instances, there will be particular approaches that apply to only one location or to one particular classification or trade or to the individual services. Such tailoring should not be dismissed. This allowance for local variation does not contradict the need for a strategic approach; done correctly, the two are complementary.

Fourth, it should be a CF priority that the number of personnel assigned to training establishments be increased. Without a stable instructor base, the goal of 8,000 trained effective personnel will be unachievable. There will be trade-offs to be made in the short-term: units may have to be manned at less than full strength. However, the pay-offs (in terms of a reduction in personnel tempo and long term growth) will be worth the investment.

It may take 'out of the box' solutions to make these recommendations work. For instance, since the number of potential instructors in the CF is limited (again, recall the shortage of junior leaders) perhaps it would be advisable to seek out other sources of instructors. One useful idea might be to re-hire retired military personnel (who often live near training bases anyway) on short-term contracts to perform this service. These retired personnel would certainly have the skills and experience to conduct basic recruit and trades training, and if effectively engaged (either as contractors or perhaps through some kind of service akin to that of the Cadet Instructor Cadre) could be an effective source of expertise without the burden of re-enrollment and full-time career management. When the shortage of in-service instructors is overcome, this practice could be reviewed and, if deemed appropriate, ended. Such 'alternate service delivery' mechanisms might factor into the expanded role of the recruiting system as well.

CONCLUSION

Work has already begun. A CDS with a mandate for renewal has been appointed. Increased funding has been promised by the government. And a sensible defence policy statement has been released. All are positive steps in the right direction. But, as always, there is more to be done. The Defence Policy Statement does not lay out a detailed strategy for how the vision of a more relevant and effective armed forces will be created, but indeed that is not its function. The details of the process that will convert vision into reality will come in the subsequent force planning documents and the 'follow on strategy paper'.⁴¹ In the end, it will be a combination of vision, leadership, resources, and sound administration that will create the capabilities the CF needs to meet the challenges and the missions of the future. These are all vital to overcoming the personnel challenge in defence administration.

CHAPTER FIVE

Closing the Policy Gap

Brian MacDonald

INTRODUCTION

The quandary faced by Canadian defence planners is the re-capitalization of the Canadian Forces – the key to the creation of the ‘Future Force’. While the 2005 Budget announced substantial funding increases for National Defence over the coming five years, the bulk of those increases are delayed until the later years. In the meantime, of course, ‘rust out’ continues inexorably to erode the ‘capabilities platforms’ of the CF.

That raises the second dilemma for Canadian defence planners – the extraordinary delays inherent in the Canadian defence procurement process. In 2003, the *Minister’s Advisory Committee on Administrative Efficiency* identified this cycle as taking 15 to 16 years,⁴² a figure confirmed by a 2004 report of the Auditor-General of Canada.⁴³

The combination of delays in the provision of adequate re-capitalization funding, together with the excruciatingly slow procurement process (call it a ‘Procurement Gap’), guarantees that the CF will be unable to address the ‘Policy Gap’ inherent in the accumulated rust out. The ‘Future Force’ capabilities inventory will be reduced and emaciated, and maintaining it will be problematic if drastic steps are not taken immediately.

Unless the CF can somehow bridge that procurement gap, the effects will not only be the short term disappearance of key operational capabilities, but also the disappearance of the ‘collective training’ experience process that is absolutely critical to the long-term development of the personnel who will serve in the Future Force. Without this experience, which can only be gained from sustained collective training exercises, the development of operational capabilities in the Future Force will be exceedingly difficult, if not nigh impossible.

Thus, the rapid and sustained full re-capitalization of the Canadian Forces is now the fundamental problem of current and future Canadian defence capabilities management. Otherwise the CF will continue to be subject to the vagaries of ‘Defence Policy by Attrition’, rather than ‘Defence Policy by Reasoned Plan’.

Two vital tasks lie before DND: ‘Closing the Capital Gap’, and ‘Closing the Procurement Gap’. Both are needed if we are to achieve the objective of ‘Closing the Policy Gap’ that yawns before us as capability after capability simply drops off the table by attrition.

CLOSING THE CAPITAL GAP: THE IMPACT OF ACCRUAL ACCOUNTING

A first step towards closing the Capital Gap appears to have been taken already – but by Treasury Board, rather than the Department of National Defence. That step is the consequence of the 1995 decision to shift the basis of the federal government accounting system from ‘expenditure based accounting’ to what is known as ‘accrual based accounting’.⁴⁴

The impetus for this shift came from concern about the accumulated debt of the government of Canada. There was growing realization that the existing expenditure based accounting method overlooked that fact that the government of Canada also possessed a formidable asset base worth many billions of dollars. However, since there was no formal financial balance sheet listing these assets in financial terms, there was no way to determine a net financial position of the government, which would reflect a substantially different figure than a simple focus on the total debt. Indeed, one strategy available to the federal government for debt reduction is the sale of surplus assets, and the use of the monies generated to pay down debt.

In the accrual accounting practices of the private sector, such a sale of a surplus or unused asset to generate funds to be employed elsewhere in the operations of the firm is a routine element of Asset Management. Assets can take the form of financial assets, or the physical assets contained in the machinery of production, or those tied up in inventory, or those reflected in the ownership of ‘real property’ (the collective land and buildings holdings of the firm). As such, financial managers routinely

look at such things as real property holdings to determine whether any are no longer required, and which can be sold and turned into cash for redeployment elsewhere.

The two accounting systems are distinguished further by the concept of ‘amortization’. If the government purchases an item with a service life expectancy of several years, it will nonetheless amortize or expense 100 percent of the value of the asset in the year of purchase, hence the term “expenditure based accounting.” In the private sector, however, a manager purchasing an identical item would understand that the life of the item would be used up over several years, and, therefore, would amortize or expense only a portion of its initial cost to the firm’s profit and loss or income statement in the year of purchase, with the balance of the purchase price amortized over subsequent years. Such ‘amortization schedules’ are a routine feature of accrual based accounting and are recognized in the regulations of the Canada Revenue Agency for the purpose of calculating income tax.

The key difference is that, in effect, the expenditure based accounting system does not recognize the existence of a balance sheet, and focuses only on the government’s income statement, treating a capital investment as an income statement operating expense item, to be 100 percent expensed in the current year.

However, government accounts do distinguish between capital and operating expenses in other ways, such as the distinction between Vote 1 expenditures and Vote 5 expenditures. Vote 1 expenditures are those of an operating nature to be consumed in a period of one year or less, such as expenditures on personnel, operations, and maintenance, and Vote 5 expenditures are those of a capital nature to be consumed over a longer period, in excess of one year.

