

The Quest for Control in Canadian Defence Policy: The Evolution of Defence Management and
Organization, 1963–1972

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ABSTRACT

This study examines the evolution of Canadian defence organization and administration from the integration and unification of the Canadian Forces, starting with the arrival of Paul Hellyer as Minister of National Defence in 1963, to the full integration of military and civilian staffs at National Defence Headquarters in 1972. It seeks to understand the underlying defence management philosophy by explaining the evolving decision-making process and how and why certain management techniques and organizational concepts came to be embodied in the policy process. The goal of this work is to gain insight into not only the management of defence but its relationship to, and place within, general organization and management theory. The idea of rationalizing the business of defence lies at the heart of the history of the reorganizations in the 1960s and early 1970s. Management and organization were arranged to allow defence decision-making to become a more rational process, characterized by new degrees of control, in order to aid the overall effectiveness of the policy-making process. Overall, there existed a progression of administrative and management rationalization that had been occurring not only in the post-Second World War era, but since the turn of the century, both within and without the public sphere. While there was much to be critical about unification and the general defence policy vision of Hellyer, the evolution and development of modern management techniques in defence during the 1960s can largely be situated within an ongoing history of bureaucratization and management evolution of large scale organizations in general and military organizations in particular.

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ABBREVIATIONS

ACDS	Assistant Chief of Defence Staff
ACM	Air Chief Marshall
ADM	Assistant Deputy Minister
AM	Air Marshall
AVM	Air Vice Marshall
CAS	Chief of Air Staff
CCSC	Chairman, Chiefs of Staff Committee
CDC	Cabinet Defence Committee
CDRB	Chairman, Defence Research Board
CDS	Chief of the Defence Staff
CF	Canadian Forces
CFHQ	Canadian Forces Headquarters
CG	Comptroller General
CGS	Chief of General Staff (Army)
CLE	Chief of Logistics and Engineering
CNS	Chief of Naval Staff
COR	Chief of Operational Readiness
COSC	Chiefs of Staff Committee
DC	Defence Council
DCDS	Deputy Chief of the Defence Staff
DM	Deputy Minister
DMC	Defence Management Committee
DND	Department of National Defence
DPMS	Defence Program Management System
DRB	Defence Research Board
DSP	Defence Services Program
DSS	Department of Supply and Services
ICBM	Intercontinental Ballistic Missiles
JAG	Judge Advocate General
MCCRT	Management Command and Control Re-engineering Team
MIC	Military Industrial Complex
MND	Minister of National Defence
MRG	Management Review Group
NATO	North Atlantic Treaty Organization
NDA	National Defence Act
NDHQ	National Defence Headquarters
NORAD	North American (Aerospace) Defence Command
NPM	New Public Management
NRC	National Research Council
OA	Operational Analysis/Operations Analysis
OR	Operational Research/Operations Research

PCB	Program Control Board
PCO	Privy Council Office
PJBD	Permanent Joint Board on Defence
PPBS	Planning, Programming, Budgeting System
RCAF	Royal Canadian Air Force
RCN	Royal Canadian Navy
SA	Systems Analysis
TB	Treasury Board
TQM	Total Quality Management
UN	The United Nations
VCAS	Vice Chief of the Air Staff
VCDS	Vice Chief of Defence Staff
VCGS	Vice Chief of the General Staff (Army)
VCNS	Vice Chief of the Naval Staff

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INTRODUCTION

By the time the Korean War ended in 1953 the Canadian defence budget had reached roughly ten times what it had been during the years immediately after the Second World War, just shy of 2 billion dollars. In the decade that followed, however, that budget would be in a slow decline and military needs would rise, along with costs to address them. In addition to the defence controversies surrounding Canada's aerospace policy and the acquisition of nuclear weapons, defence expenditures declined under the Diefenbaker government to 26% of federal spending—down from an average of 41% under the previous Liberal government. By 1962, the defence budget had become greatly imbalanced, with 83% of expenditures going to operating and maintenance costs, versus and 17% for equipment.¹ What is more, the number of military personnel grew, accounting for 33.1% of the budget in 1960 where it had only been 26% four years earlier, all while the purchasing power of the Canadian defence dollar slumped amidst inflation.² At the same time, there was a growing list of needs for the Armed Forces, such as replacing the Centurion tanks for the Germany Brigade.

In the early 1960s an examination of military needs was undertaken to understand what measures could be taken in order to increase the effectiveness of the 'sharp end.' Each of the three services had a list of wants for both the short and long term, which included increasing personnel, accelerating ship building programs, a build-up of the 4th Canadian Infantry Brigade Group (4CIBG), an increase in air transport capability, accelerated airfield improvements, and the acquisition of new helicopters for search and rescue and anti-submarine roles. Along with sand-filled warheads on the Bomarc missiles and toothless (that is non-nuclear) CF-101 Voodoos, Honest John surface-to-surface rockets, and CF-104 Starfighters, the operational effectiveness of the armed forces was in jeopardy. Both Desmond Morton and Aaron Plamondon write that no major procurement had been acquired from

¹ Peter C. Newman *Renegade in Power: The Diefenbaker Years* (Toronto: McClelland and Stewart Ltd., 1963), p. 343.

² Desmond Morton, *A Military History of Canada*, 5th ed. (McClelland and Stewart, 2007), p. 246.

1957 until the end of the Diefenbaker years.³ While budgets stagnated and spending on equipment decreased, the administrative tail of the Department of National Defence increased. In 1963, the Royal Commission on Government Organization—also known as the Glassco Commission—wrote that payments to or for personnel accounted for nearly half of defence expenditures.⁴ While equipment went from 42.4% in 1954 to 19.3% in 1960, personnel costs went from 22.2% in 1954 to 36% in 1960.⁵ This imbalance needed to be addressed. When Lester Pearson replaced John Diefenbaker as Prime Minister in 1963 the price of military equipment had “skyrocketed”—as had been indicated by the Avro Arrow program and the ongoing Bras D’or hydrofoil research—and “a higher percentage of defence money was being spent to keep outdated equipment functioning.”⁶ At the same time there were calls for reductions of the defence budget which had been on the decline from \$1.8 billion in the late 1950s to just about \$1.5 billion in the early 1960s. In 1963 Cabinet explored the implications of the current defence budget. The Minister of National Defence, Paul Hellyer, had been asked about the possibility of a slight reduction of the annual budget with an increase of three percent in the following two years. In exploring the idea an exercise was conducted to determine the nature of adjustments that would have to be made by the programs of the three armed services in order to keep expenditures within proposed limits. The results indicated that the only way to keep budgets within strict limits was to scale back service programs.⁷

Each service Chief outlined the impact that budget limits would have on their environment and the magnitude of the program reductions that would be required. Despite a decline from 40% on capital expenditures from the Navy portion of the budget from 1957-1958 to 22.5% in 1962-1963, one third of

³ Morton, p. 246; Aaron Plamondon, *The Politics of Procurement: Military Acquisition in Canada and the Sea King Helicopter* (Vancouver: UBC Press, 2010), p. 70.

⁴ Canada, *Royal Commission on Government Organization. Chair: J. Grant Glassco, four vols., Vol 3: Special Areas of Administration Report 20: Department of National Defence* (Ottawa: Queen’s Printer, 1963), p. 63.

⁵ *Ibid.*, p. 90.

⁶ Plamondon, p. 70.

⁷ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6254, “Defence Budgeting Implications,” 2 August 1963, p. 2.

the annual expenditures were needed for major equipment to remain up to date. To find savings to meet the budget limitations, Chief of the Naval Staff Vice Admiral, Herbert Rayner, explained that the Navy would need to defer construction of general purpose frigates and reduce the order number, Oberon submarines would be borrowed instead of purchased, personnel and operating costs would need to be cut back, and already low unfirmed strength would need to be further diminished.⁸ The situation was no better in the Air Force or the Army. Chief of the General Staff (Army), Lieutenant-General Geoffrey Walsh and Chief of the Air Staff, Clarence Dunlap each presented a long list of cutbacks and establishment closures that would be required. The picture was “grim” according to Hellyer.⁹ In recent years spending had been curtailed on an ad hoc basis by postponing equipment purchases, creating a backlog of needs. Scaling back programs at the time appeared to be the only method of staying within budgetary limits. The reality of the policy environment was one of increasing defence requirements and any cuts to programs would have an impact on international commitments with potentially negative political consequences. At the same time, an expanding welfare state was redirecting resources away from defence to new programs and policies. During the Liberal election campaign in 1963 a new health care program was promised and when Pearson came to power funding was directed to university research, the Canada Student Loans Plan, and the Canada and Quebec pension plans, among other things. The Canada Assistance Plan, guaranteed Income Supplement payments, and Medical Care Act were also only a few years away. Raising the budget levels did not appear to be an option for defence, but the economic, diplomatic, political, and indeed, military implications of the situation were apparent.

It was agreed in Cabinet that no reduction of expenditures could occur without a change of direction of policy and that a radical change in the character of the defence program would be needed

⁸ Ibid., pp. 3-4.

⁹ Ibid., pp. 4-6.

to gain public support.¹⁰ With the implication that existing commitments could only be maintained through an increase in the budget, Cabinet agreed that defence programs and activities were to change.¹¹ The need for this was clearly framed in the context of the financial implications—annual defence expenditures would need to be increased if changes were not implemented. In particular, operating and maintenance costs were seen as a burden on expenditures which would push capital expenditures to a low of 17.5% of the budget.¹² Similar observations were made by the Glassco Commission which pointed to duplication of effort and uneconomic administration and management at the Department of National Defence (DND). The Commission suggested that significant savings could be achieved through management reorganization which would help correct the financial imbalance between high operating and maintenance costs and paltry capital equipment expenditures.

In 1964 the Liberal party released a new defence *White Paper*, outlining the policy initiatives to guide Canadian defence moving forward. The economic constraints within defence and the apparent administrative problems were strong influences on the final report. There were three main priorities articulated by the government: a change in emphasis on roles, modernization of management, and most importantly, defence reorganization. Greater priority was placed on the ability of the Canadian military to quickly contribute to “trouble spots” throughout the world, with less emphasis on military resources designed for all-out nuclear war in hopes that small conflicts would not escalate towards that outcome. Hellyer envisioned a flexible force making use of technology and equipment that would greatly increase mobility. This would be costly, however. The erosion of aging equipment and purchasing power of defence dollars was a major concern. In order to find economic savings to redirect towards capital

¹⁰ Ibid.

¹¹ There was to be a reduction in the number of anti-submarine craft (although a commitment to continue upgrading effectiveness of current ones), changes to the survival programme, the regrouping of CF-104s and CF-101s for more effective use, and plans to give the Air Division in Europe a multi-capability role in NATO. This was in addition to a full review of defence policy.

¹² Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6254, “Defence Expenditures,” 4 December 1963.

equipment, Hellyer decided to reorganize defence management, integrating the separate service commands and creating a single administrative framework for the three services in 1964. This was the first step towards the full unification of the services into the single Canadian Armed Forces, which occurred in 1968. Reorganization and the application of new modern management tools were expected to reduce the administrative tail and rationalize the defence policy process. Rationalization would also allow for the elimination of duplication and administrative overlap between the three services which would provide savings needed to cope with the financial difficulties of defence. With the unlikelihood of increased budgets but the certainty growing equipment obsolescence, integration/unification was chosen as the way to kill two birds with one stone.

Hellyer, himself, indicated that his rationale for the paper and reorganization was rooted in not only the influence of rising costs but also the management and control structure of defence—too many senior officials had direct access to the Minister and the complexity of choice among alternatives had grown too large.¹³ Embedded within the reorganizations were evolving ideas about the best way to structure civil-military relations. While the principles of civilian control—the legitimate responsibility for directing the military belongs to political authorities—were never questioned by the military, Hellyer felt that the means of this control could be strengthened. Not only did certain events, such as the Cuban Missile Crisis, indicate a weakness of command and control, but the Glassco Commission provided intellectual justification for increasing the role of civilians in the defence administration and policy-making process. For Hellyer, part of the problem was the loyalties of senior officers to their particular service which created rivalry over resources and reduced objectivity of planning which occurred in separate silos¹⁴—he therefore distrusted advice coming from service Chiefs. His concern was that lack of

¹³ Canada, Department of National Defence, *Address on the Canadian Forces Reorganization Act* (Ottawa, 1966), pp. 9-10.

¹⁴ Canada, House of Commons Standing Committee on National Defence, *Minutes of Proceedings and Evidence: "Bill C243, An Act To Amend the National Defence Act and Other Acts In Consequence Thereof,"* No. 14 (Ottawa: 1967), p. 452.

objectivity in planning and advice could negatively impact operational effectiveness and could potentially waste resources. Because of the scientific changes in defence and the strategic and financial significance of modern technological advances in weaponry (such as intercontinental ballistic missiles and nuclear weapons), it was felt that dispassionate and objective assessments of policy and planning was paramount, and this could be improved through a unified defence organization. A Chief of the Defence Staff (CDS) would act as a single voice for the services, policy planning would be integrated, and reorganizers hoped that a unified military would foster a new singular loyalty above that of the individual services. A key part of this reorganization included the use of modern management tools and principles, such as a Planning, Programming, and Budgeting System (PPBS) and Systems Analysis. Hellyer also introduced a new philosophy of defence management based on an integrated system of programming and planning (known as the Integrated Defence Program, or IDP) which relied on the most current financial and management techniques. The new system was intended to provide more reliable information to aid decision-makers in making more informed and efficient decisions. Data were to be expressed in terms of equipment and activities could be more effectively analyzed, bringing planning and output in line with each other to a greater degree than had been achieved in the past. This reflected an emphasis on information management and a general philosophy of control over programming and decision-making to mitigate the expensive, uncertain, and complex nature of defence policy. These tools further reinforced the role of civilians in defence planning and further affected civil-military relations and military professionalism.

The process of change carried forward through the late 1960s and into the early 1970s when the civil-service and military chains of command were integrated into National Defence Headquarters (NDHQ) in 1972 at the recommendation of the Management Review Group (MRG)—a panel that was established by Minister of National Defence, Donald Macdonald, to examine the entire management of defence. Unification and the MRG are two of the most significant events in the history of the Canadian

defence policy. In a little under 10 years the command structure of the Canadian Forces and defence civil-service were completely rearranged, representing new ways of conceiving civil-military relations and defence management and administration in Canada.

CANADIAN DEFENCE IN THE 1960s

In *The Administration of Defence* (1987) Douglas Bland posits a framework for understanding pre- and post-Hellyer defence management: the pre-1964/pre-Hellyer policy environment is known as the “Command Era,” characterized by command authority, military conceptions of decision-making and administration, as well as reliance on subjectivity of military experience. The post-1964 period, or the “Management Era,” is characterized as one where the military way was replaced with the “civilian way” of administration which led to changes in the leadership, structure, and process of policy. But Bland’s theoretical approach to defence management does not solely revolve around integration of the Hellyer years, but also the integration of the Armed Forces and civil service in 1972. He looks at the pre-1972 era as defined by two distinct approaches to defence problems: command problems and administration problems, to be addressed by the military and civil-service, respectively. The post-1972 defence environment, however, is defined by management problems to be addressed with management solutions alone. Bland sees the history of the “Management Era” as a progression towards the inevitable civilian control of defence, the “negation” of command concepts over defence, and towards greater centralization at the top. The effects of this era on the military profession—such as civilianization and emphasis on managing over leading—are taken up in the final chapter of the thesis.

Although a fairly neat conceptual framework with strong explanatory value, it can be questioned whether the “Management Era” is in fact too neat a concept when a deeper historical analysis is applied. It also raises a number of questions. In the most general sense, what is the larger management history that the unification era can be placed within? That is, how did the management of defence under

Hellyer connect to the broader history of defence management, as well as the broader history of management in general? For Bland, the trends of the 1960s and 1970s represented a belief and commitment to the rational process of management and policy-making which was intended to “replace intuitive thinking and subjective incremental decision making with impassionate logic”¹⁵—a belief rooted in concepts like scientific management. Bland writes with a tone of skepticism regarding the degree to which rationality can even be achieved because, essentially, the ideas behind the Management Era are, according to him, flawed: they are based on ideas not applicable to defence as defence is not rational. Yet, a deep analysis of how the reorganizations fit within the concept and history of “rational” management and decision-making, and the degree to which such concepts and historical trends are compatible with defence, has not been attempted. While Hellyer certainly saw the military as uncoordinated, wasteful, and anachronistic, how can we conceptualize the changes he made to address this? Was there an identifiable guiding management philosophy in the 1960s and early 1970s? Was it consciously used? If so, what was its historical genesis, and what was its relationship to private sector management ideas and the validity of their application to defence?