The implementation of accrual accounting is underway, though it is a lengthy and complicated process. However, ‘accrual budgeting’, the use of accrual accounting for appropriations (how much each department gets), has not yet been fully adopted, though aspects of both the Budget 2004 and Budget 2005 defence appropriations indicate that it is starting.

Among the complexities delaying the implementation of accrual accounting and accrual budgeting, has been the question of the valuation of the existing assets of each department, and the development of appropriate amortization schedules. The two are interactive to some extent,

since many of the assets of departments are partway through their service lives and the accumulated amortization of such assets will have to be deducted from their purchase price in order to establish current values.

BUDGETS 2004 AND 2005

The 2004 Defence Budget Statement included a footnote indicating an initial application of accrual accounting. First came a statement promising a solution to the Search and Rescue aircraft (SAR) replacement question:

Another major priority for Canada's military is the purchase of modern Fixed Wing Search and Rescue aircraft (SAR) to replace older Hercules aircraft and Canada's fleet of Buffalo aircraft. Under Defence's current plan, deliveries of the new aircraft will begin much later in the decade.⁴⁵

This was followed by what was really an accrual budgeting statement:

This budget sets aside non-budgetary resources to allow the Department of National Defence to move this acquisition forward in time without displacing other planned capital investments. By doing so, the Government will accelerate the process so that deliveries of the replacement SAR planes to Canada's military can begin within 12 to 18 months. This measure will allow Defence to spend an additional \$300 million on capital in 2005–06 and similar amounts in subsequent years until this procurement is completed.

And the technical footnote followed:

Under accrual accounting, the acquisition of capital assets has no direct budgetary impact in the year in which the asset is acquired. Instead, the amortization of the asset over its useful life is recognized in the budgetary balance. The acquisition of capital assets does, however, directly affect non-budgetary transactions and financial source/requirements.

A similar statement is found in Budget 2005:

The \$12.8-billion increase over five years in defence funding is the largest such increase in the last 20 years. It will cover the full costs of the activities

described above, including the additional annual personnel and operating and maintenance costs associated with any capital that is acquired. In the budgetary funding estimates shown in the summary table at the end of this chapter, the actual cost of the capital is spread over its life, and the annual budgetary amounts include only a fraction of the full capital cost. However, DND will have to pay the full costs of the capital in cash in the years that it is acquired. The Government will make that cash available to DND as it is needed.

What this appears to mean, according to the routine accrual accounting procedures of the private sector, is that the replacement SAR aircraft will appear on the new DND Balance Sheet. Normal civilian “accrual accounting” practices would include an amortization schedule which would establish the size of the annual charge to be recorded against the Department’s Vote 5 capital budget as the aircraft are used up over their service life.

TREASURY BOARD AMORTIZATION GUIDELINES

Treasury Board has already established guidelines for the amortization of federal capital assets, including military capital assets, as indicated in Table 5-1.

Table 5-1
Treasury Board Capital Asset Amortization Guidelines

- The original cost of land is not amortized
- Buildings: 20 to 30 years
- Machinery and equipment: 5 to 15 years
- Works and infrastructure: 20 to 40 years
- Informatics hardware: 3 to 5 years
- Informatics software: 1 to 10 years
- Arms and weapons for defence: 5 to 10 years
- Motor vehicles: 3 to 10 years
- Military vehicles: 3 to 20 years
- Ships and boats: 10 to 25 years
- Aircraft: 10 to 20 years

The implications of the use of such guidelines can be illustrated in a simple thought experiment. The Medium Support Vehicle System (MSVS) project is a desperately needed Support, Sustainment, and Mobility project. The existing MLVW fleet is now 23 years old, three years beyond the end of its life expectancy according to the Treasury Board Guidelines.

The MSVS acquisition is a \$956,900,000 project. The *Strategic Capabilities Investment Plan (SCIP 2004)* shows a slow five year ramp-up in spending on it, with a total of only \$125 million or 13.1 percent spent to the 2008-09 point and the remainder to be spent in the years following.⁴⁶ Its inclusion in Vote 5 expenditures is impossible before that time because there simply wasn't enough money in Vote 5 to accommodate it before then. In 2008-09, the fleet will be 26 years old, with good prospects of being 30 years old by the time actual replacement takes place.

As discussed in Chapter 3 of this study, in order to keep the fleet of MLVWs operational for the additional ten years beyond the end of their life expectancy, the accelerating maintenance costs could amount to an additional one billion dollars, or \$100 million per year.

The use of accrual based accounting would allow the new MSVS fleet to be taken onto the DND balance sheet immediately, and to be amortized over its 20 year life at the approved Treasury Board guideline rate of "military vehicles: 3 to 20 years." As such, instead of a \$957 million cost in this year's Vote 5, the cost would only be one-twentieth of that, or \$48 million.

Additionally, it would mean avoiding the \$100 million annual operations and maintenance bill for the life extension of a completely worn-out and unreliable fleet. Brand new, reliable vehicles, and a \$53 million annual savings in O&M is a very strong argument for the fastest possible conversion to accrual based accounting.

The process would be somewhat more complex than suggested by this simple thought experiment, of course, since many equipments are a mixture of components with differing amortization rates. One example is the Single Ship Transition Project, designed to allow replacement, on a common hull, of the Iroquois class destroyers and the Halifax class frigates, for which there is no money in the SCIP until years "subsequent" to FY 2008-09. It will contain a hull and propulsion component amortized over 25 years, plus "arms and weapons for defence" amortized over 10 years, informatics hardware amortized over 5 years, and informatics

software which might be amortized over as little as one year or as many as 10 years. But this “modular amortization” process is not particularly difficult, and is recommended by Treasury Board.⁴⁷

THE POTENTIAL OF GLOBAL CAPITAL ASSET MANAGEMENT IN THE DEFENCE DEPARTMENT

The second step with potential to help the generation of adequate re-capitalization funds lies in the area of Capital Asset Management, presuming a small but highly significant change to an already existing Treasury Board policy.

Financial officers of private sector firms routinely engage in active asset management practices in order to identify unused, underused, or surplus assets that can be sold and converted from physical to financial assets, which can then be redeployed elsewhere according to the firm’s investment priorities. In some cases such sales may generate cash in excess of the amortized value of the assets recorded in the accounts of the firm, and in such cases the excess will be recorded as income in the income statement of the firm. If there is a terminal loss, such a loss will also be recorded in the income statement of the firm. The remainder of the receipt for the sale of the surplus asset is simply a balance sheet transaction in which one asset (real property such as a surplus factory site) is converted into a different asset form (financial), and converted at a later date into another form (new production machinery).

While there is an immediate problem in valuing the existing asset base, such as it is, of major CF capabilities platforms, much of the conceptual analysis needed to implement such a process has already been completed by the office of Chief Review Services in a comprehensive 2002 report titled “Best Practices and Lessons Learned in Surveyed Defence Organizations Implementing Accrual Accounting.”⁴⁸

Treasury Board Policy already allows a form of balance sheet asset management in the use of revenues gained from the sale of Real Property (land and buildings).⁴⁹ The policy states:

Revenues from the sale or transfer of real property must be credited to the Consolidated Revenue Fund. The Treasury Board has authorized the sharing of 100 percent of net proceeds from the sale or transfer with custodian departments, on the condition that

- the departments have a strategic investment framework (e.g., a Long-Term Capital Plan) approved by Treasury Board;
- the proceeds are reinvested in real property, consistent with the strategic investment framework.

The Department of National Defence, of course, has a strategic investment framework, the Strategic Capabilities Investment Plan, already cited. Unfortunately, the Treasury Board restriction that revenues generated from the sale of real property can only be re-invested in real property prevents DND from being able to take advantage of a very large real property asset base, much of which is surplus or potentially surplus to DND requirements. If that Treasury Board policy restriction could be removed, so as to allow full asset management, the implications could be profound.

According to the Directory of Federal Real Property, the Department of National Defence in 2002 held 8,102 properties involving 8,285 parcels of land, and covering 29,454,186 hectares.⁵⁰ On these properties were 32,400 buildings with a total floor space of 17,300,753 square metres.

One speculative valuation means might be to take the Payments in Lieu of Taxes (PILT) to municipal governments as a means of generating a first estimate, since the basic PILT is calculated as “the product of the federal property value multiplied by the effective tax rate and is paid on an annual basis.”⁵¹

Consider another thought experiment that posits DND has determined the Canadian Forces College in Toronto is surplus to requirements, and its educational mandate could be shifted to Kingston to be taken up by the Royal Military College of Canada and the Canadian Land Forces Command and Staff College. As a result, the Toronto property could be sold and the sale proceeds returned to the Department’s capital asset balance sheet as a financial asset available to the financial managers of the Department to pay for needed new equipment.

From the Federal Directory of Real Property already cited⁵² we discover that the site includes five buildings with a total floor space of 17,663 square metres on a 7.92-hectare site, and that the annual PILT amounts to \$1,014,401. Estimating the effective Toronto tax rate to be about one percent of the assessed value of the property, the capital value of the site could be about \$100 million.

A similar process might provide first estimates of a capital asset valuation of \$259 million for the 97.4 hectare Longue Point Supply Depot in Montreal, or a capital asset valuation of \$300 million for the 2,500 hectare Lancaster Park in Edmonton, though one suspects that the municipal tax rate in Edmonton is lower than in Toronto or Montreal and that therefore the valuation of Lancaster Park should be considerably higher than \$300 million.

In any event, this suggests that there is considerable real property asset value in the DND portfolio, which, if sold, could make a substantial contribution to the re-capitalization requirements of the Canadian Forces.

THE VOTE 1 SAVINGS IN INFRASTRUCTURE REDUCTION

The Auditor General has already taken the strong position in a 1994 Report that “Force structure requirements must be the basis of property holdings”, but noted that “at least until the 1994 Budget, government concern about the impact of base closures on local economies and the potential political fallout led to indecision.”⁵³ The consequence of placing such non-military objectives upon the Defence Department is to reduce the amount of funding for the achievement of necessary military objectives.

The Auditor-General, in the same report, cited internal DND infrastructure studies in 1975, 1988, and 1993 that attempted to define the minimum infrastructure requirement for the Canadian Forces. The 1975 study concluded that a total of 12 military bases would suffice to provide the minimum infrastructure needed to support the CF. The Auditor-General then used the Department’s computer model to estimate the annual savings implicit in a reduction to 12 bases and found that:

The modelling showed that military capability would be enhanced. As well, depending on the chosen configuration, savings of between \$360 million and \$970 million per year could result, chiefly by consolidating support staff.

The Auditor-General’s 1996 follow-up of the recommendations of DND action with respect to the 1994 report referred again to the 12 bases figure, noting that:

The 1995 departmental Budget Impact Statement defined the operational needs of the Canadian Forces as:

- A naval and maritime air presence on the Atlantic and Pacific coasts;
- A land force presence in all four regions of Canada;
- Eastern and western fighter aircraft bases; and
- Eastern and western air transport bases.⁵⁴

Of course, there remain today some 23 bases instead of the 12 cited in the 1975, 1988, and 1993 studies. The effect of this inefficiency may be seen in the much higher support costs per person at those bases with a smaller permanent, all year round resident military population, as is reflected in Tables 5-2 through 5-6, whose data is drawn from the CF Cost Factors Manual.⁵⁵

Table 5-2
Army Base Support Costs

<i>Army Bases</i>	<i>Annual Support Cost Per Person</i>	<i>Daily Support Cost Per Person</i>
Shilo	\$29,970	\$153
Gagetown	\$26,059	\$130
Montreal	\$18,521	\$ 93
Petawawa	\$18,214	\$ 92
Edmonton	\$17,455	\$ 89
Suffield	\$14,570	\$ 75
Kingston	\$10,838	\$ 55
Valcartier	\$ 9,119	\$ 46
Average	\$15,933	\$ 81

Table 5-3
Air Force Base Support Costs

<i>Air Force Bases</i>	<i>Annual Support Cost Per Person</i>	<i>Daily Support Cost Per Person</i>
22 Wing North Bay	\$36,074	\$188
19 Wing Comox	\$32,670	\$167
5 Wing Goose Bay	\$29,722	\$156
3 Wing Bagotville	\$28,515	\$147
14 Wing Greenwood	\$27,756	\$143
9 Wing Gander	\$25,132	\$126
6 Wing Trenton	\$23,261	\$119
4 Wing Cold Lake	\$22,462	\$115
15 Wing Moose Jaw*	\$17,591	\$ 92
17 Wing Winnipeg	\$17,048	\$ 86
Average	\$23,897	\$122

Note: *A major reason for the low support cost for CFB Moose Jaw is that it is an 'Alternative Service Delivery Base', and a portion of the support cost is covered in the contract with the contractor, which is paid for from a different financial code.