At a conceptual level, defence reorganizations initiated by Hellyer were a rational decision. They came about as a response to the environment of the time and were designed to help achieve strategic goals the Liberals set for defence but within the limits that constrained that achievement (Chapter 4). When he came to defence, Hellyer had seen the problems facing the Armed Forces as defence critic for the official Opposition. He conducted a defence review and developed new perspectives and priorities. These priorities were a modernization of the defence force as well as a change in emphasis of roles towards the so-called mobile, flexible force. Modernization meant dealing with the growing obsolescence of equipment and modernization meant a new kind of force structure with new kinds of equipment. The limits were financial. Budgets were to be held constant and inflation

¹⁵ Ibid, p. 202.

threatened to weaken purchasing power. The reorganization of defence management, with integration as the centerpiece, held the potential to find substantial savings and improve administrative efficiency. Greater political control served this purpose by eliminating committees and improving inter-service rivalry and decision making.

Despite the outward logic, the process was plan was indeed problematic. While in many ways Hellyer acted like a standard management and political thinker, he left much to be desired as a leader of Canadian defence (Chapter 5). When one examines the details of the implementation of the reorganizations, it is clear that there were major deficiencies from the perspective of good leadership. Ideas such as the mobile force and unification were assumed to be correct, despite drawbacks and opposition. Furthermore, the assumption came with no studies or consultation. The Glassco Commission formed a key foundation for Hellyer's reorganization and its justification, details of policy plans were given to others to work out for him, and unification was imposed on an institution already coping with integration. He also neglected human and cultural elements, either willingly or through ignorance, hampering civil-military relations. While he had much support for the integration component of his reorganizations, his greatest opposition came over the unification phase. Despite the validity of his critics' complaints, he pressed his reorganizations down to the lowest levels of the organization. What is more, the process of change did not stop with unification. The quest among senior political decision-makers for rationality and control over the policy-process continued into the early 1970s (Chapter 7). The consequences of the reforms were significant, having an important effect on the professionalism of the Canadian Armed Forces over the following decades (Chapter 8). The managerialism that was accelerated in the 1960s became an embedded feature of defence, even into the post-Cold War period where the quest for management solutions to defence problems continued.

While the specific policy direction Hellyer envision had flaws, and the degree to which he compelled DND to accept his reforms is questionable, there was validity to some of the changes

occurring. The management tools and methods that gained prominence in defence were not as inapplicable as critics have believed. In the complex defence and security environment of the Cold War, characterized by expensive, deadly, and highly technical weapons, a higher degree of managerial acumen was required. The increased share of decision-making and advice that was passed to civilian analysts was intended to supplement military expertise and advice, not to replace it. Not only did the renewed attention to management serve to improve political decision making with respect to allocating scarce resources (Chapter 6), but they were being applied elsewhere and were even rooted in Canada's own military past. The philosophy underpinning the defence reorganizations through the 1960s had their own historical trajectory—forms of integration and unification had been developing since the end of the Second World War (Chapter 2). The search by defence managers for the optimum organizational design was a constant feature of the history of defence management—different forms of political control and tools and methods to achieve administrative efficiency was not entirely new. Furthermore, the Glassco Commission had already indicated the need and potential for administrative change, providing an intellectual foundation and justification upon which Hellyer could hang his hat (Chapter 3), although the Commission was not without its flaws as a source of inspiration for change. Additionally, the rational approach Hellyer applied and the tools of management he implemented to support it have traditions in the wider management history—both private and public, including defence (Chapter 1). Systems Analysis was used in U.S. defence by Robert McNamara and the tool can be traced back to the Second World War. The same can be said of Operational Research/Operational Analysis. In fact, Hellyer, while ushering in a period of disruptive and controversial change, can be understood as running with the ball of management change that was passed to him by his predecessors—whether he was aware of it or not. At a more abstract level, rationalization was a well-established component of bureaucratic institutions, including the military. While one can question the degree to which defence planning and decision-making can be truly rational, the historical trend was moving towards a greater effort to make

it so. The management trend of rationalization and control and the increasing use of civilian analysts in defence had its own historical momentum when Hellyer became Minister of National Defence.

As a manager Hellyer applied no particular theory or idea other than the goal of modernizing management, however, an unstated philosophy of management control and rationality is observable, in line with the classical management schools of thought. The tools he used, such as PPBS, centralization of decision making, and the quest for alternative sources of advice indicate this philosophy. This was consistent with the management trends observed in bureaucratic organizations at the time, both public and private, including the military. Even the tools of that philosophy had been part of military planning and management well before Hellyer arrived in defence. There was certainly a newness to defence under Hellyer which was disruptive and difficult to adjust to. It was more than just new, however. The reorganizers saw the changes as a catching up effort—an acceleration of trends already underway elsewhere in the management world. While revolutionary in its application, this philosophy of rationalization and control had its own historical momentum. This was not a surprising trend in an environment of both high cost and limited resources, but where organizational goals (effectively ensuring the security of the nation and allies) are imperative. This organizational change is also a natural part of an institution's existence—it represented a balancing act between competing values that exist within the defence institution. While this search for the optimal organization is a constant need, changing tools of administration and evolving civil-military relations are the consequences.

At the highest level, the management ideas, while ground breaking in the degree to which they were implemented, were also rooted in a wider historical context. Militaries have always been large complex bureaucracies concerned with increasing degrees of management control. The decision to institute the change had some imperatives and to a degree a precedent for the kind of approach used by Hellyer had been set. Therefore, as a manager he was not radical. He fit the mold of classical manager and as a politician was charged with the need for effective resource management. He also was not a

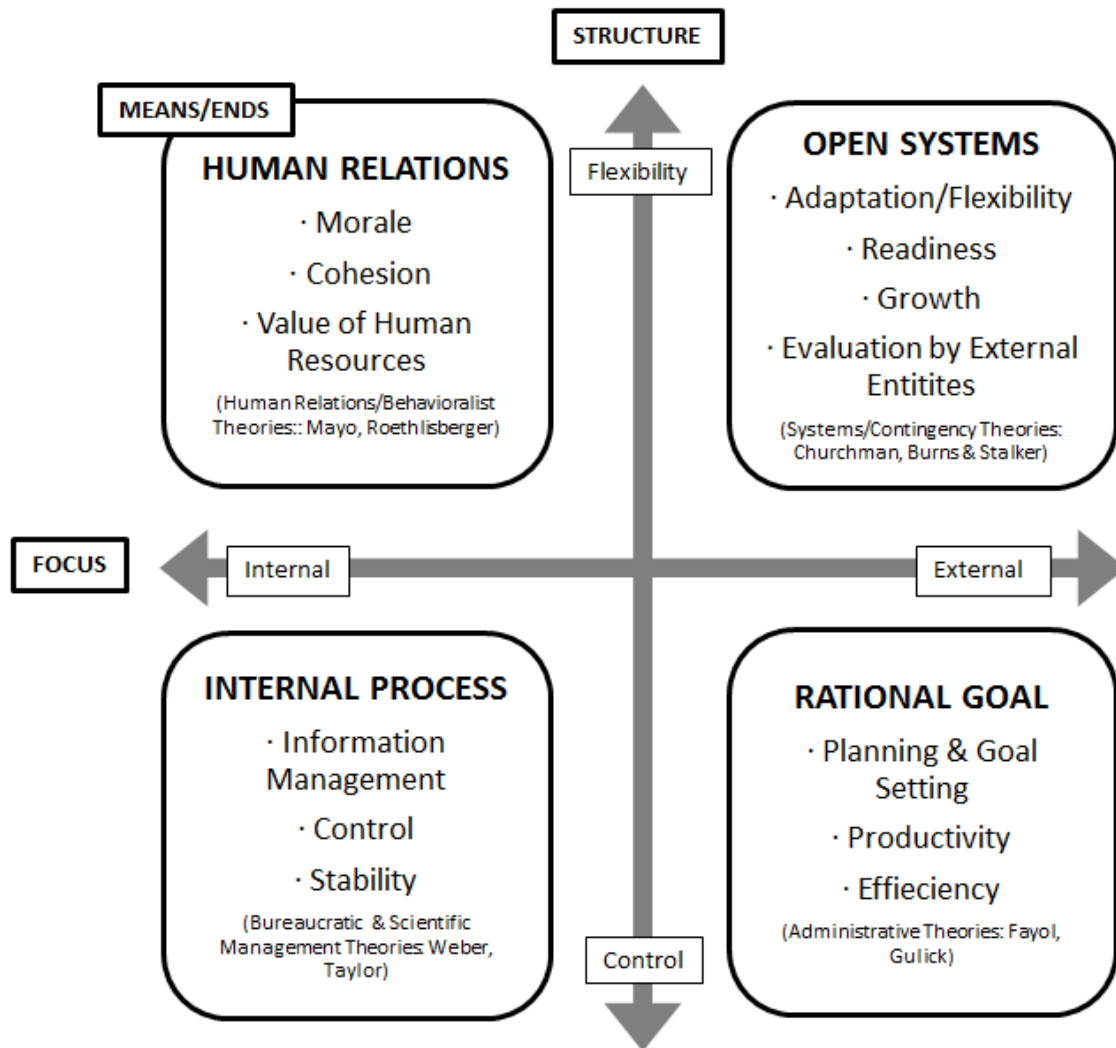
great visionary. Many of his ideas were borrowed and, as has been mentioned, his new ones were left to others to figure out how to implement. Yet, the period of change ushered into defence in the early 1960s were not initiated by a total loose cannon. They were developed in response to the reality of the defence environment and in conjunction with Hellyer's own experiences within the military and as Opposition critic. He was calculating and exercised firm control as MND. Defence management had shown weaknesses which Hellyer witnessed and some which others had articulated. Moreover, although he took his structural change to a further degree than many had anticipated or expected, the changes were consistent with the evolutionary direction already occurring in defence. Hellyer accelerated changes that had already been initiated by others—changes which stood to achieve the government's three priorities in defence, and which would influence further change. His particular policy perspective, however, was deficient. Had Hellyer not been Minister, the story would likely be very different. Likewise the changes that occurred in the 1970s were influenced by different personalities and perceptions of defence. Key personalities are an important part of the history. The story is, therefore, not about historical determinism, although there was real degree of historical momentum underlying the evolution of Cold War defence management and organization. In fact, speed and the use of momentum was a strategy of Hellyer to help drive his reorganization. The history of reform was about successive defence organizers searching for the best organizational design for the Canadian Armed Forces, based on the imperatives of the Cold War environment, the constraints of the political decisions, and their own perspectives of what was the right way forward. This design, however, was set within an increasing trend of rationalization of management in defence which was not entirely new, but accelerated in the costly and complex post-Second World War world. Even if the design was seen to be flawed by some, the process and attempt to determine the best design was not.

APPROACH

The goal of this thesis is to focus more on what went into unification—not just the stated ideas/goals to the reorganization but the unstated ones, approaching it more directly from a management perspective. This work is about the management of defence and the evolving philosophies that underpinned it during the reform years of 1963-1972, and represents a qualitative analysis of archival records dealing with policy and management in DND and the Canadian Forces (CF). Explored here is the application of new ideas, technologies, and organizations to defence policy. This thesis seeks to understand the management and administrative evolution that lay beneath the structural reorganizations, the degree to which they represented “modern business” practices or not, and the ultimate motivations and policy goals behind them. It also seeks to understand not only which structures and tools chosen but why these choices were considered the best options available at the time in the context of the defense policies of the day. In doing so, the underlying management philosophy of the defence reorganization in the 1960s were examined and referenced against major schools of management thought.

In particular, Robert Quinn and John Rohrbaugh’s framework for understanding organizational efficiency has been used. This framework neatly organizes major management schools into four categories. Each represent different ways institutions organize themselves to achieve their goals. Essentially, their framework (Fig. 1) represents a list of organizational criteria related to “effectiveness,” involving three “value dimensions.” The first value dimension represents the *focus* of an organization, and is represented by a horizontal/X axis, indicating the range of focus that organizations have, and contrasting between an *internal* focus (person-oriented emphasis) to the far left of the axis, and an *external/organizational*-oriented focus to the right. Overall, the focus relates to the internal well-being of the people within the organization and an external emphasis on the well-being of the organization itself within the environment in which it operates. The second value indicates the

Figure 1: Quinn & Rohrbaugh Competing Values Framework



differing preferences for *structure* and is represented by a vertical/Y axis. The structure axis indicates the contrast between an interest in organizational *stability* and *control* (to the bottom), and *flexibility* and *change* (towards the top). The third and final value represents the means and ends of the organization, which are grouped into the four corners of the framework, corresponding to how they relate to the focus and structure axes. Emphasis ranges from processes, such as planning and goal

setting, to outcomes and productivity.¹⁶ Different management theories can be situated within these four groups/models.

Within this framework, four general organizational models are articulated which can be used to group together different theories, depending on how they articulate an institution's focus, structure, and means/ends. The Human Relations model represents a perspective that conforms to high degrees of structural flexibility and a focus on internal dynamics of the organization (upper-left on the axes). This model focuses on the people who comprise the organization and emphasizes the need for flexibility in the structure and social cohesion. Human relations and behaviorist theories developed by thinkers such as Mayo and Roethlisberger can be grouped into this model. The means-oriented values include cohesion and morale, whereas the ends-oriented values include human resource development. Second, the Open Systems model is representative of a perspective that, like the Human Relations model, emphasizes flexibility, but differs in that it has an *external* focus on the needs of the organization within its operating environment (upper-right on the axes). The means-oriented values include flexibility and the readiness for adaptation to uncertain environments, while the ends-oriented values include growth of the organization and the acquisition of resources. Structural Functional theories and Open Systems theories of the 1950s-1970s can be grouped into this category (James Thompson, Joan Woodward, and Burns and Stalker). Third, the Rational Goal model represents theories which place an emphasis on the organization (external focus) while also seeking a greater degree of control and stability in its structure, as opposed to flexibility (thus, the bottom-right on the axes). Here, means-oriented values include planning and goal setting. Productivity and efficiency represent the ends-oriented values. Administrative Management theories from the 1910s to the 1930s (such as the works of Henri Fayol, Luther Gulick, for example) would fall into this category. Finally, an internal focus that also seeks a great deal of control (bottom-left on the axes) is representative of an Internal Process model, where information

¹⁶ Robert E. Quinn and John Rohrbaugh, "A Spatial model of effectiveness Criteria: Towards a Competing Values Approach to Organizational Analysis," *Management Science* 29, 3 (March 1983), pp. 367-369.

management and communications are the means towards stability and control. Coordinating and controlling the work and activities of the organization are conducted in a disciplined and predictable manner. Weber's theories of bureaucracy and Scientific Management fall into this category.¹⁷

It should be clear that there is an inherent contradictory nature to this framework, as the values at opposite ends of the vertical and horizontal axes (structure and focus dimensions) are essentially in competition with each other: The values of internal versus external well-being on opposite ends of the horizontal axis, or the struggle between flexibility and control on opposite ends of the vertical axis, seem mutually exclusive and an over-emphasis on one value can come at the expense of their opposite ones.

This seemingly contradictory nature does not, however, negate the value of the framework. What it indicates is that organizations require balance. Although the four models correspond to different theories, there are some similarities. Quinn and Rohrbaugh identified certain functions that all organizations must accomplish, and which the above models all satisfy—none in total, but all in part. These functions include: adaptive (adjusting to the external environment); goal attainment (the development of plans in pursuit of goals); integrative (coordination and integration of work activities); pattern maintenance (ensuring continued commitment of members to the organization and its goals); and tension management (solving tensions that arise within the organization and the satisfying of member needs).¹⁸ Thus each model contributes something towards the functions of the organization, and they must work in concert. Thus it is a job of management to integrate different models and theories and decide how they can be used in combination. The history of defence organization can be seen in this way.

It should also be noted that the four different points of the focus and structural axes each tells a tale of military realities. First, there must be a focus on the organization itself—it must be able to

¹⁷ Jonathan R. Tompkins, *Organization Theory and Public Management* (Belmont, CA: Thomson Wadsworth, 2005), p. 29.