Table 5-4
Navy Base Support Costs

<i>Navy Bases</i>	<i>Annual Support Cost Per Person</i>	<i>Daily Support Cost Per Person</i>
Esquimault	\$20,111	\$100
Halifax	\$18,987	\$ 93
St Johns	\$15,273	\$ 79
Average	\$19,311	\$ 95

Table 5-5
Other Base Support Costs

<i>Other Bases</i>	<i>Annual Support Cost Per Person</i>	<i>Daily Support Cost Per Person</i>
Borden	\$26,319	\$131
Ottawa	\$10,168	\$ 51
Average	\$14,210	\$ 71

Table 5-6
Canadian Forces Support Costs

<i>Canadian Forces</i>	<i>Annual Support Cost Per Person</i>	<i>Daily Support Cost Per Person</i>
Average	\$17,889	\$ 89

Care should be taken to note that the arrangement of bases in order of support cost per person is not necessarily a recommendation for closure, since the shift of establishments from any one base to another will change the support costs per person, simply by changing the number of permanent military residents. Furthermore, bases that are primarily used for training rather than operations may have very large seasonal population shifts, especially during the summer months when individual training course loads tend to peak. Additionally the much higher capital intensity of Air Force and Navy bases generate higher maintenance costs that skew the support costs per person when inter-service comparisons are made.

Nonetheless, it is easy to agree with the views of the Auditor General in concluding that the closure of surplus bases would allow

significant Vote 1 savings by consolidating support activities. Certainly, there is no reason to argue with the Auditor General's expectation of savings of between \$360 million and \$970 million per year, adjusted upwards to correct for inflation since 1994, the year of the Auditor General's report.

THE FINAL TASK: CLOSING THE PROCUREMENT GAP

All of the foregoing suggestions could serve to free up substantial sums of money for investment in the re-capitalization of the Canadian Forces. Unfortunately, even if every suggestion were to be adopted in its entirety, defence planners would still face an increasing 'Policy Gap' coming from the extinction of capabilities, as major platform after major platform simply drops off the 'capabilities table' by attrition.⁵⁶ Quite simply, the length of the procurement cycle is now outrunning the remaining life expectancy of many major platforms.

The Minister's Advisory Committee on Administrative Efficiency identified internal DND procedures as a significant part of the problem, noting that:

The Committee finds that Defence's *internal* process for defining requirements and approving capital projects takes too long (nine years out of the average 15-16 year process required to procure major equipment), involves too many successive reviews, occupies too much senior management time for little added value, and fails, from a process perspective, to distinguish between common goods and complex weapons systems.⁵⁷

The Committee accepted that the Department recognized its own contribution to the problem:

A 1998 department study revealed that most capital equipment projects took, on average, 16 years from concept to project completion. The Department acknowledged that this is an unacceptable length of time and committed to shortening the process by at least 30 percent – to 11 years. In December 2003, the Department developed a new project approval process to reduce internal approval times and in 2004 was working on an implementation plan.⁵⁸

The Committee recommended supporting that commitment:

The Committee proposes a revised capital approval process for consideration. This process is designed to result in significant savings in the overall capital acquisition process, principally by halving the current nine-year period that it currently takes just to award procurement contracts. Adopting the recommended changes would reduce the average overall project life cycle from the current 15-16 year average to between 10-12 years by placing shorter time limits on certain internal stages of the process (for example, one to two years for requirements definition).⁵⁹

Little had changed by early March 2005. Private conversations at the March 2004 Conference of Defence Associations Annual General Meeting, however anecdotal, indicate the problems seemed still to be unresolved: a representative of a major Canadian defence contractor commented that it was still taking four years to produce a Statement of Requirements; a staff officer on one of the project management teams complained that the constant requirement for the negotiation of non-military and inter-departmental aspects was causing severe delays; a senior officer observed that the most important problem facing the Department was not the provision of capital funding, but the delay in being able to get the authority to commit it to the actual procurement; and a delegate to the meeting made the comment at a microphone that "I'm beginning to think that we're not going to make it."

CONCLUSION

It is now so late in the long day of the decline and extinction of Canadian Forces capabilities that increasingly desperate measures are required.

Perhaps it is time for the Government of Canada to recognize that the imposition of non-military objectives on the broken back of the defence procurement process cannot be borne further, and that it is time to abandon the search for 'offsets', and 'socio-economic benefits' to be extracted from the defence capital budget in order that some Member of Parliament might report success once again in the delivery of 'political pork' to his or her riding.

Perhaps it is worth remembering that an alternative mechanism exists in the Defence Production Sharing Arrangements, an agreement between Canada and the United States that the total amount of Canadian defence procurement south of the border would be equalled by American procurement north of it. The defence industry in Canada should be encouraged to enter into supplier relationships in many cases, and even into primes in other cases, with American firms to produce flexibility to enhance that area of the Canadian economy.

Perhaps it is time to abandon, for a time at least, the requirement to call for tenders in defence procurement, and go to 'directed procurement' in order to bypass the delays in the procurement process until we have surmounted the capabilities crisis already upon us.

Perhaps it is time to reflect that regional development, while maybe a worthy national objective, is not a national defence objective, and that surplus bases should be closed, with the monies generated by their sale for redevelopment by either the public or private sector reallocated to the defence capital programmes.

And perhaps we should remember that the proper objective of defence is, in fact, defence.

Appendix A

Industry Canada

The Procurement Process in Canada

a. Overview

- (1) Federal government procurement means the acquisition of goods and services by contract. The goods and services may be off-the-shelf, an adaptation of an existing product/ solution, or a unique government development. The procurement process begins when needs are established and includes requirements definition, requirements validation, selection of a procurement strategy, project approval, bid solicitation and source selection, negotiation and award of contracts, contract performance and contract administration.

- (2) For procurements classified as Major Crown Projects (MCP) – usually over \$100 million and high risk or as designated by Cabinet – formal interdepartmental project management offices (PMOs) and Senior Project Advisory Committees (SPACs) are established in accordance with Treasury Board’s policy and management guidelines. The operational department sponsoring the procurement project (usually the Department of National Defence – DND) is the lead department with responsibility for overall project management, for seeking the required project approvals and reporting on progress to the Treasury Board. Public Works and Government Services Canada (PWGSC) is the project contracting authority. Industry Canada has lead responsibility for the IRB program; however, the Atlantic Canada Opportunities Agency (ACOA), Western Economic Diversification (WD)

and Canada Economic Development for Quebec Regions (CED'Q) each has representation on the SPAC.