¹⁸ Tompkins, p. 29.

acquire resources from governments and must accomplish the tasks it sets out to do. But of course, Hellyer learned the hard way that a focus on the internal well-being of the organization and those who make the institution work is of absolute importance. Second, in terms of structure, militaries must adapt to ever changing strategic environments, political and public wills, and technological threats. Flexibility—a key buzzword of Hellyer’s policies—is key. On the other hand, so is a degree of stability and control as organizational change and upheavals can have drastic effects on an organization’s ability to perform. This is all to say that the health of an organization needs to recognize the differing realities of its existence which requires the understanding and application of different ideas—managerial, organizational, etc. The difficulty is in choosing which ideas to emphasize and which to deemphasize. How your organization and administration supports one aspect over another is a difficult choice, and in making that choice, it can lead to conflict. This is largely what happened under Paul Hellyer. The framework thus provides a useful way of thinking about effectiveness and the role of management in creating it, and allows for the recognition that theories are not necessarily mutually exclusive. Institutions such as militaries are complex organizations without one best way of organizing. As we will see, the history of defence organization and management displays each of the competing four theories outlined above in one way or another. These categories represent organizational ideas which seek to cope and respond to different challenges, both internal and external. When identifying organizational and management ideas within the history of defence, this allows an understanding of where those ideas fit into general management theory. It also provides a reference point to understand if certain values or ideas were being emphasized above others.

SOURCES

In order to explore the underlying management philosophy of the defence reorganization, records of individuals in charge of the change, key government and management studies that

underpinned the change, and the new tools and techniques of management that were implemented were targeted for investigation. Key actors in defence in the 1960s and early 1970s were identified and their records at the Library and Archives Canada as well as the Directorate of History and Heritage (DND) were examined. Importantly, the papers of Ministers of National Defence, Paul Hellyer and Edgar Benson were examined. Paul Hellyer is the most important individual for this investigation as it was during his tenure as MND that many changes at DND were instituted, including the integration and unification of the Armed Forces. His papers provide insight into the changes made within defence in the name of greater political control over defence decision-making as well as changes to planning and management made in the name of greater efficiency. Much of the records in the Hellyer archives deal with the unification debates and its implementation and provide an understanding of his critics' opinions regarding the changes. However, the most valuable information is that which gives an understanding of his fundamental motivations for reforms and the attitudes underlying his new organizational and management concepts. In this respect, his speeches in government as well as to various organizations and institutions outside of government illuminate the management and decision-making philosophies of defence at that crucial time. To supplement the archival research, an interview was conducted with Paul Hellyer in order to gain further insight into the topic under analysis and his role and opinions on the matter.

Donald Macdonald, Minister of National Defence from September of 1970 to January of 1972, is another important figure as he established the Management Review Group to investigate the overall management of National Defence—the final report of which acted as the foundation for the reorganizations at NDHQ in 1972. Unfortunately, his papers are not available for consultation, nor could he be reached for interview. However, records created by Macdonald's assistant, Dr. Gordon Smith, consisting of notes and writings on the 1971 *White Paper* on Defence have been examined. Moreover, the actual MRG report was published under the subsequent Minister, Edgar Benson, whose files have

been consulted. Other Ministers and important actors who were involved in defence planning and defence criticism have been studied, including members of the military, politicians, and independent defence analysts. The archival records of Minister of National Defence, Brooke Claxton, Admiral Jeffrey Brock (of the RCN), Andrew Brewin (NDP defence critic), J.C. Arnell (defence analyst), John Harbron (journalist and independent defence analyst/consultant), and Alastair Gillespie (Liberal MP) have all been consulted. Of particular importance are the archival records of John Harbron who was a member of the Management Review Group. His records make up much of the available archival material on the MRG other than the completed document itself and the individual topic reports. There were six primary members of the MRG and Harbron's LAC fonds are the only complete record of any member. His fonds consist of meeting notes and report drafts. Particularly interesting is a series of annotated articles and clippings which provide insight into the sources of inspiration that the MRG members drew from and the way they approached defence management. The records of Prime Minister Lester Pearson and Pierre Trudeau have also been explored, as were the Cabinet conclusions for the period under investigation.

Government documents and policy statements were also of importance. The 1964 *White Paper on Defence* in which Hellyer laid out his plan for the future of defence is one of the key documents of the era as it articulated some of his intended reforms and represents the start of the entire integration/unification period. Because policies represent the enunciation of ideas, the 1964 policy paper is of value as it indicated not only what the government saw as the key challenges facing defence but also the ways in which these challenges were to be addressed. Another important policy document is the report of the Management Review Group (MRG), completed in 1971. It not only provided a critique of the overall management of defence but paved the way for the reorganizations of the military and civil arms of defence into NDHQ in 1972. In a similar vein, the 1962 Royal Commission on Government Organization (also known as the Glassco Commission) had an important influence on the evolving organizational structure of DND as well as the management philosophies that governed it. The

Glassco Commission and the MRG form an important buttress to the management period being investigated. Their available archival documents at Library and Archives Canada as well as Directorate of History and Heritage (DND) were consulted in order to understand the conceptual thinking that underlay them and which fed into the policy framework of defence.

Not only was stated policy an important source in the investigation, so too was the process of policy and decision-making. The process and structure themselves were sources of analysis as conceptualizations of how defence should be managed are imbedded within the organizational structure. The hierarchical framework and how defence actors are positioned within the process affects the relationships and power of different policy-making participants. Moreover, the process of policy-making changes as administrative and management needs change and can therefore hold clues as to the perception of management problems and how to correct them. As policies represent ideas in action, the challenge for the historian of policy is in attempting to understand the ideas or perspectives that are at the root of such policy. In addition to scrutinizing the organizational discourse in the 1960s to understand the particular philosophy of management that was being implemented in Canadian defence, uncovering it has been done through careful consideration of evolving policy-making frameworks. These arrangements—represented by organizational hierarchies (figures 3-7), or particular tools of decision-making (such as the integrated defence program)—are indicators of how defence was understood by senior management. The kinds of tools used, such as the integrated defence program or systems analysis, as well as the justification for their use, are clear indicators of how defence planners perceive the problems and solutions of management

Beyond this, a variety of secondary sources were examined. In addition to works on unification, defence policy, and military history, an attempt has been made to take into account a variety of relevant ideas and concepts. Theories of rational decision-making and civil-military relations are two examples of thematic components explored. Social sciences, particularly in areas that focus on bureaucracies and

political decision-making (such as Max Weber's thinking on bureaucracies, or Graham T. Allison concepts of decision-making in organizations), is crucial for understanding the context of Canada's evolving defence policy-making frameworks and the interaction between the military and political sides of defence in formulating policy. Finally, the historical evolution of management theory literature has been inspected in parallel with the development of military management reforms in order to gain a deeper appreciation for where they two forms of management overlap. Looking at the evolution of management theory allows for a contextual background upon which to assess the predominant philosophies and concepts of the time and how they were applied to large scale organizations such as defence. Moreover, a look at management theories such as scientific management, administrative management, open systems theory, and human resources theory, all add to our understanding of the claims that private sector management theories offer little in the way of advice or inspiration for the Armed Forces.

A particularly salient theme is the issue of public vs private management. Attention has been paid to organizational, management, and decision-making theories—in both the public and private sector—in order to gain an appreciation of their compatibility and applications. Works such as James Burnham's *Managerial Revolution* (1960) and David Noble's *Forces of Production* (1984) have already attempted to establish the nature of post-war (American) business and industrial management/organization, with particular reference to the role that the military and veterans played in the style of management. Along with a reading of general management theories by thinkers such as Peter Drucker, a general sense of the private sector management concepts can be obtained. In understanding the relevance of different kinds of management thought in the public sphere and particularly in the military, it helps to answer the question of whether or not such a management approach can be used at all investigating defence. This issue is taken up later in the thesis but generally it can be said that there is agreement within the literature that public and private management share a

large degree of overlap, and that management theories used in the private sector can be applied in the public—even defence. While there are certainly differences between defence and the public sphere and risks to overemphasizing their similarities, the key is in not applying management ideas to a degree that the unique characteristics of the military is forgotten. As a result, there is legitimacy to approaching defence from a management perspective. If certain aspects of management thought or certain management tools are to a degree applicable to the military, then it helps to assess the validity of men like Hellyer who imposed new degrees of management in defence.

A NOTE ON KEY TERMS

The terms *organization*, *management*, and *administration* will be used throughout this thesis and at times, will appear to be used interchangeably. It is important, however, to establish definitions that delineate these interrelated concepts. An organization refers to an entity that consists of structured social units that are managed and work towards a common/collective goal. Organizations are characterized by the particular structure that defines the roles, responsibilities, and authority of individuals within the organization who carry out tasks in pursuit of the organization's goals, in addition to the relationships between individuals within the organization. In Canada, the organization of the Department of National Defence is indicated by Fig. 2. Management and administration have similar but slightly different meanings. Management refers to the coordination of efforts of people and resources within an organization in order to accomplish a goal, both efficiently and effectively. Management represents the transformation of resources into a specific utility—essentially it is “getting things done” through people and resources. The functions that are commonly associated with management are: planning, organizing, staffing, directing/leading, controlling, and motivating. Most organizations have

Figure 2: DND Organization



different levels of managers: high level managers who perform functions such as planning and organizing, middle managers who oversee branches or departments, and low level managers who typically control, direct, and supervise.

In contrast, administration refers to the techniques and systems managers use to manage. In the military context it refers to the processes used to direct, govern, or manage aspects of non-combat military operations such as personnel, training, supply, and importantly, the policy-making and implementing process. It should be fairly clear that organization, management, and administration are interrelated. An organization is an entity with a specific goal where managers direct resources in achieving that goal and administration is the process in which it is accomplished. In theoretical terms, organizations and management are terms often used interchangeably. Academically, both management theory and organization theory refer to the same thing: conceptual theories, ideas, and rules that attempt to explain how to manage and organize bureaucratic, business, and social entities.

Finally, rationality is one of the key themes that runs throughout this thesis. The term can be used in a few different ways, but all fall under the same general conceptual framework. One way to use the term is in the belief in the possibility of quantitative calculation. This means that things are essentially knowable and precision and predictability are attainable. Rationality can be a feature of the decision-making of actors within an institution, or it can refer to the institution itself which seeks an optimal organization in order to achieve desired goals. In both cases, rationality is a loaded term which implies logic and efficiency. It refers to actions and decisions that are reasoned, intelligent, and optimal in the pursuit of organizational or individual goals. Whether it is optimal and logical workflow within an organization, or decision-making of actors or groups, rationalization implies that which is certain and identifiable. In some cases rationalization can refer to the process of simplification. For example, the establishment of standard forms within a bureaucracy, the elimination of duplication of effort, or the creation of standardized time zones. In the case of the defence reforms, reducing overhead and

duplication through integration and unification is an example of rationalization. Even in these cases, it is still, at its root, about the development of greater efficiency and logic, the exercise of reason, and the optimization of effort.

UNIFICATION IN HISTORICAL PERSPECTIVE

Although the term “unification” looms large in the historical consciousness of those within the military and those studying military history, much of the literature on the subject also deals with the earlier 1964 reorganizations known as *integration*. Where debates within government and military circles that culminated in the legal unification of the CF in 1968 took place between 1966 and 1967, but often when unification is mentioned it is the entire 1964–1968 period—that is Bill C-90 (integration of CF command in 1964) as well as Bill C-243 (the unification of the three service environments in 1968)—that is being discussed. The term unification is often used synonymously with the entire period under Paul Hellyer and his wide-ranging reforms. What’s more, much expert analysis on the era also includes the 1972 NDHQ reorganizations, as many of the themes and issues of the Hellyer years in fact bleed over into the early 1970s—civilianization, morale, and command and control issues to name a few. This is partly because defence policies and ideas are in a state of constant evolution, building on what has come before and refining over time.

Much of the literature on unification has stuck primarily to historical overviews. David Dewitt and David Leyton-Brown’s *Canada’s International Security* (1995) is one such example, as are David Bercuson’s *Fighting Canadians* (2008) and Lieutenant-Colonel Bernd Horn’s *From Cold War to New Millennium* (2011), which address the reforms in terms of regimental history. Others have taken up the task of looking back on unification’s results, arguing that its intended consequences never came to fruition. Desmond Morton’s *Canada and War* (1981) and *A Military History of Canada* (2007), Geoffrey Shaw’s “The Canadian Armed Forces and Unification” (2001), and Dan Middlesmiss and Joel Sokolsky’s *Canadian Defence* (1989) all conclude that the original stated goal of the reforms—finding efficiencies and significant economic savings—never came to fruition. Yet, many history books remain quite silent on the issue all together. Robert Bothwell’s *Alliance and Illusion* (2007) is an example of a study in which one would expect some sustained attention to the unification years, but which is without one. Other

general works which focus on the time period are often silent on the issue as well, Pierre Berton's 1967: *The Last Good Year* (1997) being an example.

The historiographical literature at the actual time of integration/unification is in fact quite scant and what does exist focuses to a large extent on the implementation of the defence reorganizations. Jon McLin's 1967 *Canada's Changing Defence Policy 1957-1963: The Problems of a Middle Power in Alliance* offers a play by play of Hellyer's 1964 integration reorganizations. At the time of publication, the controversial unification was just underway and McLin's work offers little analysis. His brief treatment is not overly critical towards Hellyer's reasoning for attempting defence reform: he recognizes that defects in policies and organization had a negative impact on the minister's ability to do his job as well as on the coordination, control, and capabilities of the army. Moreover, McLin's tone was optimistic, demonstrating the hope that Canada's distinctive "experiment" would improve the country's standing within alliance frameworks as Canada's relative strength and contributions were declining.

This early optimism is equally reflected in "Canada Pioneers the Single Service" (1969), by the preeminent political scientist, historian, and international affairs critic, James Eayrs. Writing shortly after the unification of the Canadian Armed Forces, Eayrs briefly outlined the history of Canadian command and control of the military, the key features of the 1964–1966 integration, and puts up a defence against the arguments in opposition to unification. For Eayrs, the kind of arguments levelled against unification by its critics were less than convincing and ultimately were based on fears which only time would be able to prove or disprove. Eayrs was deeply opposed to the Vietnam War, was critical of Canadian diplomats and diplomacy, denounced Canadian corporate complicity in war profiteering, advocated Canadian neutrality, and the notion of getting value for money spent in policy.¹ It seems fitting that he would write favourably of a policy that was representative of an attempt by defence to gain a firm hold over planning that was also a uniquely Canadian defence vision. Eayrs looked at Canada as a pioneer in

¹ Daryl Copeland, "James Eayrs on Diplomacy, Foreign Policy, and International relations: A Retrospective," *International Journal* 26, 2 (Spring 2007), pp. 241-261.

defence with a great capacity for innovation—innovation which was both possible and necessary because of the unique Canadian strategic situation. In fact what emerged—the legal unification of the three services into the Canadian Armed Forces—was itself unique, as no other western nation had attempted such a profound reform.² To be sure, although the U.S., Great Britain, and Australia had their own experiences with increasing forms of armed forces integration, no other western nation has taken the experiment as far as Canada, legally unifying its separate armed services into a single military force.³

During the era of the reforms themselves, conclusions remained general. Vernon J. Kronenberg's *All Together Now* (1973), a revised version of his Carleton University MA thesis published by the Canadian Institute of International Affairs is one such example. A student of Canadian defence organization, Kronenberg provided one of the first academic examinations of the development of defence policy through the unification period. He focused mainly on the implementation history and only makes some cursory observations on the nature of Canada's defence management, providing little insight beyond the actual step by step process of change. This generality might partly be due to the fact that the changes that had occurred defence were still young at the time and consequences not yet fully realized. However, the analysis that did begin to surface was generally quite positive even if the future of defence was uncertain and the reform plans held the potential for controversy. For example, Brigadier General E.M.D. Leslie's "Too Much Management, Too Little Command" (1972) concluded that

² Some critics even used this as evidence that unification was a poor concept to implement in reality. While there were criticisms of the reform on the very grounds that no other nation followed in Canada's footsteps in establishing such a military organization, Eayrs was not persuaded by such an argument, primarily because it overlooked Canada's strategic situation. Unlike other nations who maintain militaries to protect their territories, Canada does not face quite the same situation because of our closeness (geographically and politically), with the U.S. As such, Canadian armed forces are maintained for other reasons, such as prestige, diplomatic influence, and law and order at home, and therefore can accommodate a more creative design. James Eayrs, "Canada Pioneers the Single Service," *The Round Table: The Commonwealth Quarterly* 59, 234 (1969), pp. 156–157.