- (3) In order to simplify the IRB process and to free up the human resources involved in major procurements, Industry Canada will normally avoid seeking IRBs for strictly preliminary definition or definition related contracts. Industry Canada recognizes that the true value of the IRB policy is in the larger implementation contract. However, potential Bidders may be reminded during the definition phases of a contract that IRBs will be an evaluated aspect of the procurement strategy, for the implementation phase, should they decide to submit a proposal for the main contract. As early as the definition phase prospective Bidders should take advantage of the advance notice for advance planning of their future implementation phase IRB activities.

b. Acquisition Strategy

- (1) The federal government has defined three basic procurement strategies:
 - (a) commercial off-the-shelf – low risk
 - (b) solution-oriented procurement – medium risk
 - (c) unique government development – high risk
- (2) Each of these procurement strategies provides unique challenges to the IRB Manager in the development of the IRB strategy and objectives.

c. Dialogue with Industry

- (1) The federal government may use a number of methods to begin the formal process for interaction with industry. Prior to release of a request for proposal, a project office may issue:
 - (a) price and availability request
 - (b) a solicitation of interest
 - (c) draft statement of requirements/objectives
 - (d) requests for information

- (2) In addition, the project office may hold pre-solicitation conferences (industry days) or conduct bidders' conferences.
- (3) In order to facilitate the early notification of an upcoming procurement, the Contracting Authority usually issues a Solicitation of Interest (also known as a Letter of Interest) to industry on behalf of the client department. In addition, federal government departments participate in various industry activities to discuss upcoming procurements. For instance, personnel from National Defence, Public Works and Government Services Canada and Industry Canada frequently speak at industry association lunches held in Ottawa where planned projects are discussed. With increasing frequency, draft Requests for Proposals are also posted on internet bulletin boards in order to solicit reaction and input from interested companies.
- (4) Once the Solicitation of Interest has been issued, companies are encouraged to meet with the Program Manager or his/her staff to gain a full understanding of the operational requirements. Meetings with Industry Canada IRB Manager as well as representatives from the Regional Departments/Agencies are also encouraged so initial discussions regarding IRB plans and expectations can be discussed. It is during this period that Bidders should commence their business prospecting considerations to learn about Canadian company capabilities and to seek clarifications about the Canadian IRB program.
- (5) The government recognizes that companies need time to develop an understanding of government needs and to define an effective and affordable solution, including time to form alliances with other companies and to negotiate teaming agreements and develop long range business plans, a key ingredient in the development of an effective and successful IRB program. As noted above, part of this process includes meeting with government officials to discuss various aspects of the project, including IRBs. It should be noted that there is a willingness on the part of all government departments involved in the project to meet with interested Bidders up until the date which the RFP is issued.

- (6) As mentioned above in paragraph 1. c. (10), there are a number of sources available to Bidders that can assist in business prospecting. Industry Associations and officials from Canada's provincial governments are always eager to talk to prospective Bidders about industrial capabilities within their jurisdictions. Many times the regional agencies and departments will work closely with the provinces to arrange information sessions with Bidders, as well as company tours and facility inspections for their region. These business prospecting activities provide an excellent opportunity for Bidders to understand the capabilities of firms and to identify potential IRB recipients.
- (7) Once Public Works and Government Services Canada issues the RFP then all enquiries must be submitted in writing to the Contract Authority. This applies to queries related to IRBs as well. To ensure consistency and quality of information provided to Bidders, the Contracting Authority will provide, simultaneously to all companies to which the solicitation has been sent, any information with respect to significant enquiries received and the replies to such enquiries without revealing the sources of the enquiries. It should be noted that non-compliance with this condition during the bid solicitation period may, for that reason alone, result in disqualification of a Bidder's proposal.
- (8) Industry Canada discourages pre-approvals of IRB Transactions. One of the reasons of publishing this IRB Guide is to educate Bidders about the application of the Canadian IRB Policy so Bidders can better understand the eligibility criteria for business activities that constitute Canadian IRBs. Industry Canada attempts to respond to all correspondence received in the department. However, Bidders should not construe a non-reply as a positive response to its request for pre-approval.

d. Request for Proposals

- (1) The IRB statement of work and evaluation process will be included in the Request for Proposal. With increasing frequency drafts of the document are also being published on the internet in advance of the

formal release date. A sample Request for Proposal (RFP) is provided in Part B of this Guide. Actual RFPs may be more prescriptive than that found in this IRB Guide. However, all RFPs will include sections related to the Mandatory IRB Requirements, the IRB Statement of Work, IRB Eligibility Criteria, instructions related to the format of the IRB proposal and the IRB Evaluation Plan that will be used to evaluate proposed business activities. Attached to the RFP will also be an IRB Model Contract that includes the IRB related terms and conditions that Bidders are expected to agree to. A model of an IRB Contract is included in Part C of this Guide.

e. Evaluation*/*Contract Negotiation/Performance

- (1) The winning proposal will be selected based on an overall evaluation of the Bidder's:
 - (a) technical solution;
 - (b) the bid price (and schedule)
 - (c) the risk associated with the proposed solution; and,
 - (d) the IRB proposal.
- (2) The IRB Evaluation Team is led by the IRB Manager from Industry Canada and generally has participants from ACOA, WD and CED'Q. Knowledge-expert resource people from any number of sources can be called upon to assist the evaluation team in gaining a more thorough understanding of aspects of the bids.
- (3) The successful Bidder will be invited by the Government of Canada to enter into contract negotiations. If negotiations are successful, the Bidder will be asked to sign a formal contract with the federal government. The IRB portion of the Bidder's proposal will be embodied into the formal contract.
- (4) During contract performance, the contractor is required to conduct the work effectively, to satisfy all contractual requirements and to deliver the required goods and services within the time periods quoted in the contract.

- (5) In the federal government, contract administration is the responsibility of the client department project office. Public Works and Government Services Canada provides contracting specialists to the project office and acts as the contract authority. The IRB Manager is a member of the project team and will administer the IRB portion of the contract as the IRB Authority, on behalf of the project manager.

f. Application of the IRB Policy in Procurement

- (1) One of the objectives of the Treasury Board Procurement Review Policy 3-02 is to ensure maximum benefit to Canada is achieved and that all major federal procurements be reviewed for industrial and regional development opportunities.
- (2) Treasury Board established an interdepartmental procurement review process for all procurements in excess of \$2 million to ensure that they are carried out in an efficient and cost-effective manner.
- (3) Competition remains the cornerstone of the Canadian government procurement process. It is the most efficient way of achieving both the primary and secondary goals of procurement. It gives each Bidder the incentive to bring forward its best solution to the operational problem, at a competitive price, as well as to respond more effectively to requirements in support of other national objectives. Moreover, competition ensures that all qualified suppliers are afforded access to government contracts. To this end, procurement initiatives in support of regional industrial development must, to the greatest extent possible, focus on assisting Canadian firms in becoming competitive in domestic and world marketplaces.
- (4) Treasury Board Policy 3-02 states that a project is deemed to be a Major Crown Project when its estimated cost will exceed \$100 million and the Treasury Board (TB) would assess the project as high risk. However, TB may require any project exceeding the sponsoring minister's delegated project approval authority to be managed as an Major Crown Project (MCP). As well, provision is made in the TB policy for a sponsoring department to request approval from Treasury Board to manage a project exceeding \$100 million but of lesser

risk within a tailored MCP regime or outside the MCP management framework.

- (5) Project Management Offices (PMOs) and Senior Project Advisory Committees (SPACs) are established to manage MCPs. SPACs are responsible for advising on all aspects of the project, including a procurement review for the project. The client department sponsoring the procurement is the project lead and has responsibility for project management, approvals and reporting. Other key interdepartmental members may include:
 - (a) Public Works and Government Services Canada (PWGSC) as the project contracting authority;
 - (b) Industry Canada as the IRB Authority;
 - (c) Atlantic Canada Opportunities Agency;
 - (d) Canada Economic Development for Quebec Regions;
 - (e) Western Economic Diversification;
 - (f) Privy Council Office;
 - (g) Treasury Board Secretariat;
 - (h) Finance Canada; and,
 - (i) Human Resources Development Canada.
- (6) Collectively, Industry Canada and the regional agencies/departments are responsible for the development and management of industrial and regional benefits. A more detailed description of each of these departments and agencies is provided in Annex A to this part of the Guide.
- (7) Procurements in the \$2 to \$100 million range are known as PRC cases.
 - (a) They are reviewed by a Procurement Strategy Committee consisting of a number of federal departments: PWGSC (the chair), the client department, Industry Canada, the regional agencies/departments, Indian and Northern Affairs Canada, Environment Canada, Human Resources Development Canada, National Research Council, Finance Canada and the Treasury Board Secretariat.

- (b) The Procurement Strategy Committee reviews all PRCs submitted by client departments. Industry Canada and the regional economic agencies/departments review cases for potential IRB policy application. The other departments, such as Indian and Northern Affairs, review the cases for applicability of these procurements to achieve other national objectives such as Aboriginal economic development.

g. Outline of the IRB Process

- (1) The first step in the process is the identification of a procurement opportunity with significant dollar value that provides opportunity for Canadian industrial and regional development. Once a project has been identified, then the assigned Industry Canada IRB Authority prepares an IRB strategy, in cooperation with the client department, PWGSC and the regional agencies/departments.
- (2) Solicitation documentation is prepared and the IRB Authority is tasked with writing the IRB related Letter of Interest, Request for Proposal, IRB Evaluation Plan and IRB related terms and conditions, all of which are tied in as-and-when-required to the overall solicitation documents. The IRB Authority will seek inputs from the Regional Agencies and Departments in the preparation of all solicitation documents.
- (3) When bids are received, the overall proposal is evaluated in the areas of technical merit, risk, bid price, schedule and IRBs.
- (4) The IRB portion of the proposal is evaluated separately on the basis of quality, quantity and the risk associated with the likelihood the proposed IRB will be achieved. The IRB evaluation team is comprised of the Industry Canada IRB Manager and representatives from the three Regional Agencies/Departments. It should be noted that all members of the IRB evaluation team sign non-disclosure statements with the Contracting Authority as they relate to the contents of the bid packages and the deliberations of the evaluation team. Each member of the IRB evaluation team also signs-off the final IRB evaluation report.

- (5) When the overall bid evaluation is completed, and the IRB results have been incorporated, then the various evaluation teams brief the various interdepartmental decision-making officials on the results of the evaluation – in the case of a Major Crown Project, the Senior Project Advisory Committee (SPAC).
- (6) The SPAC then makes a recommendation to Ministers on which proposal should be selected for contract award.

Appendix B

National Defence – Major Platform Physical Aging Tables

(Treasury Board Life Expectancy Guidelines)

Navy

<i>Platform</i>	<i>Number</i>	<i>Service Life TB*</i>	<i>Age 2005</i>	<i>Age 2010</i>	<i>Age 2015</i>	<i>Age 2020</i>
AOR	2	25	36	41	46	51
Destroyers	4	25	33	38	43	48
Submarines	4	25	16	21	26	31
Frigates	12	25	13	18	23	28
MCDV	12	25	10	15	20	25

Army


<i>Platform</i>	<i>Number</i>	<i>Service Life TB*</i>	<i>Age 2005</i>	<i>Age 2010</i>	<i>Age 2015</i>	<i>Age 2020</i>
M109s	76	20	34	39	44	49
MBTs	114	20	27	32	37	42
MLVW	2,769	20	23	28	33	38
HLVW	1,212	20	13	18	23	28
LSVW	2,879	20	12	17	22	27
COYOTE	203	20	9	14	19	24
ADATS		20	9	14	19	24
LAV 3	651	20	6	12	17	22
M113A3**	289	15	3	8	13	18
AVGP**	401/301	15	2	7	12	17
BISON**	199	15	2	7	12	17

Air Force

<i>Platform</i>	<i>Number</i>	<i>Service Life TB*</i>	<i>Age 2005</i>	<i>Age 2010</i>	<i>Age 2015</i>	<i>Age 2020</i>
Mar Hel	29	20	42	0	5	10
CC130E	19	20	42	47	52	57
CC130H	13	20	30	35	40	45
LRPA	16	20	26	30	35	40
CF18	80	20	24	29	34	39
A310	5	20	19	24	29	34
Tac Hels	78	20	12	17	22	26

Key:

 More than half of service life left

 Less than half service life left

 Service life expired

Notes: *TB is Treasury Board Canada life expectancies.

**M113A3, AVGP, BISON were rebuilt; accordingly their life expectancy is reduced to 75 percent of new builds.

Notes

¹*Achieving Administrative Efficiency*. Report to the Minister of National Defence by the Advisory Committee on Administrative Efficiency. <http://www.forces.gc.ca/site/Focus/AE/AEReportFull_e.pdf>

²*The Claxton Papers 4*, “Canada without Armed Forces?” School of Policy Studies: Kingston, 2003.