³ This aspect to unification has not been explored in the historical literature, and forms a serious gap in the scholarship. A detailed examination of unification from a comparative perspective, which examines Canada's unique organization in relation to other nations' efforts at integration, but which have stopped short of full unification, would be a valuable contribution.

unification had been generally successful, although he displayed some concern over the blurring lines between management and command.⁴

The period from 1964 to 1972 witnessed great change in defence. The structure of the defence department was overhauled, the policy process and defence hierarchy evolved, and the professional nature of the Armed Forces themselves changed. While works like the ones mentioned above sought to place the integration/unification years within the context of changing times and ideas, distinguished Canadian political scientist R.B. Byers sought to use these turbulent years as a means of understanding military change itself. In “Structural Change and the Policy Process in the Department of National Defence: Military Perceptions” (1973) R.B. Byers sought to understand the link between structural changes within DND and the concomitant changes in the policy process. Making use of theories on change resistance (by William Starbuck and Peter Blau) as well as theories of bureaucracy (by Morris Janowitz and Michel Crozier), Byers concluded that the majority of the military opposed unification on grounds of tradition, but at the same time resistance to structural reorganization was, in fact, not so extensive: It was change that threatened identity and vested interests that was opposed. The problem with the integration/unification years was that structural and management changes done in the quest for greater rationalization were intertwined with issues of command and control and fighting capability. As such, change to the fighting forces was unavoidable and this was the source of conflict.⁵ Moreover with respect to the structural reorganizations, Byers pointed to the speed and haste of Hellyer’s planning as a main contributing factor to resistance from the military.

⁴ Leslie served in Italy as a part of the Occupation Force in Germany and commanded the 1st Regiment, Royal Canadian Horse Artillery in Loren in 1952. He subsequently served in a variety of leadership positions such as at Army Headquarters, , as Commander of the 2nd Canadian infantry Brigade Group in Petawawa, as Chief of Staff of the UN Force in Cyprus, commander of Canadian Forces base Borden and as Colonel Commandant, The Royal Regiment of Canadian Artillery, until his death in 1979.

⁵ R.B. Byers, “Structural Change and the Policy Process in the Department of National Defence: Military Perceptions,” *Canadian Public Administration* 16, 2 (Summer 1973), pp. 233-234.

Canadian defence in the early 1970s witnessed even greater changes than the Hellyer years. In the wake of the Management Review Group which sought to infuse the policy process with more effective planning and civilian control, National Defence Headquarters (NDHQ) was established—an integrated civil-military structure that brought together the military (CFHQ) and the civilian (DND) components of defence into one cooperative organization. This represented a closer union between the military and civil-service than had been seen before. The consequence of this was a realigning of power at DND with a new relationship between the DM and CDS. The continued growing pains felt in defence created new issues and led to new areas of inquiry and exploration, including civil-military relations—the role that the military plays in society and the level of control that society (government) has over it.

Particularly salient civil-military relations issues have been: 1) *civilian/political control* of the military; 2) *professionalism* and the shape of the military as it evolves through changing domestic and international environments⁶; and 3) *civilianization*—a term used to describe a number of different but related phenomena: Civilianization can refer to (a) the development of a “nine-to-five” mentality among individuals or groups within the military profession; (b) the perceived increase in the number of civil servants who are employed by defence and who perform what are considered to be strictly military jobs; or (c) who make what are perceived to be strictly military decisions. Civil-military relations were the principal focus when Byers explored the defence reorganizations in his 1972 work, “Canadian Civil-Military Relations and Reorganization of the Armed Forces: Whither Civilian Control?” Here Byers outlined how Paul Hellyer disagreed with the idea that the institutional organization of defence in the early 1960s ensured civilian supremacy which was impaired by a small group of senior military officers, and that the civilian role needed to be “augmented to counterbalance position and role of the military.”⁷

⁶ For more the development of Canadian Armed Forces professionalism after WWII as well as the issue of civilianization, see Peter Kasurak, “Concepts of Professionalism in the Canadian Army, 1946–2000: Regimentalism, Reaction, and Reform,” *Armed Forces and Society* 37, 1 (2011), pp. 95-118.

⁷ R.B. Byers, “Canadian Civil-Military Relations and Reorganization of the Armed Forces: Whither Civilian Control?” in *The Canadian Military: A Profile*, ed. Hector J. Massey (Toronto: Copp Clark, 1972), p. 200.

But Byers rightly raised some concern over Hellyer's assessment, as much of what was pointed to as evidence of a challenge to civilian control over the military (i.e. the Admirals' Revolt) occurred as a consequence of the reorganizations, not prior to it.

Writing only a few years after unification and at the outset of the emerging debates on civil-military relations, Adrian Preston's work on the professional armed forces in Canada argued that the need for strong political control in the particular defence and security environment of the 1960s was very real, and that integration and the establishment of a single Chief of Defence Staff achieved this need.⁸ Ultimately, there is agreement that unification can and should be understood as a case study of civil-military relations—particularly the way in which Paul Hellyer handled the military's concerns, as he is often portrayed as having been “bull-headed” and without due regard for military advice.

In the 1970s, the integration and unification reorganizations became the means of understanding such issues. Even in the 1980s and 1990s, analysis of the Hellyer reorganizations within the context of civil-military relations continued to be a dominant trend. They sought to understand Hellyer's relationship with the military during those years, especially the Navy, the most vocal opponent of Hellyer's unification scheme. Senior military officers made known their reservations to the unification policies, and when the gulf between Hellyer and the opposing officers could not be closed, they retired—both willingly and at the Minister's behest. One of the most vocal opponents was Rear-Admiral William Landymore. When he was released from service, he took his opinions to the media, ushering in a period of intense public debate on the issue and spurring the establishment of anti-unification organizations of veterans and reservists. The battle between Hellyer and Landymore, known as the “Admiral's Revolt,” is infused with themes of political control of the military.

As political control of the armed forces is a central issue in any state, the degree of political accountability that the armed forces has in relation to the government is not a small consideration.

⁸ Adrian Preston, “The Professional Arms in Postwar Canada, 1945-1970: Political Authority as a Military Problem,” *World Politics* 23, 2 (Jan 1971), pp. 189-214.

Michael Howard points out that too much obedience opens the door for tyranny at home and aggression abroad whereas too little can result in “Caesarism”—that is, military dictatorship.⁹ Further, when where military leaders are free to use their judgement, they might question the degree to which political interference is allowed in matters of professional expertise. The vital problem is how “on the one hand, to develop armed forces necessary to external security without corroding internal liberties and how, on the other, to promote political economy and welfare without prejudice to the armed forces upon whose efficiency and valor that social order and prosperity ultimately rest.”¹⁰ More recently, Major-General Daniel P. Gosselin (retired from position of Commander of the Canadian Defence Academy and an historian of Canada’s National Command) argued in “The Storm over Unification of the Armed Forces” (2007) that the unification controversy, while largely debated due to the impact on tradition and military ethos, was “first and foremost a crisis of civil-military relations in Canada.”¹¹ His analysis is that events such as the Admirals’ Revolt was the culmination of a failing relationship that stretched back to the end of the previous decade and the Diefenbaker years, and that by mid-1966 civil-military relations had become unhealthy to the point that the crisis that surrounded the unification efforts was almost pre-determined.

In 1978, ten years after unification, David Burke’s account of the unification implementation process in “Hellyer and Landymore: The Unification of the Canadian Armed Forces and as Admirals’ Revolt” (1978) places greater responsibility with the Admirals for the crisis of civil-military relations that surrounded unification, showing Landymore as a crusader set on destroying both the concept and the man behind it. One could argue that Burke’s article represents a one dimensional viewpoint, but in time others have established a counter-point, providing a softer perspective of the Navy and harsher

⁹ Preston, “The Professional Arms in Postwar Canada, 1945-1970: Political Authority as a Military Problem,” pp. 189.

¹⁰ Ibid., p. 190.

¹¹ Daniel P. Gosselin, “The Storm over Unification of the Armed Forces: A Crisis of Canadian Civil-Military Relations,” in *The Insubordinate and the Noncompliant: Case Studies of Canadian Mutiny and Disobedience, 1920 to Present*, ed. Howard G Coombs (Toronto: The Dundurn Group, 2007), p. 333.

assessments of Hellyer's personality and role in the controversial implementations stage. In 1982 A. Keith Cameron examined the unification crisis in *The RCN in Retrospect 1910–1968*, edited by James A. Boutlier of the Royal Roads Military College. Cameron argues that the view that officers “revolted” is inaccurate: there was no collusion among commanding officers who were in fact genuinely concerned with the integrity of the forces in general and the Navy specifically.¹² Instead, their commitment to the preservation of force tradition and their concerns with unification reflected the majority of opinions on the issue within the military. It was the admirals's, however, who ended up drawing the majority of headlines, not those within the Army or Air Force. Furthermore, Cameron contends that it was untrue that the Navy was resistant to change and that the ideas represented by integration (single chief of staff at a single HQ) were not opposed. The problem, according to Cameron, was with *unification* itself and the lack of informed debate about the plan's essential component.¹³ Although Cameron portrayed Hellyer as a closed book, inaccessible to those concerned with his scheme, he also claimed that the Navy failed to keep in touch with public attitudes and failed to adequately explain its own relevancy in those years of change. As a result, the admirals had to make a case for the retention of traditions and a system to which the majority of those outside that system could not relate.

In *The RCN in Transition, 1910-1985* (1988), edited by W.A.B. Douglas—former Navy officer and Canadian naval historian at the Directorate of History, NDHQ from 1967-1973 and Director from 1973-1994)—both R.B. Byers and Joel Sokolsky further contribute to this discussion.¹⁴ Byers shows how the Navy emerged as the most vocal opponent of the unification concept not only during the implementation stage, but after as well. Unification became a symbol of the demise of the Royal Canadian Navy and retired service personnel were a major source of pressure that resulted in the Fyffe

¹² A. Keith Cameron, “The Royal Canadian Navy and the Unification Crisis,” in *The RCN in Retrospect, 1910-1968*, ed. James A. Boutlier (Vancouver: The University of British Columbia Press, 1982), p. 342.

¹³ *Ibid.*, p. 342.

¹⁴ See Joel Sokolsky, “Canada and the Cold War at Sea, 1945-1968 and R.B. Byers, “Canada and Maritime Defence: Past Problems, Future Challenges,” in *The RCN in Transition, 1910-1985*, ed. W.A.B. Douglas (Vancouver: UBC Press, 1988).

Committee review of unification in 1980. Ultimately, unification has had a more profound and long lasting effect on the Navy than the other two environments. Byers's sympathetic tone was accompanied by a critical quality towards the failure of unification to end inter-service rivalry—a major reason for reorganizations.

Joel Sokolsky—Dean of Arts and a distinguished professor of political science and former principal at the Royal Military College of Canada who has also worked as a consultant with government departments—took a slightly different approach. His contribution framed unification and the Navy within Canada's alliance framework. Sokolsky argued that the key factor in the decline of Canada's maritime capabilities was that the Liberal government did not maintain force levels at the point required for contributions to both alliance obligations (NATO and NORAD) as well as sovereignty roles that the CF were expected to accomplish. Picking up on Hellyer's main goal for reorganization—finding economies within defence—Sokolsky downplayed the debate over traditions. Unification might have had an effect on traditions, but it was not the death knell of the Navy. The problem was that policy-makers wished to avoid alliance obligations but were not able to do so in reality. The goal of finding more money was doomed to failure because efficiency is not possible while maintaining (or increasing) commitments. And so the result was that savings had to be found elsewhere, and this included a reduction of force structures and capabilities, largely at the expense of the Navy. Overcommitted defence, not the washing away of traditions, was the real culprit behind the military's problems.

A more recent analysis is provided by Marc Milner, a Canadian naval historian and Director of the Gregg Centre for the Study of War and Society at the University of New Brunswick. Underpinning his assessment of unification provided in *Canada's Navy: The First Century* (2010) is the idea that the government and the Navy have always been at odds over what kind of fleet Canada needs. Moreover, the Navy had to contend with the fact that Prime Minister Lester Pearson was more concerned with establishing a new Canadian identity which was to be more removed from the British model. In this way,

there is almost a sense of inevitability with regards to conflict between Hellyer's plans and the Navy. Milner came to the defence of the Navy's reputation, refuting the claim it was directionless and without a plan; on the contrary, it was Hellyer who did not fully understand the Navy and who was taken in by the view that the Navy was led by a "cadre of ambitious bunglers." Consequently, Hellyer saw the Navy as something to be "broken" to fit new organizational concepts and the outcome was a "nonsense" plan to find more money and equipment through the "shotgun wedding of unification."¹⁵

Although the Admiral's Revolt takes the front seat to much of the historical discussion, for many in defence the reorganizations of the 1960s and the early 1970s were about more than just political control of the military. At the heart of the issue was the fundamental nature of the military profession itself—a profession that was witnessing great change during the Cold War. Unification further exasperated this through the increase of 'bureaucratization' and 'civilianization' and the loss of military morale needed for institutional loyalty and fighting efficiency. David Bercuson claimed that more damage than good has come of unification, including the increase of civilianization, confusion in the change of command, and the emphasis of "administrative acumen" and managerial frame of mind above military insight.¹⁶ Similarly, Milner's 2010 analysis was that the logic of unification was unclear, its implementation was messy, and expert knowledge was ignored in favour of a "confused" policy by an ambitious "egotist" who recklessly experimented with the careers of 120,000 people—the result being the destruction of CF morale.¹⁷

In *Concepts of Professionalism* (2009), Peter Kasurak, a consultant and Assistant Professor at the Royal Military College, outlined the conflict between two forms of professional military in post-war Canada in his well-researched essay which made use of a host of important names in Canadian defence

¹⁵ Marc Milner, *Canada's Navy: The First Century*, 2nd ed. (Toronto: University of Toronto Press, 2010), pp. 242-243, 256.

¹⁶ David Bercuson, *Significant Incident: Canada's Army, the Airborne, and the Murder in Somalia* (Toronto: M&S, 1996), p. 72.

¹⁷ Milner, *Canada's Navy*, p. 261.

analysis and military professionalism, such as Adrian Preston, Colin Gray, Charles Cotton, Douglas Bland, and J.L. Granatstein. The first form represents a “traditional” perspective, influenced by Samuel Huntington’s “heroic” professional army which is apart from society, based on the British regimental system, leadership, and internal army matters; and the second, a “modernist” perspective, influenced by Morris Janowitz’s theories of the convergence of military and civil institutions, which champions an army that is “integrated with Canadian society and that was education centred, outward looking, and interested in taking an active role in the development of national security policy.”¹⁸ According to Kasurak, neither perspective dominated thinking, even throughout the reorganizational upheavals. Yet, unification of the CF represented an attack on the traditional model as it introduced new uniforms and badges, eliminating the “Royal” from the title of branches, and replaced the regimental system of managing careers and promotions by a new centralized personnel management system, forcing the traditional regimental supporters “underground.”¹⁹ As a result of these changes, morale weakened and attrition set in. But importantly, Kasurak pays a significant amount of attention to the post-unification changes brought on by NDHQ and the apparent reliance on civilian management and dominance of civilians in defence—in other words, ‘civilianization.’ Much of the conflict between the “traditional” and “modern” perspectives is rooted in this issue, and Kasurak shows how the complicated nature of the evolving military professionalism is a result of not only unification, but the 1972 reorganizations as well.

According to political scientist W. Harriet Critchley, many people within the military attributed civilianization to unification, contributing to a legacy that has been widely criticized. This opinion has persisted in the literature. For example, Donna Winslow traced civilianization back to unification in her

¹⁸ Peter C. Kasurak, “Concepts of Professionalism in the Canadian Army, 1946-2000: Regimentalism, Reaction, and Reform,” *Armed Forces and Society* 37, 1 (2011), p. 96.

¹⁹ *Ibid.*, p. 100.

contribution to *Towards a Brave New World: Canada's Army in the 21st Century* (2004).²⁰ Similarly, David Bercuson claims in *Significant Incident* (1996) that unification failed both at creating a single military culture as well as enhancing the quality of advice that the government received from the military. But what it did bring about was civilian bureaucrats in the process of military decision-making. The result of this was a confused chain of command and administrative judgment above military insight.²¹ This criticism is largely unfair, however, as the confused chain of command was more the result of the organizational changes of 1972 than unification. Critchley's article, "Civilianization and the Canadian Military" (1989)²² concluded that with respect to civilianization, key changes occurred with the creation of NDHQ, and not with unification. She also questions the assertion that pre-unification era was one where civilians had less control over ranks in the field and that the military had greater control over defence matters, calling into question the impact of unification, or at least the degree to which pre-unification days should be regarded as more favourable. Even more important, Critchley concludes that (at least at the time of writing) the Canadian military had not in fact seen a dramatic increase in the number of civilians performing military jobs.