³Canada, *Defence in the 70s* (Ottawa: DND, 1971), p. 41.

⁴Canada, *Challenge and Commitment: A Defence Policy for Canada* (Ottawa: DND, 1987).

⁵Douglas L. Bland and Sean M. Maloney, *Campaigns for International Security: Canada’s Defence Policy at the Turn of the Century* (Kingston: Queen’s University, 2004), pp. 31-34.

⁶PWGSC, “Aerospace and Defence: The Procurement Process,” accessed 3 April 2005, at: <http://strategis.ic.gc.ca/epic/internet/inad-ad.nsf/en/ad03666e.html>.

⁷Canada, *Report to the Minister of National Defence by the Advisory Committee on Administrative Efficiency* (Ottawa: DND, 2003), p. 12.

⁸*Minister’s Efficiency Study*, p. 11.

⁹Henry E. Eccles, *Military Concepts and Philosophy* (New Jersey: Rutgers University Press, 1965), p. 83.

¹⁰Caution must be exercised in interpreting the figures in this table, due to the language used to categorize them, as discussed further below. Readers should also note that published government documents nowhere use the simplified format of listing depicted in Table 3-1 (and indeed the other tables and figures in this chapter), which were compiled by analysts of the Conference of Defence Associations.

¹¹Department of National Defence, *2004-2005 Report on Plans and Priorities*, p. 64.

¹²Treasury Board of Canada, *2004-2005 Estimates Parts I and II, National Defence, Ministry Summary*, 25 August 2004.

¹³See http://www.vcds.forces.gc.ca/DPOnline/FY5/PDF/Predefined/DefencePlan03-04_e.pdf for full listing of Level 1 on page 103-123. Note the e-file is 5.16MB.

¹⁴Howard Marsh, "Sensitivity Analysis of Canadian Defence Spending: Value for Money – Cost of the Canadian Forces," in Richard H. Gimblett (ed.), *Understanding the Crisis in Canadian Defence and Security* (Ottawa: Conference of Defence Associations Institute [CDAI], 2005).

¹⁵CF *Cost Factors Manual 2004-2005*, Table 5-1: Vehicle Costs Per Kilometer.

¹⁶See, for instance, Liberal Party of Canada, *Moving Canada Forward: The Paul Martin Plan for Getting Things Done* (2004), p. 48.

¹⁷See, for instance, Government of Canada, *Speech from the Throne to Open the First Session of the Thirty-Eighth Parliament of Canada* (October 5, 2004), p. 14.

¹⁸DND, *A Role of Pride and Influence in the World: Defence Policy Statement* (2005), p. 31.

¹⁹DND ADM HR-Mil data. Combat Arms NCM releases were approximately 80 in 1982, and annually below 40 until 1995. Projected releases for 2007 are 160.

²⁰J. Dunn and R. Morrow, "Should I Stay or Should I Go: Attrition Questionnaire Revision Project—Phase 1 Findings" (DND, Director Human Resources Research and Evaluation, November 2002). For a further exploration of the reasons behind retention problems, see Christopher Ankersen and Losel Tethong, "Birds in Hand: The Need for A Retention Based Strategy for the CF," *Canadian Military Journal*, 2:2 (Summer 2001), pp. 43-58. See also David Pugliese, "Soldiers 'frustrated' by rules, policies," *The Ottawa Citizen*, 23 June 2003 (on line edition).

²¹DND, ADM HR-Mil data.

²²The Army recently undertook a study to evaluate this choice, entitled Operation Bastion. The results were varied: some arms (such as the Armoured Corps) decided to fill their training billets at the expense of their operational units, while others (such as the infantry) opted to maintain unit strength at the expense of full-time instructors.

²³An aggregate ratio for people attracted to CF members trained is approximately 6:1. This consists of attrition that occurs between the 'front door' of the CFRC and actual application: not everyone who enters a recruiting centre 'follows through' to apply to the CF. Then there is an attrition rate of approximately 50 percent for those who apply to the CF and go on to enter the training system, due to unacceptability, medical problems, and time delays in processing of ap-

plications. Finally, there is a similar training attrition rate for voluntary, medical, and training failures. Statistics for this 6:1 ratio are highly speculative, partly because they rely on data gathered from the 'bottom up' across separate parts of the recruiting and training process (e.g., some figures come from CFRCs and some from training establishments), but have been tentatively validated through comparison with 'top down' estimates.

²⁴Based on comments given by senior DND and CF personnel during the official launch of the International Policy and Defence Statements, 19 April 2005.

²⁵It is theoretically possible to alter attrition rates and thereby lower the 6:1 somewhat, by lowering fitness, medical, or training standards, but this is assumed to be unacceptable.

²⁶Of those polled in the CROP '3SC' Survey in 2003, 53 percent responded that the CF was 'favourable' or 'very favourable' (down from 58 percent in 2002). For a detailed review of public opinion towards the CF, see Sarah Noble, "Talking to Canadians About Defence: Giving to Whom You Trust," in Gimblett (ed.), *Understanding the Crisis in Canadian Security and Defence*.

²⁷CROP Agency, 3SC Survey, 2003.

²⁸DND, *Report on Plans and Priorities 2003-2004*.

²⁹*Ibid.* What's more, 49 percent of those in this age group who are interested in the CF would prefer to join the Reserves (vice 36 percent in favour of joining the Regular Force).

³⁰Department of National Defence *Report on Plans and Priorities 2005-2006*.

³¹CROP Agency, 3SC Survey, 2003.

³²DND, *Report on Plans and Priorities 2002-2003*.

³³Government of Canada, *Budget 2005*, p. 222.

³⁴DND, ADM HR-Mil data.

³⁵DND, *Departmental Performance Report 2004-2005*.

³⁶DND, *Report on Plans and Priorities 2003-2004*.

³⁷Interviews with members of the CF.

³⁸Department of National Defence, *A Role of Pride and Influence in the World: Defence Policy Statement 2005*, p. 31.

³⁹Department of National Defence *Report on Plans and Priorities 2005-2006*.

⁴⁰Based on comments given by senior DND and CF personnel during the official launch of the International Policy and Defence Statements, 19 April 2005.

⁴¹Based on comments given by senior DND and CF personnel during the official launch of the International Policy and Defence Statements, 19 April 2005.

⁴²*Minister's Efficiency Study, Section 1 – Management Enhancements*, at: http://www.forces.gc.ca/site/Focus/AE/report/toc_e.htm.