Charles Cotton, Rodney Crook, and Frank Pinch add to this discussion in "Canada's Professional Military: The Limits of Civilianization" (1978). Crook, with a PhD in Sociology from Princeton, and Cotton and Pinch, both CF members and academics (Cotton focusing on the impact of social trends on military organizations, and Pinch focusing on issues surrounding transition from military to civilian life), attempted to use the Hellyer reorganizations as a means of understanding civil-military relations in Canada. They argued that unification reduced traditional differences within the military services but that the basic structure of the overall system and the way that system interacted with society was left

²⁰ Dona Winslow, "Canadian Society and its Arms," in *Towards a Brave New World: Canada's Army in the 21st Century*, eds. Lieutenant-Colonel Bernd Horn and Peter Gizewski (Kingston, ON: Directorate of Land Strategic Concepts, 2004), pp. 1-22.

²¹ Bercuson, *Significant Incident*, p. 72.

²² W. Harriet Critchley, "Civilianization and the Canadian Military," *Armed Forces and Society* 16, 1 (1989), pp. 117-136.

unharmful. Developments in CF professionalism had more to do with manpower pools and society as a whole than specific structural reorganizations in defence. Thus, the reforms and their impact were not as extensive as many within the military and defence circles had reported.²³

Still, the literature often remains critical of the effect that the unification years had on the professional armed forces and their morale. Echoing David Bercuson's opinion in *Significant Incident* that unification contributed to the breakdown of CF morale and even morals, Geoffrey D. T. Shaw states in "The Canadian Armed Forces and Unification" (2001):

...the Hellyer plan was an unmitigated disaster for Canada's Armed Forces. Already reeling from years of neglect and indifference, yet still, almost magically, holding out, the Canadian Armed Forces as a viable military entity were finally destroyed by these "reforms". Morale within the forces never recovered, even after several concessions about uniforms etc. were eventually allowed, while personnel have been reduced in numbers still further.²⁴

In *Who Killed the Canadian Military?* (2004), J.L. Granatstein asserted that although some things were gained by unification, much was lost. Hellyer dismissed tradition or regimental and service identity as "buttons and bows" which meant little to him. Granatstein continues: "Yet to senior officers who watched men fight and die for their regiments, ships, and squadrons, the names of units and corps and the peculiar, particular traditions of the services had real meaning."²⁵ Hellyer wanted loyalty to the Canadian Forces above regiments, but loyalty to the services and regiments was vital for soldiers — appearances do matter.²⁶ Granatstein's own experience and perspective must be kept in mind, however. He is one of Canada's most widely read military historians, but also served as a cadet at Le Collège Militaire Royal de St-Jean and at the Royal Military College of Canada, as well as a junior officer for ten years in the Canadian Army (leaving in 1966 at the outset of the unification debates). As Chair of

²³ For more on Canadian military professionalism, see Charles Cotton, "Institutional and Occupational Values in Canada's Army," *Armed Forces and Society* 8, 1 (1981), pp. 99-110.

²⁴ Geoffrey D.T. Shaw, "The Canadian Armed Forces and Unification," *Defense & Security Analysis* 17, 2 (August 2001), p. 168.

²⁵ J.L. Granatstein, *Who Killed the Canadian Military?* (Toronto: Phyllis Bruce Books, 2004), p. 78.

²⁶ *Ibid.*, p. 83

the Council for Canadian Security in the 21st Century (a pro-defence lobby group), Granatstein has stated that between the choice for guns and butter, he is for guns.²⁷ Thus, it is unsurprising that he would write about Hellyer's reforms and the apparent decline in military morale in such a critical way.

One of the most important sources for defence researchers is Douglas Bland. With a background in the military and policy and Chair of the Defence Management Program at Queen's University's School of Public Policy, he is one of the most widely sourced thinkers on defence policy, including Hellyer and the important reform years, which include the early 1970s post-Hellyer changes.²⁸ One of his most widely sourced works, *The Administration of Defence Policy in Canada, 1947-1985* (1987), examined the history of defence policy and firmly establishes the Hellyer period as something quite distinct from the way policy had been accomplished in the past. Bland established the fundamental concepts of the reorganizations within Hellyer's desire to centralize the control and administration of defence which was linked to his vision of civilian-control and the role the Minister should play in the administration of policy. The streamlining and integration of command was pushed forward as a way to rationalize decision-making based on the flow of a single military view to the Minister despite concerns that service views and technical knowledge would not be well represented.²⁹ According to Bland, the "corporate" concept of management resulted in a clear loss of the military profession of its role as "advisor and executor" of defence policy as Hellyer portrayed a disregard for professional expertise, resulting in a breakdown of trust between minister and senior officer corps.³⁰

²⁷ Ibid., p. 10.

²⁸ His works include "Who Decides What?: Civil-Military Relations in Canada and the United States," *Canadian-American Public Policy* 41 (1999), "Controlling the Defence Policy Process in Canada" in *Canada's Defence Perspectives on Policy in the Twentieth Century* (1993), "A Conceptual Approach to Defence Policy Planning" *Canadian Defence Quarterly* (1985), and "Trends in Canadian Security Policy and Commitments" written with John Young in *Armed Forces and Society* (1988). He has also edited two collections of primary documents, *Canada's National Defence*, in which volume one contains key *White Papers* on defence, and volume two covers the important documents in the evolution of the defence organization.

²⁹ Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987), p. 45.

³⁰ Ibid., p. 50.

In his 1993 work, "Controlling the Defence Policy Process in Canada," Bland again took aim at Hellyer, arguing that when Hellyer came to the role of Minister of National Defence and began the writing of the 1964 *White Paper*, he was less interested in the international component of defence policy than in reorganizing defence. He therefore "tried to reshape the strategic picture if only to support his plan for reorganization."³¹ In the end, Bland painted a fairly unflattering picture of Hellyer: he "purposefully left officials to sort out how unification was to be achieved and how it was to function," and the result was that "with no consensus as to what unification really meant in terms of "who gets what," the defence establishment dissolved into intense bureaucratic bargaining."³² In his final analysis he states: "Contradiction between Hellyer's strategic concepts, his organizational ideas, the proposed roles for the Canadian Forces, and the predictably declining defence budgets created phenomenal bureaucratic pressures within the defence establishment, which in turn, contributed directly to the failure of Hellyer's policies."³³

Interestingly though, Bland's *Canada's National Defence* (two volumes), written only four years later, takes a softer tone, particularly when assessing the outcomes of integration/unification. In volume one Bland stated clearly that to blame every failing of the CF in terms of policy and force performance such as the Somalia incident on Hellyer and unification is unfair. Moreover, the assumption that the unification of the Canadian Forces and the loss of traditions would destroy capabilities has been shown to be false.³⁴ This, according to Bland, was due to a number of factors: Hellyer's vision was never fully put in place; there was no organizing concept to guide planners to begin with; and many organizational developments and concepts have been established largely as a result of post-unification developments,

³¹ Douglas Bland, "Controlling the Defence Policy Process in Canada: *White Papers* on Defence and Bureaucratic Politics in the Department of National Defence," in *Canada's Defence: Perspectives on Policy in the Twentieth Century*, eds. Ronald Haycock and Barry D. Hunt (Mississauga, Ontario: Copp Clark Pitman, 1993), p. 212.

³² Ibid., p. 213.

³³ Ibid., p. 215.

³⁴ Douglas Bland, ed., *Canada's National Defence, Vol I: Defence Policy* (Kingston: School of Policy Studies, 1997), p. 62.

such as the 1972 integration of the CF and DND into NDHQ. Instead, declining budgets and inefficient policies and procedures unrelated to unification were the real culprit of defence problems. As Bland stated, "The snake's nest of policies and decisions is too complex to unravel today and no one can determine if unification as envisioned in 1964-68 would have produced the results Hellyer hoped for then."³⁵ Moreover, in his second volume on defence organization, Bland contested that changes in the organizations since 1968 "make it almost impossible to judge whether Hellyer's concept of national defence was valid or not" and thus "no one can confidently point to unification as the saviour or Satan."³⁶ The blame put on Hellyer for the declining conditions of the Forces is misplaced; not all the problems facing the CF flow from Hellyer's reforms. In a balanced way Bland still acknowledged that some of the evils that the reforms of the 1960s sought to eliminate, such as inter-service rivalry and bottom-up planning, do persist in defence planning.

Such a change in tone is not unheard of elsewhere in the literature either. Jack Granatstein's 1986 work, *Canada, 1957-1967: Years of Uncertainty*, devoted one chapter to unification. Relying almost exclusively on primary source analysis and interviews with Paul Hellyer and focusing primarily on the implementation history Granatstein wrote with a rather fair tone. Like others, he pointed to unification over integration as Hellyer's main downfall, arguing that if he had stopped his reforms before he began to tamper with traditions and uniforms, he might be remembered as one of our greatest defence ministers. Instead, he is remembered as arrogant and inflexible; and "That is unfair, of course, but public perceptions and politics are unfair."³⁷ In a surprising change of tone in 2004, Granatstein points directly at Paul Hellyer and unification as a contributor to the death of the Canadian Forces. Where *Canada, 1957-1967* is meticulously researched, relying heavily on primary documents and interviews, his 2004

³⁵ Ibid., p. 62.

³⁶ Douglas Bland, ed., *Canada's National Defence, Vol II: Defence Organization* (Kingston: School of Policy Studies, 1998), pp. 97-98.

³⁷ J.L. Granatstein, *Canada 1957-1967: The Years of Uncertainty and Innovation* (Toronto: McClelland and Stewart, 1985), p. 242.

work, *Who Killed the Canadian Military?*, has a strikingly different tone, lacks sources or references, intended to be more apolemic piece than a work of meticulous historical research. Here, he fleshed out his views on the unification concept, which are less than glowing. He maintained that Hellyer never fully grasped the distinctions of the services, almost sarcastically tracing the evolution of Hellyer's implementation which paid little attention to, and showed little regard for, the "fearful and the doubters." Again, Granatstein contends that had Hellyer stopped at unification, history would judge him differently. Instead he pressed on and the result was a loss of loyalty to the services and regiments to which men served—loyalty which was vital for the forces. Heritage and tradition was hard earned in the military and Hellyer never understood this as he was "arrogant" and "rigid."³⁸

Brigadier-General Daniel Gosselin reasoned that some of the ideas that initially inspired Paul Hellyer have endured throughout the years in defence and that General Rick Hillier's arrival to the position of CDS signaled the revival of some of them. In "A 50-Year Tug of War of Concepts at the Crossroads: Unification and the Strong-Service Idea" (2005) Gosselin maintained that for decades the conflict between of unification and a traditional perspective based on the preservation of the separate services has been going on. His work posited that the conflict between these two ideas is unlikely to disappear in the future and that the two concepts will continue to exert pressure upon the defence institution unless they can be reconciled. Gosselin's works are written with a balanced tone with respect to unification, claiming, like Douglas Bland, that it is unfair to blame the reorganizations for all of the failings of defence policy since 1968. Moreover, Gosselin and Craig Stone contended in 2005 that unification was justifiable, even necessary, from an administrative and management perspective, but did result in a loss of service expertise in the decision-making process and did not correspond to a true operational need. In the end, Hellyer left much to be desired as an implementer. While Minister Hellyer's ideas of integration and unification have been highly criticized over the years, Stone and

³⁸ Granatstein, *Who Killed the Canadian Military?*, p. 83.

Gosselin wrote that he would have probably “fared better in the history books had it not been for his single-minded drive and the approach he employed as he wrestled with an entrenched defence bureaucracy. Minister Hellyer created an atmosphere of suspicion, and his senior military advisors were seldom consulted as he developed his unification ideas”³⁹ In “Hellyer’s Ghost,” Gosselin described Hellyer as “dogmatic” and “idealistic.” Yet, Gosselin’s 2007 work, “The Storm over Unification,” concluded that not *all* of the blame can come down on Hellyer’s difficult personality: Senior military officers must share some of the blame as they were never fully able to explain in a coherent and unified way, what they saw to be the impact of unification on operational capabilities of the military, nor did they understand the nature of the changes taking place in the political and civil environment which were altering the nature of civil-control of the army, and as a result, remained “disconnected from the society it was mandated to serve.”⁴⁰

The most recent historical work to cover this era of Canadian defence, *A National Force* (2013), by Peter Kasurak, similarly put more blame on the military than has been the case in previous research. Although he conceded that neither the civilian nor the military sides of defence played their roles adequately in policy-making, Kasurak challenged the standard narrative that the pre-unification era (the “Command Era”), was better than the era which followed (“Management Era”). A narrative established by popular works such as Bland’s *Administration of Defence* and John English’s *Lament for an Army*⁴¹ has posited that the ‘Command Era’ featured a better equipped and funded army, with a proper place in policy-making, replaced by civilian management concepts and attitudes, to the detriment of the army’s British heritage. Instead, Kasurak argues that the British heritage created institutional deficits in the ability of the army to contribute to national security policy and develop military doctrine.

³⁹ Craig Stone and Brigadier-General Daniel Gosselin, “From Minister Hellyer to General Hillier: Understanding the Fundamental Differences between the Unification of the Canadian Armed Forces and its Present Transformation,” *Canadian Military Journal* 6, 4 (Winter2005/2006), p. 12.

⁴⁰ Gosselin, “The Storm over Unification of the Armed Forces,” p. 333.

⁴¹ John English, *Lament for an Army: The Decline of Canadian Military Professionalism* (Concord, ON: Canadian Institute of International Affairs, 1998).

Moreover, using Peter Feaver's *Armed Servants* (2003) as a foundation—which pushed a theory of civil-military relations based on principal-agent relationships, otherwise known as agency theory—Kasurak contended that the Canadian Army (the agent) during the 1970s “shirked” its responsibilities to the state (the principal). Feaver's theory suggests agents do what is expected of them by the principals when they are controlled, but follow their own agenda when control is lacking. This “shirking” can take the form of determining policy outcomes by inflating estimates of cost; by making end runs through public protests, leaks, or appeals to political actors; or by foot dragging—all of which can be argued to have taken place in Canada throughout the reorganization era. Kasurak maintained that the Army followed its own agenda instead of implementing that of the government, and therefore, his interpretation highlighted the theme of political control as a central theme during this historical period.

A note on the memoirs of key actors at the time is also needed, although the interpretations of events they presented are not overly surprising. Paul Hellyer's *Damn the Torpedoes*⁴² provided an uncritical account of events, downplaying criticisms and not giving substantial weight to Landymore's recollection of events surrounding his dismissal. Moreover, the tumultuous nature of the reorganizations was downplayed, writing that the transition into one integrated management system was “so smooth it didn't create a ripple.”⁴³ In contrast, *The Thunder and the Sunshine*,⁴⁴ the memoirs of Rear Admiral Jeffry Brock—one of Hellyer's more vocal opponents—was more scathing of the unification plan, Hellyer's leadership, and even the public's share of the blame for their lack of interest in defence. The memoirs of Jean Victor Allard, Chief of the Defence Staff from 1966 to 1969, on the other hand, were a bit more balanced.⁴⁵ He did defend Hellyer's reorganization plan and their intentions, although he added some critical analysis in stating that unification made less sense from an

⁴² Paul Hellyer, *Damn the Torpedoes: My Fight to Unify Canada's Armed Forces* (Toronto: McClelland & Stewart, 1990).

⁴³ *Ibid.*, p. 88.

⁴⁴ J.V. Brock, *Memoirs of a Sailor: The Thunder and the Sunshine, Vol. II* (Toronto: McClelland & Stewart, 1983)

⁴⁵ J.V. Allard, *Memoires du General Jean V. Allard* (Boucherville: Editions de Mortagne, 1985).

operational standpoint; instead, he argued that unification made more sense from a management perspective.

The literature on unification is varied. When looked at closely it shows a fair bit of nuance although some general trends prevail. Much of the historical attention focused on the implementation history of the Hellyer reforms with civil-military relations and the struggle between Hellyer and the military as the dominant angle of investigation. The unification years are largely depicted as a “crisis” — both in terms of the evolution of the military profession as well as the relationship between the Armed Forces and the politicians. Although the issue of “traditions” was the heart of the intense debates over the unification, it is the Admirals’ Revolt, Hellyer’s approach to the opposition (the Navy in particular), and its effects on the defence arena (in terms of command, capabilities, and morale) that form the core of the literature. Although the two “integrations” — 1964 and 1972 — were of much greater significance for the evolution of defence policy and organization, and had more significant impact on civil-military relations than unification, the 1966–1967 debates over unification itself that historians and defence analysts have focused on. It must also be mentioned that something important is underdeveloped in this historiography, namely a sense of policy, including the policy pressures that faced the Hellyer administration and the alternatives it had to choose among. While the criticisms of outcome and impact of the choices that were made are well developed, they are rarely considered in terms of what else could have been done or what other directions could have been chosen. It is the impact of the choice that is most deeply analysed, and not the choosing itself.

It is not surprising that unification became the centre of attention during the roughly ten year period of defence organization evolution. First of all, it was a time when many men in government, society, and of course, the military, were veterans of the First and Second World Wars. They had fought for the country, shed blood, and lost friends and relatives. Their loyalties to their respective services or regiments were strong and their traditions ran deep. The thought of doing away with uniforms and the

like was difficult and drew many people into the defence policy debate. Jonathan Vance has shown in his work *Death so Noble* (1997)⁴⁶ how not only are the meanings associated with wartime experiences so important, but the memories can be intimately shaped by nostalgia which is hard to shake. Canada has a proud military tradition and regions hold strong to their regimental histories. It is not surprising that the reforms that came into conflict with this social and historical military consciousness were so controversial—amongst those in the military, the Opposition, and the general public.

Moreover, there was a political dimension at play. The Liberals came to power due to the failure of Prime Minister John Diefenbaker's stance on defence issues. The unification controversy became a lightning rod for Conservative critics who hoped to turn the tables on the Liberals and bring them down in the defence arena as well. This added another facet to the controversial implementation period in the mid-1960s and helped establish unification as the premier defence issue of the period because of its controversial and public nature. Furthermore, as opponents of unification continued to link problems of the military in the coming years to the Hellyer plans, the controversial nature of unification has endured, overshadowing other issues and events, such as the 1972 reorganizations, which are often mentioned in connection to unification in the literature, but gain much less critical attention.

This thesis is not about unification, per-se. It is not another implementation history, nor is it about Hellyer versus the military. Although the implementation events as well as the themes of civil-military relations form an important contextual backdrop, this thesis is about the intersection of policy and management. Where others have examined the reform years from perspectives of the military (i.e. Navy, regiments, command perspectives), or from the social sciences angle of civil-military relations, this thesis attempts something different. While mention of the "new" management and administrative concepts that emerged in the reform period is a necessary component to the traditional historical overview of the integration/unification years, it is an aspect that has yet to be closely examined.

⁴⁶ Jonathan Vance, *Death so Noble* (Vancouver: UBC Press, 1997).

Certainly the literature makes reference to “business” and “modern” management practices that were instituted in defence in the Hellyer years and have lamented the “civilianization” that is wrapped up with it. For example, in “Hellyer’s Ghosts: Unification of the Canadian Forces is 40 Years Old,” Major-General Gosselin examined the fundamental ideas behind Hellyer’s decision to integrate and unify the CF, one of which was the introduction of modern management methods and the elimination of triplicate functions to achieve efficiencies. Major-General Gosselin argued that the predominant focus on efficiency that helped give way to civilianization and bureaucratization trends, as well as a reliance on “business methods,” had the consequence of reducing operational focus and erosion of military ethos. Finally, Peter Kasurak, in a discussion of civilianization, mentioned the “inapplicable” management techniques used by civilian managers as one component of the phenomenon.⁴⁷ Yet, exactly what “business” and “modern management” principles are being referred to, or how they fit into the reorganization period is never made explicitly clear. No one has explored this dimension thoroughly. This thesis represents such an endeavour.

The value of this is not simply in filling an historiographical gap, but in making an important contribution to that historiography by seeking to test the idea that the undue application of business principles to defence was a core component to Hellyer’s reforms—an idea that currently seems accepted, despite the lack of thorough background research on this particular perspective. In a way, this thesis helps to add a layer of contextual understanding to the events, which ultimately form Paul Hellyer’s more salient and long lasting legacy in government. Unification continues to be a contemporary issue, particularly in the way in which the certain symbolic aspects of unification have been rolled back. This includes the reintroduced of separate uniforms in 1985-1986, and more recently with the re-introduction of pre-unification names Royal Canadian Navy, Royal Canadian Air Force, and Canadian Army, for Maritime, Air, and Land Force Command. Because of the important psychological

⁴⁷ Peter Kasurak, “Civilianization and the Military Ethics: Civil-Military Relations in Canada,” *Canadian Public Administration* 25, 1 (1982), p. 108-129.

impact that these historical events continue to have on the Canadian Forces, the historiography needs to continue to be developed and debated. Finally, one other factor gives value to a study of this type: the contemporary issues of defence change and renewal. Defence “transformation” and defence “renewal” efforts of recent years have sparked new discussions on change management in Canadian defence contexts. And while this thesis is not about change management per se, the events and issues surrounding defence management evolutions in the 1960s and early 1970s undoubtedly speak to these contemporary issues.

CHAPTER 1

MANAGEMENT, THE MILITARY, AND THE PURSUIT OF EFFICIENCY

The military and management are historically linked. In fact, military organizations have been a source of inspiration and a role model for the development of management and organizational theory. Sun Tzu's book on how to succeed in war which is now championed as a strategic management guide, Max Weber's theories on management and strategy drawn from his observations of the Roman Empire and its military, and Taylor's theory of scientific management which has been supported by generals and admirals are just a few examples to which some people point to when discussing the military-management relationship.¹ Looking carefully at this relationship in the decades prior to the arrival of Paul Hellyer to Canadian defence establishes that some of the underlying ideas and structures of the defence management reforms in the 1960s and 1970s did not emerge in a vacuum. Even though those pushing for reform were most likely unaware of their place within the story, they were contributing to a long history of increasingly concerted efforts at rationalizing management and organization for the purpose of greater efficiency, effectiveness, control, and predictability. More importantly, the criticisms with respect to the military borrowing management philosophies taken from the private sector are tempered when the historical and intellectual context of the public vs private management debate is taken into account. This chapter builds a foundation for subsequent ones by both outlining some of the historical legacies operating beneath the surface of the overall history of defence reforms, as well as introducing some theoretical concepts and debates in which the reforms of the 1960s and 1970s should be understood. It examines the military and management—outlining some key definitions and exploring the historical relationship between bureaucracy and the military and introduces the concept of rationalization. In addition, a look at the rational versus bureaucratic decision-making theories,

¹ See Joseph Soeters, Paul C. van Fenema, and Robert Beeres, *Managing Military Organizations: Theory and Practice* (New York: Routledge, 2010), p. 2; Delphine Resteigne and Joseph Soeters, "Managing Militarily," *Armed Forces and Society* 35, 2 (2009), pp. 307-308; and Mark R. Beissinger, *Scientific Management, Socialist Discipline, and Soviet Power* (London: I.B.TAURIS & Co Ltd, 1988), p.85

particularly as they relate to the defence environment, is included, along with an examination of the debates surrounding the compatibility between military and non-military concepts of management.

THE MILITARY AND MANAGEMENT

Private Sector Management and the Military

Much of the debate over the defence reforms is essentially a debate over the universality of management, public and private, and the degree to which the public sector can effectively incorporate private sector theories. The theories and frameworks that management experts have developed are products of their observations about how organizations operate and these theories have been applied to organizations in order that these institutions can better match their organization and management frameworks to their bureaucratic realities. Within the management of public and private organizations there are essentially two views: one is that the government is a special case in terms of management due to lack of a clear bottom line, the structural division of authority among different units of government, and the breadth of constituencies. The second view is that management is management, and that generally the tasks of directing large-scale organizations are common to all. John Hutchinson of Columbia University's Graduate School of Business states: "The duties of managers vary at different levels in [an] organizational hierarchy, but certain activities are common to all levels of management. Managerial duties can be viewed as universal functions or activities performed at specific levels in the organizational structure."² Administrative theorists such as Henri Fayol shared a similar perspective nearly a century ago. Patrick Yates argues in *The Politics of Management* (1985) that at the heart of the

² John G. Hutchinson, *Organizations: Theory and Classical Concepts* (New York: Holt, Rinehart and Winston, 1967), p. 13.

issue, the environments between private and public sectors vary greatly, but they might be more common than they appear.³

The issue becomes even more complex when the military component is considered, for defence is unlike any other area of the private sector. Undoubtedly, the military is also unique within the list of governmental organizations. At the outset of their work on managing military organizations, *Managing Military Organizations: Theory and Practice* (2010), Joseph Soeters, Paul van Fenema and Robert Beeres (eds.) point to the dual nature of military organizations as one of the prime unique features: that is, on the one hand, military organizations deal with peacetime and routine conditions, while at the same time they operate in conditions of war and crisis. Thus militaries can be both normal employers like any other organization but also masters of force or violence, endowing them with a certain kind of uniqueness. The real question is whether the unique nature of the military can lend itself to the successful adoption of private sector techniques. There are, to be sure, some who believe that the military can learn much from civilian management.⁴ John Downey's *Management in the Armed Forces* does not fully reject the conceptualization of the military and private sector as being compatible: "The process of designing and maintaining armed forces may be comparable in general principle with the management of a large industry."⁵ According to Downey, armed forces need to be highly centralized—as are private sector corporations—and they need a strong corporate spirit which will help achieve high standards of discipline, spirit, and morale. Downey does not reject the experience of trained military experts, but sees a place within the military for collaboration with external experts who provide alternatives ideas

³ For example, the bottom line—often cited as the most fundamental difference and source of incompatibility—is in fact, little more than a device for setting goals. They are methods for ordering political resolution, and political conflict resolution is imperative in both public and private sectors, as is the need to measure competing claims. Thus, management is about managing political conflict for resources in a way that adds to the overall policy of an organization, and often private organizations and firms have broad goals beyond profit and bottom lines which are merely tools of goal setting. Patrick yates, *The Politics of Management* (London: Jassey-Boss Publishers, 1985), p. 16.

⁴ See Murray Davies, *Commanding Change: War Winning Military Strategies for Organizational Change* (Praeger: Westport, CT, 2001).

⁵ Downey, p. 20.

and advice. However, most experts in the field argue that there is only a very limited degree to which the military can absorb civilian management practices and that any implementation on business advice must be done within strict boundaries of the military domain. The main reasons for this are that military organizations are not driven solely by the need for a positive financial result, although finance is indeed a major factor. For many critics the fundamental problem with importing business management concepts into defence is the different ways that each measure success. In the private world of corporate management, profit and loss are the means of measuring efficiency, which, in defence, is a poor way to determine success. E.M.D. Leslie, for example, argues that the currency in defence is human life, and waging war is the purpose. Thus, the commercial world of market value as the yardstick for effective management of organizations is not applicable in the defence context.⁶ The notion of profit motive is a distinguishing feature between private and public enterprise. A rational process based on accountability and leadership might be similar goals between private and public spheres, but one cannot cloud the fundamental differences in purpose, culture and context.⁷

Incompatibility is seen to stem from the perspective that a crucial flaw within the management theories is that decisions can be made rationally. Decisions, especially in defence, are based on a complex process and conducted within a framework of a multitude of competing interests, actors, and organizations. The complex way decisions are made cannot always be assumed to be accomplished within logical or rational contexts. It can sometimes be hard to distinguish policy and political motives behind Government and Opposition arguments for or against particular policies. Building on work done

⁶ E.M.D. Leslie, "Too Much Management, Too Little Command," *Canadian Defence Quarterly* 2, 3 (Winter 1972/73), pp. 30-32. Others make similar claims. Alan English states that "the capability to engage in combat is not a business activity, and in many ways requires measures of effectiveness fundamentally different from efficiency as defined in the marketplace." Alan English and G.E. Sharpe, *Principles for Change in the Post-Cold War Command and Control of the Canadian Forces* (Kingston, ON: CF Leadership Institute, 2002), p. xiii.

⁷ Craig Stone, ed., *The Public Management of Defence in Canada* (Toronto: Breakout Educational Network, 2009), p. 218.

by Graham T. Allison and Morton H. Halperin on the nature of government decision-making,⁸ Kim Richard Nossal argues that “assumptions of rationality do not adequately account for some of the more *non-rational* (as opposed to *irrational*) elements that one can easily find in defence policy-making in Canada.”⁹ Rivalry, competing interests, and bureaucratic politics all contribute to an DND that is difficult to call efficient; each actor/party within the organization competes for control over the policy process and each represent different ideas on what makes an “efficient” organization. David Detmomas, like so many other experts—defence and otherwise—is skeptical about the degree to which business ideas can eliminate bureaucratic conflict public management, which is further complicated in defence by the differences in management during peace and war: “Attempting to implement business techniques that stress efficiency and economy in an environment that demands compromise and works by “muddling through” combines the worst of both systems...It justifies increasingly smaller budgetary allocations in the mistaken belief that a more efficient use of funds will provide the same if not better capabilities.”¹⁰ The negative consequences of the adoption of business practices in defence are argued to be many: the encroachment of civilians into the work traditionally the purview of the military, the development of an officer corps more interested in career management than military leadership, the goal of improving the bottom line as superior to operational effectiveness, the reverence for computers above traditional military judgement, and the development of an overly bureaucratized military establishment more concerned with ever-increasing administration efficiency than military effectiveness.

⁸ See Graham T. Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown, 1971); Graham T. Allison, “Conceptual Models and the Cuban Missile Crisis,” *American Political Science Review* 63 (September 1969), pp. 689-718; Graham T. Allison and Morton H. Halperin, “Bureaucratic Politics: A Paradigm and Some Policy Implications,” *World Politics* 24, Supplement: Theory and Policy in International Relations (1972), pp. 40-79; and Morton H. Halperin, *Bureaucratic Politics and Foreign Policy* (Washington: The Brookings Institution, 1974).

⁹ Richard Kim Nossal, “Rationality and Non-Rationality in Canadian Defence Policy,” in *Canada’s International Security Policy*, eds., David B. Dewitt and David Leyton-Brown (Scarborough: Prentice-Hall Canada Inc, 1995.), p. 352.

¹⁰ Detomas, p. 344.

This struggle between efficiency and effectiveness is an unavoidable reality of defence management, which is constantly attempting to find a balance between preparing for the realities of war while trying to operate in the realities of peace. Providing the means for the CF to be successful in war is the benchmark for effectiveness while doing so at the lowest cost is the benchmark for efficiency.¹¹ But there is a subtle, yet crucial consideration of efficiency in the military—that military efficiency means being successful at not just the lowest financial cost, but the lowest cost of life. What is economically inefficient can, at the same time, be militarily effective. For the armed services, effectiveness is expressed as a future “potential”; it is intangible—a concept that is difficult to reconcile with the need for administrative and financial efficiency in the present.

It must be understood, however, that not everyone looks at profits/bottom lines as the ultimate argument against compatibility between private and public enterprises, even defence. Downey argues that profit is merely a condition to the continued existence of organizations, rather than a goal. In the case of defence, armed force is the nature of the product—what distinguishes it amongst other enterprises. Armies do not, of course, need to make profits, but cost and financial efficiency are major factors of consideration, especially in a country like Canada whose available funds for defence are modest, especially compared to our closest ally, the United States. However, it is generally agreed upon by all of who weigh in on this subject that regardless of the degree to which economic efficiency and return on investments are stressed in the case of defence organizations, armed forces should certainly not identify themselves with private sector management practices to the extent that the difference between the two become blurred.¹² This reinforces the idea that organizational and management theory holds a great deal of relevance for public organizations, but one must keep in mind that there is no one

¹¹ See Ross Fetterly, “The Influence of the Environment on the 1964 Defence White Paper,” *Canadian Military Journal* 5, 4 (Winter 2004-2005), pp. 47-54.

¹² Downey, p. 65.

best way for structural and organizational arrangements. Different arrangements are needed for different purposes and theories must be tested and adapted to each individual agency.

Current Canadian Defence Organization, Management, & Administration

Canada's National Defence, Vol 2: Defence Organization (1998), describes the 'higher organization' of national defence as the "State's central structure for defence decision making that brings together political leaders, senior military officers, and civil servants," and it is the decision between competing choices—ideas, demands, programs, or resources—that defines its character and internal dynamics.¹³ Defence organization, therefore, is a structural framework that establishes the process within which actors make decisions and which facilitate the making of choices. To put it another way, an institution's structure is the composite of actors, their organization and relationship to each other, and the process of deciding. But the structure must be understood as more than simply the facilitator of decision-making for it has a crucial role in shaping outputs, both policy and strategy. This is because the structure defines the relationships between actors within the process as well as their respective powers. Actors within the policy organization—politicians, officers, and bureaucrats—all make choices which are intended to work towards achieving certain ends/goals as set by the government. These choices represent the means to achieving those ends—they are ideas that are manifested as policy. And because these policies are made by those actors operating within the structural organization, it can be said that policy is dependent on the structure.¹⁴ How defence is organized and how actors work together in creating policy through both expert analysis and the forums for advice are crucial in determining policy outcomes. The complex systems of information gathering and analysis and how this analysis feeds back into the decision-making frameworks is key, not only for

¹³ Douglas Bland, *Canada's National Defence, Vol II: Defence Organization* (Kingston, ON: School of Policy Studies, 1998), p. xii.