⁴³Office of the Auditor General of Canada, *Report of the Auditor General 2004, Chapter 3: National Defence – Upgrading the CF-18 Fighter Aircraft*, at: <http://www.oag-bvg.gc.ca/domino/reports.nsf/html/20041103ce.html>

⁴⁴Department of Finance Canada, *Backgrounder – Implementation of Full Accrual Accounting in the Federal Government's Financial Statements (2004)*, at: http://www.fin.gc.ca/toce/2001/fullacc_e.html

⁴⁵Department of Finance Canada, *Budget 2004 – Budget Plan, Chapter 4.5 – Moving Forward on the Priorities of Canadians -The Importance of Canada's Relationship to the World*, at: <http://www.fin.gc.ca/budget04/bp/bpc4ee.htm>

⁴⁶National Defence, *Strategic Capabilities Investment Plan, Capital Equipment Annex 2004 Update, Capability Thrust 2, Support, Sustainment, and Mobility*, at: http://www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/ddm/scip/annex04-05/ctdyn_e.asp?ct=2

⁴⁷*Treasury Board Accounting Standard 3.1.*

⁴⁸National Defence, Chief Review Services, *Best Practices and Lessons Learned in Surveyed Defence Organizations Implementing Accrual Accounting (2002)*, at: http://www.forces.gc.ca/crs/pdfs/bpar_e.pdf

⁴⁹Treasury Board of Canada Secretariat, *Treasury Board Real Property Revenue Policy (2001)*, at: http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/realproperty/rvp-pre1_e.asp#1.%20Effective

⁵⁰Treasury Board of Canada Secretariat, *Directory of Federal Real Property – Summary of Results – National Defence (2002)*, at: <http://www.tbs-sct.gc.ca/dfrp-rbif/summary-sommaire.asp?Language=EN&Qid=10655&QueryFile=/dfrp-rbif/bycustodian-gardien.asp>

⁵¹Public Works and Government Services Canada, *Payments in Lieu of Taxes, Frequently Asked Questions (2000)*, at: <http://www.pwgsc.gc.ca/pilt/text/faq-e.html>

⁵²Treasury Board of Canada Secretariat, *Directory of Federal Real Property – Summary of Results – National Defence: Toronto (2002)*, at: <http://www.tbs-sct.gc.ca/dfrp-rbif/property-bien.asp?Language=EN&PN=10072>

⁵³Office of the Auditor General of Canada, *Reports to Parliament by Federal Institution (1994) – Chapter 26: National Defence – Infrastructure Reductions*, at: <http://www.oag-bvg.gc.ca/domino/reports.nsf/html/9426ce.html>

⁵⁴Office of the Auditor General of Canada, *Reports to Parliament by Federal Institution (1996) – National Defence – Follow-up of the Auditor General's*

1994 Report, at: <http://www.oag-bvg.gc.ca/domino/reports.nsf/html/9635ce.html#0.2.Q3O5J2.O25UY6.LLTLQE.211>

⁵⁵CF, *Cost Factors Manual 2004-2005*, Table 7-1.

⁵⁶See Brian MacDonald, “Canada Without Armed Forces?: Chapter 2 Update,” in *Understanding the Crisis in Canadian Security and Defence*, Annex: National Defence – Major Platform Physical Aging Tables (Treasury Board Life Expectancy Guidelines), reproduced here as Appendix B.

⁵⁷*Minister’s Efficiency Study*.

⁵⁸Office of the Auditor General of Canada, *Report of the Auditor General (2004), Chapter 3 National Defence – Upgrading the CF-18 Fighter Aircraft*, at: <http://www.oag-bvg.gc.ca/domino/reports.nsf/html/20041103ce.html>

⁵⁹*Ibid.*

About the Authors

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Dr. Douglas Bland is Professor and Chair, Defence Management Studies in the Queen's University School of Policy Studies. His research is concentrated in the fields of defence policy making and management at national and international levels, the organization and functioning of defence ministries, and civil-military relations. He has published books, articles, and reports and lectured in these fields in Canada, the United States, Europe, and South Africa. Dr. Bland is a graduate of the Canadian Army Staff College, the NATO Defence College at Rome, and holds a doctorate from Queen's University. He was a 1992-93 NATO Fellow. Among other works on defence management, he wrote, in 1987, *The Administration of Defence Policy in Canada 1947-84*, and in 1995, *Chiefs of Defence: Government And The Unified Command of The Canadian*

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Dr Richard Gimblett served for 27 years in the Canadian Navy prior to becoming an independent historian and defence policy analyst. His service included ships of various classes on both coasts, notably as Combat Officer of HMCS Protecteur for operations in the Persian Gulf during the war of 1991. He subsequently co-authored the official account of that conflict, under the title *Operation FRICTION: The Canadian Forces in the Persian Gulf, 1990-1991* (Dundurn, 1997). His last appointment was to the Directorate of Maritime Strategy, as lead writer of *Landmark: The Navy's Strategy for 2020* (DND, 2001). His newest book is *Operation Apollo: The Golden Age of the Canadian Navy in the War Against Terrorism* (Magic Light, 2004). He is a Research Fellow with the Centre for Foreign Policy Studies at Dalhousie University, is on the Visiting Faculty of the Canadian Forces College, and is Vice-President of the Canadian Nautical Research Society.

Colonel Brian MacDonald (ret'd) is Chair of Defence Studies of the Toronto based Royal Canadian Military Institute. In private life he is President of Strategic Insight Planning and Communications, consults on international and domestic strategic and business security issues. A graduate of the Royal Military College and York University, Colonel MacDonald is a prominent media commentator on security and defence issues, counting hundreds of television and radio appearances. His international conference papers have included Kings and Emmanuel Colleges of Cambridge University; the German Armed Forces University, Munich; the Beijing Institute for International Strategic Studies; the Shanghai Institute for International Studies; the International Society for the Systems Sciences in Atlanta; and the Atlantic Treaty Association in Budapest, Copenhagen, Edinburgh, Paris, Slovenia, and Washington. To date he has edited fifteen books and authored one, *Military Spending in Developing Countries: How Much Is Too Much* (Carleton University Press, 1997).

Colonel Howard Marsh (retd) joined the Canadian Army and served in the Canadian Armed Forces for 37 years. In addition to 20 years of operational service he was department head of Applied Military Science and Commandant of the Royal Military College. His various director-level positions in National Defence Headquarter provided him insight to the military culture and its interface with public administration. He has co-authored three books: *Generalship and the Art of the Admiral*, *Toward a Revolution in Military Affairs*, and *Canada Without Armed Forces?* In retirement he is an independent consultation and senior defence analyst to the Conference of Defence Associations.