¹⁴ *Ibid.*, p. xiii.

formulating policy itself but also the appropriateness of that policy and its chance for success. Thus, in a broad sense, investigations into defence policy are essentially investigations into the bureaucratic organization of defence establishments.

Defence *management*, on the other hand is about putting ideas into action. It involves making decisions and carrying them out through the effective use of resources. Teri McConville explains the role of defence as the support of government objectives and the optimization of military capability, where the job of the defence manager is to produce military capability through planning and the effective and efficient use of available resources.¹⁵ Defence management “transforms national policy into activities and joins the agencies of the state and the national economy to the armed forces” through the Defence Ministry and is about the crucial process of transforming resources into military capabilities which are meant to achieve national aims and government policies.¹⁶ In essence, defence management involves making choices among alternatives within a framework that is intimately shaped by bureaucratic politics, which determines the nature and scope of policy outcomes. The output of this organizational and management system takes two broad forms: operational and administrative. The operational output is the final product produced by the defence organization, everything else essentially being the administrative support. Administration is the management structure that underpins the entire military function and which generally constitutes those functions that are neither operations, nor procurement.¹⁷ Understood in this way, there are essentially two lines of authority that run through the defence establishment—the line of authority for operational command and the line of authority for administrative control. Operational command involves authority to assign forces and missions, deploy units, or delegate control as needed. It does not implicitly include authority over administration and

¹⁵ Terri McConville, “The Principles of Management Applied to the Defence Sector,” in *Managing Defence in a Democracy*, eds. Laura R. Cleary and Teri McConville (Routledge: New York, 2006), p. 110.

¹⁶ Bland, ed., *Canada’s National Defence, Vol II*, p. 3.

¹⁷ V.J. Kronenberg, *All Together Now: The Organization of the Department of National Defence in Canada, 1964-1972* (Toronto: Canadian Institute of International Affairs, 1973), p.188.

logistics. The difficulty is in deciding the degree to which they can be joined or separated. This has been a particularly salient issue in the Canadian context and lies at the centre of much of the reorganizations during the period under examination. As the defence organization was rearranged in 1964, 1968, and then 1972, the roles and responsibilities vis-à-vis command (particularly administrative) shifted continually.

The three top current positions at NDHQ are the Minister of National Defence (MND), the Chief of the Defence Staff (CDS), and the Deputy Minister (DM). The Minister is responsible for the direction of the Canadian Forces and all defence matters, the CDS is the senior military officer of the Forces, and the DM is the senior departmental civil servant. The legal basis for their authority stems from the National Defence Act (NDA) which charges the Minister with the “management and direction” of the Canadian Forces, and the Chief of Defense Staff with the “control and administration” of the Canadian Forces “under the direction” of the Minister. For the CDS, his “control” is subject to the direction of the Minister, and his main duty is to implement government decisions that involve the Canadian Forces. Appointed by the Governor-in-Council, the CDS is accountable to the Minister for the CF’s conduct, activities, and readiness. A formal line of command also passes from the Head of State (Canadian Monarch), through the Governor General, the Chief of the Defence Staff, and down to all officers and members of the Forces. Moreover, the CDS is both a commander, responsible for the operation of the armed forces, as well as a policy actor, responsible for advising the Minister and the Government on military matters. According to Bland, a certain degree of confusion and ambiguity with respect to this latter role emerged as a result of the establishment of NDHQ in 1972 as distinctions emerged between ‘military advice’ emanating from the CDS and ‘defence policy advice’ emanating from the DM.¹⁸ However, the fact that the National Defence Act does not clearly define what is meant by the Minister’s “management” (which extends to the Deputy Minister) versus the CDS’s “administration” of the

¹⁸ Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987), p. 98.

Canadian Forces means that a certain amount of confusion has been built into the system from the beginning, requiring a degree of interpretation regarding duties and relationships.

Under law, the Canadian Forces and the Department of National Defence are separate entities but serve complementary roles in providing advice and support to the Minister and in implementing decisions. The Minister of National Defence has statutory powers over both sections of defence, whereas the CDS only presides over the Canadian Forces and the DM solely over DND. The Deputy Minister is charged, primarily, with the financial management of defence and oversees the civilian personnel in addition to his/her responsibility for policy, resources, and interdepartmental coordination. Appointed by the Governor-in-Council, the DM articulates the “corporate” vision for the Department, managing personnel and the work environment, and providing the Minister with broader expert civilian support on defence issues.¹⁹ Although the DM is the MND’s chief administrator, they are also accountable to the Prime Minister for policies, as well as to the Treasury Board and the Public Service Commission. The Deputy has a central role in the formulation of policy advice, which is to be impartial, candid, and to operate within the objectives and standards as set by the government. Prior to the integration of the forces under a single CDS, a precedent was set where, by custom, the DM refrained from exercising legal powers over the Chiefs of Staff of the three separate services unless it related to procurement, property, civilian personnel, or issues involving serious financial considerations. The main point of emphasis is that each official has separate responsibilities and none has the power to replace or speak for the others.²⁰

Prior to 1972, there existed the institutional separation between the military and civilian arms of defence. Confusion emerged, however, when DND and CFHQ were integrated and, according to the new organizational structure, the CDS and DM appeared to be coequal in the management and

¹⁹ “What is the Relationship between DND and the Canadian Forces?” last modified, 26 June 2012, <http://www.forces.gc.ca/site/about-notresujet/index-eng.asp>.

²⁰ Bland, *The Administration of Defence*, pp. 91-92

administration of the armed forces. The laws that define the roles and responsibilities of these senior defence actors were established at a time when there existed a clear institutional separation between the civilian and military arms of defence. This institutional separation kept the duties of the senior actors with respect to each other distinct. When the two institutions were amalgamated under the banner of the civilian/military National Defence Headquarters, the National Defence Act was left un-amended and roles and responsibilities remained unchanged. Bland is correct in pointing out that this might not have been a major problem had the duties of the CDS and DM, as spelled out within the existing NDA, been clarified, reinforced, or made more explicit. This, however, did not happen. As a result of these failures, and in conjunction with the institutional amalgamation, confusion and ambiguity over responsibilities and levels of authority between the CDS and DM became an issue. Occurring simultaneously was the issue of civilianization of the armed forces as the perception arose that military officers were becoming increasingly bureaucratic and the civil-service mandarins were seen to be expanding their role in the management of the armed forces outside their traditional purview. This has had an effect on not only the framework for policy-advice to the Minister of National Defence but also on the general administration of the armed forces.

Traditionally, within the military the person who is in charge of command in battle has also been responsible for their support and administration (that is, supplies, training, equipment, etc.)—a principle that, according to John Downey, originated from the time when the soldier of high standing authority in a regiment was responsible for recruiting his men and supplying their arms and equipment.²¹ This led to a framework in which responsibility was both direct, and immediate. To be sure, this level of direct authority has decreased in more recent times, but still, the officer in charge of operational command cannot be completely separate from administrative matters and the support required to run an effective modern army (a fact built into the National Defence Act). Ironically, the complexity of war in the second

²¹ John C.T. Downey, *Management in the Armed Forces: An Anatomy of the Military Profession* (Maidenhead, Berkshire, England: McGraw-Hill Book Company (UK), 1977), p. 118.

half of the 20th century, which necessitated that commanders also have an intimate role in administration, has also given rise to the infusion of civilian managers in administrative matters, weakening that role.

The Military & Bureaucracy: An Historical Overview

The line between military and civilian administrative functions and duties in Canada blurred in the early 1970s, calling into question the degree and appropriateness of civilian involvement in defence management, and more generally, the continued application of “business” methods within the public sphere. Despite disagreement over the exact compatibility between the military and non-military management, the two are historically linked as military organizations have often served as a role model for organizational and management ideas. Where the vast majority of management theories have been developed by observing large-scale bureaucratic organizations such as railroads or industrial manufacturing, it must be remembered that militaries were the largest, most complex, and advanced type of organization until the advent of the first Industrial Revolution. Within militaries, great emphasis is placed on chains of command, rigid hierarchies, fixed operating procedures, formal channels of communication, and codes of discipline. As the military bureaucracy and its internal working components represent the fundamental subject for this investigation, it is worth briefly tracing the rise of military bureaucracy in the historical context.

The rise of the bureaucratic nature of the military is intimately connected to the rise of military professionalism. Originally, military affairs were tied to kingship as armed force was one of two key ingredients (along with patronage) to establish and maintain rule. Military and political manoeuvring were held in the same hands and were mutually reinforcing skills—the best warriors were skilled in all things and controlled their power through centralization.²² Prior to the 17th century armed forces lacked

²² Ibid., pp. 5-6.

a distinct professional nature but as permanent military forces became necessary for the consolidation of power and to protect and support the rule of monarchs, the officer became a permanent servant to the crown. The officer corps was driven by aristocratic values of courage, individualism, and luxury, lacking the professional military ethic, discipline, and expertise that it would later develop.²³ Also non-existent was a body of professional knowledge supported by educational military institutions.

The distinguished political scientist, Samuel Huntington, argues that the professional officer corps that developed around the turn of the 19th century moved the military towards a more “corporate” character as officership became a bureaucratic profession as well as a bureaucratic organization. Officers gained the legal right to practice the profession of armed force, enlisted a corps of technical specialists in the application of violence, and recruited soldiers who were part of the organizational bureaucracy, but separate from the professional nature of the officer class.²⁴ With the growth of this professionalism came the requirement of a minimum general education and the need for a basic level of professional training. Institutions devoted to the science of war became necessary, starting with the Kriegsakademie (War Academy) in Berlin. It had also been demonstrated by the Napoleonic Wars that state security could not be guaranteed by the older model of armed forces. Only through larger scale organizations headed by competent and trained officers, supported by lower ranks of specialists in military science and conscripted men, and aided by complex logistic and supply systems, could an effective match of force be established. It was with the Second World War that the pinnacle of total war—the complete mobilization of a nation’s resources and population—would be achieved. The dramatic increase in the technological complexity of war and the industrial capabilities of warring states firmly established the armed forces as a nation’s most elaborate and complex bureaucratic organization involving a massive degree of management and coordination.

²³ Samuel P. Huntington, *The Soldier and the State: Theory and Politics of Civil-Military Relation* (Cambridge: Belknap Press of Harvard University Press, 1964), pp. 26-28.

²⁴ *Ibid.*, pp. 16-18.

Today, management theories have developed into a vast literature which focuses to a large extent on civilian life, and in more recent decades, the public sphere. Management theory does not often examine the military even though some of the earliest thinkers on the subject were inspired by the military.²⁵ One of the earliest, most important thinkers on the subject of bureaucratic and organizational management theory was the preeminent social scientist, Max Weber. His theories of bureaucracy contributed to the discourse on administrative thought and he is cited in most texts of the history of management as a pioneer of management theory. Weber's theory of bureaucracy was established based on his perceived need for a rational basis for managing large-scale organizations. For organizations seeking to operate more systematically, the answer was bureaucracy: management by the officer or position, instead of by a patronage.²⁶ For Weber, management meant exercise of control based on knowledge. The goal was to push the management of organizations towards a more logical way of operating. Rules, not people, and competence, not favouritism, were to be the cornerstones of bureaucratic management. This was seen as the blueprint for achieving organizational efficiency. In "Weberian Bureaucracy and the Military Model" (1970), Robert D. Miewald reproduces Weber's concept of military administration from his scattered references, concluding that the military organization was the ultimate in bureaucratization, "representing the culmination of the dominant trend in Western history."²⁷ Both the military and business developed a rationally-ordered discipline necessary to achieve bureaucratic decision-making. Moreover, the military structure was "the model of coordinated activity on the basis of calculation, that frame of mind which for Weber characterized the development of Western rationality...[where rationality meant the] belief in the possibility of quantitative calculation even in the relationships among men."²⁸

²⁵ Soeters, et al., *Managing Military Organizations*, p. 296.

²⁶ Daniel A. Wren, *The Evolution of Management Thought*, 3rd ed. (New York: Wiley, 1987), p. 193.

²⁷ Robert D. Miewald, "Weberian Bureaucracy and the Military Model," *Public Administration Review* 30, 2 (Mar-Apr 1970), pp. 130.

²⁸ *Ibid.*, p. 130.

The faith in objective calculation was a distinguishing feature of the Weber's view of the Western world, which operates on the idea that predictability and laws are the foundations of control and form the basis for a bureaucratized world. Weber spoke of the bureaucratization of society with a degree of despondency, which extended to the military in which leadership developed authority to the highest degree that allowed for strong discipline and adherence to organizational hierarchy. Organizational discipline found its earliest articulation in the military and allowed for leaders to exercise their authority over men who are both uniform and predictable.²⁹ Thus military organizations, at their root, are highly bureaucratic institutions built on concepts of rationality and predictability that come to be associated with the large industrial firms and organizations of the late 19th and early 20th century.

Weber's theories of bureaucracy fall in line with the Internal Process model outlined in the introduction. According to this model, managers monitor and coordinate activities to ensure predictability and ties into the integrative function of organizations while structural elements of bureaucracy allow for integration and coordination of activities and establish the means for this goal. Weber's theories also tie into the Rational Goal Model as the structure of bureaucracy serve to achieve the value of efficiency and productivity. Clearly defined duties, statutes, and job descriptions form the foundation for responsibilities, and hierarchies and chains of command enable managers to plan and direct the work of subordinates.³⁰ Organizations thus arrange themselves structurally to achieve results and create stability in turbulent environments. If one includes military organizations as part of Weber's explanation for the nature of bureaucratic institutions, then military organizations can likewise be seen as exhibiting features of the Internal Process and Rational Goal Models. Certainly, the values of coordination, clearly defined duties and chains of command, and the direction of subordinates are features of military institutions. The structure of military organizations is clearly designed to help

²⁹ Ibid., p. 130.

³⁰ Jonathan R. Tompkins, *Organization Theory and Public Management* (Belmont, CA: Thomson Wadsworth, 2005), p. 59.

achieve these features in the process of achieving the ultimate goal of ensuring the peace and security of the state. Moreover it is true to say that militaries are concerned with efficiency and productivity within their management, administration and execution of duties, although controversy did arise in the Cold War when it was argued that private sector uses of these terms (i.e. concern with the financial bottom line) came to dominate.

What is evident is that although the Cold War pushed militaries to new levels of bureaucratic complexity, military organizations have been highly bureaucratic for centuries. And where bureaucratic organizations form the basis for management investigations, militaries can not only serve to contribute to our understanding of organizational management, but conclusions and theories developed might even be applicable to the military context. The historical evolution of military institutions can be seen as fitting in with Weber's analysis of increasing rationalization and bureaucratization of the Western world. This raises some doubt as to whether military organizations are entities which will (and should) remain completely foreign to management theorists and ideas. It also raises questions about the degree to which militaries are separate, unobservable institutions, where theories and concepts developed outside of it are inapplicable.

RATIONALITY

Industry & the Pursuit of Efficiency

As rationalization is a thematic component to the military reforms, it is important to examine the origin of the idea and its connection to the military. There are two different conceptualizations of rationalization. First, economic rationalization represents an attempt to change workflow based on a set of published rules. In this context, rationality is about calculating the necessary means to achieve goals and requires understanding the relationship of men to one another as well as to their working environment and the tools they use. In sociological terms, rationalization is about decision-making

based on calculation, not based on tradition, value, or emotion. The goal of rationalization is to achieve the same or better results with fewer inputs and in both cases it is about the application of practical knowledge and the pursuit of efficiency. Much of what Hellyer was driving towards with his reforms in the 1960s was the rationalization of management in DND. What is more, it was not just about increasing efficiency of administration and management, but also about achieving a greater degree of certainty and predictability in the defence environment, as well as in the process and outcomes of policy-making.

This quest for rationalization must be understood within a wider context as such an effort is rooted in a long tradition of management thought. Rationalization has been a core theme within the business and management histories, and while it is correct to point out that the history of rationalization has existed largely within a private sector context, it must also be remembered that some of the earliest rationalization efforts in industry were driven by military considerations. Where Hellyer's reforms have been criticized as being overly optimistic in the application of practical and philosophical concepts from business, much of the core philosophical underpinnings were inspired by the military before spreading to a wider range of applications in the private industry, and before their re-application to military defence planning in the 1960s.

The goal of efficiency, certainty, and predictability can be seen in military manufacturing in the U.S. during the latter stages of the 19th century, which gave rise to what is known as the 'American System of Manufacturing.' This system was characterized by the use of interchangeable parts and the use of mechanization and machine tools in industrial production, allowing for both efficient use of labour as well as a faster, more economical output. This system laid the groundwork for mass production in the U.S. and the rapid development of management and organizational concepts that sought greater rationalization of production operations. Merrit Roe Smith's history of the Harper's Ferry Armory (in operation from 1798 to 1861), which operated in conjunction with the national armory in Springfield, Massachusetts, and under the control of the U.S. Ordnance Department, shows that the

military was a principal source for new ideas applied to industrial production as well as the importance of the military influence as a prime mover in areas beyond military strategy.³¹ Smith noted, however, that economic savings had little to do with initial application of machine tooling to arms production. This was primarily a result of the military desire for uniform, precise weapons which could be exchanged in total, or in part, whenever needed—in other words, predictability and control over the use and maintenance of arms in the field. While this early example of military rationalization is within the realm of industrial manufacturing, not general bureaucratic organization of the military institution itself, it exists somewhat separately from the economic motivation that drove private sector industrial managers. Instead, it was driven by the military desire for rational operations in general.

When taking into account the debate over the compatibility between military and business management concepts, the American System that ushered in a new era of business manufacturing was partially rooted in the military itself. The military was a source of new ideas born out of necessity. Standardization of production units and interchangeable parts not only allowed for more efficient production, it allowed for a more efficient and effective service life of firearms. The production techniques and the attention to precision rapidly spread to other manufacturing sectors and led to the development of a variety of consumer goods, such as sewing machines, typewriters, bicycles, and automobiles. The mechanization of production, although greeted with skepticism and even outright opposition, did catch on in private industry. It was representative of a process of rationalizing industrial production that was shown to be economically effective and efficient, albeit not in a widespread way until the mid-19th century. And not only was production seen as something to be rationalized, it also involved the entire environment, from the factory itself to the interaction of the labourers within its walls. Labour was at the heart of the factory rationalization process, representing a quest for a more effective organization which would improve the control, predictability, and efficiency of outcomes. Lindy

³¹ See Merritt Roe Smith, *Harper's Ferry Arsenal and the New Technology* (Cornell Univ. Press, 1977).

Biggs's work *The Rational Factory* (1996) demonstrates how rationality was not just a goal of production, but it was a guiding principle of organization as well. The factory itself became the organizing and controlling mechanism, conceptualized as part of the technological system of production with the goal of contributing to elimination of inefficient process. A rational factory was one that was itself a smooth, automatically operating machine, which demanded precision and predictability from the workers who were employed on the floors within. Individual operations were designed to increase productivity through the reduction of worker skill and also featured the standardization and regulation of the whole production process. Throughout the 19th century, factory owners, managers, and engineers all experimented with new organizational methods, from the way the materials entered a factory, to the way they were handled and sent out. Predictability and the practical application of knowledge was the means of eliminating waste and establishing standard results.³² While military organizations are not factories, the idea of rationalization was not simply a philosophy of fabrication, but became infused within the very structure of an institution's design. In the 1960s and early 1970s, the organization of defence was targeted as a way to achieve new degrees of rationalization.

The subject of management received little attention during the early stages of the Industrial Revolution due to the fact that the handicraft system of production provided little need for theory. It was the rise of scientism in the latter parts of the 19th century that helped prompt the academic study of management and a number of pioneers applied the scientific method to industry. Although Fordism represented a unique conception of production management, perhaps the best known form is Frederick Winslow Taylor's system of scientific management—popular from the 1890s to the 1920s, and an important step in the historical development of management philosophy. Scientific management represented the scientific study of management functions for the purpose of rational planning, in order to enable a more efficient task performance. It brought science to bear on management, avoiding doing

³² See Lindy Biggs, *The Rational Factory: Architecture, Technology, and Work in America's Age of Mass Production* (Johns Hopkins University Press, 1996).

things simply because it was the way they have always been done. In other words, it emphasized empiricism above tradition—a perspective that echoes the advocates of defence management reforms during the unification period. It was with the worker in mind that Taylor devised his system that focused on the responsibility of management for setting standards, careful planning of work, and designing work to allow for the maximum productivity.³³ Ultimately, Taylor’s scheme of scientific management was appealing due to its logical methodology, its simplicity, and that fact that it was rooted in the primacy of planning. Sound planning of both how to perform tasks and how to manage them provided the groundwork for more efficient operations. Science, not tradition, was representative of best practices. Planning and control was centralized, work was routinized, incentives were established, and everything was to be managed. Jonathan Tompkins explains that scientific management was a way of managing that transcended factory floors: as a philosophy devoted to eliminating waste, systematizing operations, using performance data, it has value that can be applied to any and all organizations.³⁴

Regarding organizational effectiveness, scientific management emphasizes the values associated with the Rational Goal and Internal Process models—efficiency, productivity, and predictability. Control is valued over flexibility, and planning and goal setting are the means towards achieving the primary aims of efficiency and productivity. In line with the Internal Process model, Taylor’s theories used information management and communication systems to ensure that processes are carried out in rational and predictable ways.³⁵ Although it can be said that there exist limitations to the concept as a framework for public management which is characterized by political uncertainties, ambiguity of goals, and difficulties in measuring outcomes, some of the core values (such as eliminating waste) and tools (performance data) were present in the post-war defence reforms.

³³ Wren, p. 111.

³⁴ Tompkins, p. 86, pp. 93-94.

³⁵ Ibid., p. 87.

In contrast to Taylorism, which saw workers as economic beings, motivated by incentives, other theorists developed slightly different perspectives. For example, the human-relations school of management thought argued that environmental conditions were a key factor in productivity; alterations to the working environment, whether it is lighting or social interaction, makes the environment more pleasant for workers and is a prime motivator. Experts such as Elton Mayo and Fritz Roethlisberger argued that behaviour methods and adjustments to workplace provide more cooperation from workers than monetary incentives. There were some who felt that workers were more complex than Taylor understood them to be—that man was a problem-solver, making rational decisions. Workers are adaptable to circumstances and simply operate based on whichever decision will benefit them most. Workers were thus seen as rational creatures, selecting among alternative choices, and performing their own internal cost-benefit analysis, not just cogs in the machine.³⁶

While Taylor rationalized task performance, administrative theorists sought the rationalization management and organization as a whole, and called for a normalized administrative structure that is rooted in clear lines of authority, divisions of labour among departments and units, and the delegation of authority. One such theorist was the French industrialist, Henri Fayol. Having recognized the absence of a body of literature on administrative/management thought, Fayol set out to develop a theory that could be put into practice in his seminal work *General and Industrial Administration* (written in 1916, but first translated into English in 1949), identifying universal management functions.³⁷ Another important administrative theorist was James Mooney. Mooney was a VP at General Motors and along with his

³⁶ Hutchinson, pp. 8-9.

³⁷ He developed four components to his theory. First were organizational activities in which management was only one activity along with technical, commercial, financial, security, and accounting activities. The second component was management functions in which he identified key functions common to all management: planning, organizing, commanding/leading, coordination/staffing, and controlling of activities within an organization. These were to be universal functions, not solely confined to the realm of industrial management and even applicable to the public sector. Third, he articulated 14 principles of administration. And finally, he developed methods for putting his principles into action (i.e. implementation), which included surveys, action plans, statistical reports, minutes, and organizational charts. Essentially, Fayol's theory of management worked in this way: administrative principles guide functional decisions, while administrative methods provide the means for implementing them. Tompkins, pp. 98, 101.

collaborator, Alan C. Reiley, they established their own principles of organization which were to be applicable to all forms of institutions. The principles were to be the key to efficient application of human effort which required efficiency of the entire organization, not simply production lines as Taylor had believed. Formal structures based on sound principle were an organization's best means of protection against dysfunction. The administrative management theories are associated with the Internal Process model, and to a lesser degree, the Rational Goal model. Their emphasis on information management and the scalar chain provides mechanisms for control and stability. Moreover, forecasting and planning are key elements, conforming to values associated with the rational model.

What needs to be taken away from this discussion is that these theorists and their ideas are the intellectual predecessors of the management theorist who emerged in the Cold War era. The management theorists of the 1950s and 1960s, at the same time that the Canadian military was increasingly evolving to cope with the complexities of the Cold War world, were the intellectual heirs of men like Taylor, Fayol, and Mooney. Although, in time, scientific management and administrative theories lost favour, the quest for efficiency, effectiveness, and rational management that continued in business as well as the armed forces can be traced back to them. Thus, the goals of management in defence, which included careful study and planning as opposed to operating based on tradition, dates back decades. Whether defence actors such as Hellyer were aware of it or not, these men discussed above were their intellectual predecessors and their theories and perspectives overlapped, to a degree, with what was happening in the defence sector.

Rational Decision-Making

Rationality is not, however, just a philosophy of production or management; it is also a perspective of decision-making theory. The rational model posits that outcomes are determined by careful considerations of means and ends—i.e. governments choose security objectives based on clearly

defined goals which are then met with policies that have been designed after consideration to all possible options, and based on external and internal constraints; But there is some uncertainty about the degree to which issues of public management, especially defence, can be seen as operating within a rationalistic decision-making framework. Decision-making is complex and defence issues must cope with competing parties—for example, the Army, Navy, and Air Force compete for funds and to get their program and technological needs set as priority over others—as well as the host of political considerations. Thus, individuals and departments act rationally based on their needs and goals. But this inevitably causes conflict, precluding a rational way of deciding between options and alternatives. As Alan English puts it: “those seeking some rational process to guide something as complex as defence policy search in vain.”³⁸ This makes defence, by necessity, a world of compromise and bargaining.

This style of decision-making conforms to the *bureaucratic politics* model, characterized by a “messy” process where outcomes are less relevant. What is of greater interest are inputs—the host of departments and individuals who complicate the process through differences in opinions, goals, and functions. The bureaucratic approach sees no single actor but many. These actors focus on many issues instead of one and make decisions based on bargaining and “pulling and hauling,” instead of a single rational choice. Thus, policy is not ‘above’ politics.³⁹ Decisions are based on bargaining within a hierarchy, and success is “about where you sit” within the organization and how the organization enhances your power (or how it has the opposite effect of decreasing your power).⁴⁰ Where political

³⁸ Allan D. English, and G.E. (Joe) Sharpe, *Principles for Change in the Post-Cold War Command and Control of the Canadian Forces* (Kingston, ON: CF Leadership Institute, 2002), p. 88.

³⁹ Graham T. Allison and Morton H. Halperin, “Bureaucratic Politics: A Paradigm and Some Policy Implications,” *World Politics* 24, Supplement: Theory and Policy in International Relations (1972), p. 43. International security policy was the specific lens of Allison and Halperin. For more on the bureaucratic approach to policy analysis, see also William B. Fox, “The Politics of Procurement: The low level air Defence Decision of 1986,” in *Canada’s Defence Industrial Base*, ed. Haglund, David G. (Kingston: Ronald P. Frye & Company, 1988): 159-161; Kim Richard Nossal, “Allison through the (Ottawa) Looking Glass: Bureaucratic Politics and Foreign Policy in a Parliamentary system,” *Canadian Public Administration* 22 (Winter 1979), pp. 610-626; and Lawrence Freeman, “Logic, Politics and Foreign Policy Processes: A Critique of the Bureaucratic Politics Model,” *International Affairs* 52 (July 1976), pp. 434-449.

⁴⁰ Douglas Bland, *Chiefs of Defence: Government and the Unified Command of the Canadian Armed Forces* (Toronto: Canadian Institute of Strategic Studies, 1995), p. 4.

consequences are often paramount, and limited resources can create inter-service rivalries over what is available, defence becomes an environment of bargaining as opposed to a structure based on command. Bland characterizes the entire process as “random management system” in which needs drive decisions in a “haphazard” way, as opposed to a “rational management” system—a characterization shared by other experts, such as David Detomasi.⁴¹

A vast body of literature has attempted to explain how large organizations function and how decision-making is accomplished within bureaucracies. Much was written on decision-making in the post-Second World War period, and it developed through a number of different stages: preoccupation with rational decision-making model; critiques of the rational tradition; alternatives to the rational tradition; and the development of a multi-perspective view.⁴² In the late 1940s and early 1950s the literature focused mainly on the rationality model—man as economically rational.⁴³ Largely inspired by Weber, the view was that decisions are “a deliberate act of selection by the mind, of an alternative from a set of competing alternatives in the hope, expectation or belief that the actions envisioned in carrying out the selected alternative will accomplish certain goals.”⁴⁴ In other words, decision-makers are able to look at all outcomes, assess each, and make the optimal choice.⁴⁵

Criticisms of the rational model of decision-making emerged given the realization that neither man nor organizations were capable of making decisions based on all possible alternatives, paving the

⁴¹ Ibid., pp. 4-5. See also Bland, *The Administration of Defence*, p. 175; and David Detomasi, “Re-engineering the Canadian Department of National Defence: Management and Command in the 1990s,” *Defense & security Analysis* 12,3 (1996), pp. 327-346.

⁴² Deborah Lines Anderson and David F. Anderson, *Working Paper: Theories of Decision Making: An Annotated Bibliography* (Cambridge: Alfred P. Sloan School of Management, Massachusetts Institute of Technology, 1977), p. 3. What is more, decision-making has been explored from perspectives other than the rational tradition, such as organizational and psychological.

⁴³ See: Carl J. Friedrich, *Rational Decision* (New York: Atherton Press, 1964); and Max Weber, *The Theory of Social and Economic Organizations* (Glencoe, Ill: Free Press, 1964).

⁴⁴ Peter C. Fishburn. “Personalistic Decision Theory: Exposition and Critique” in Henry S. Brinkers, ed., *Decision-Making: Creativity, Judgement and Systems* (Columbus: Ohio State University Press, 1972): 19, quoted in Deborah Lines Anderson and David F. Anderson, *Working Paper: Theories of Decision Making: An Annotated Bibliography* (Cambridge: Alfred P. Sloan School of Management, Massachusetts Institute of Technology, 1977): 3.

⁴⁵ Anderson and Anderson, p. 11.

way for a number of experts who posited alternatives and revisions to the rational model, such as Richard Cyert, James March, and Herbert A. Simon. These experts sought to understand how different factors and conditions affected a decision-makers quest to rationally decide between alternatives. Such ideas were raised by Herbert Simon, a political scientist at the Illinois Institute of Technology, whose most famous work, *Administrative Behaviour* (1947), argued that a social element was needed in addition to understanding man as rational. Simon collaborated with James March in the 1950s to produce *Organizations* (1958) in which they argued that the classical conception of traditional decision-making was limited: Rational decisions require all alternatives to be perceived, but in organizations and life, not all of the alternatives are known. Only a limited number of options can be considered at a time, the first one to meet the minimal criteria is usually adopted. Rational decision-making is made within the limits of uncertainty, and this uncertainty represents boundaries which affect the degree to which decisions can be optimized.⁴⁶ Simon and March represented a departure from early theorists. Early management theorists such as Samuel Slater and Henri Fayol stressed concepts such as unity of command, defined hierarchies, division of labour, and formal organizational anatomy. This is because of the need to bring economic, technological, human, and physical resources together in order to achieve goals.⁴⁷ March and Simon worked in a period in which formal blueprints and organizational hierarchy became less important than behaviour and understanding of people. Instead, organizations were seen as complex systems of mutually interacting human, physical and procedural elements. Interaction, not hierarchy, became their focus; flexibility, not formality was emphasized; and influence, not authority, became the manager's tools for achieving results.⁴⁸

Out of the work developed by Simon and March evolved a multiple-perspective approach to understanding how decisions are made in organizations, which even includes decidedly *non-rational*

⁴⁶ Richard H. Hall, and Pamela S. Tolbert, *Organizations: Structures, Processes, and Outcomes*, 9th ed. (Pearson Prentice Hall: Upper Saddle River, N.J.: 2005), p. 309.

⁴⁷ Wren, p. 266.

⁴⁸ Ibid., p. 389.

perspectives.⁴⁹ Works such as Graham T. Allison's "Conceptual Models and the Cuban Missile Crisis" (1969) and *Essence of Decision* (1971)⁵⁰ asserted the idea that decision-making is not understood through one theory but it is in fact multidimensional (much like management) and thus must be examined from different angles and points of view for full understanding. This is because the process involves complex and intertwined dimensions. Using the decision-making process of the Kennedy Administration during the Cuban Missile Crisis as a case study, *Essence of Decision* outlined three theoretical approaches: the rational actor model, the organizational (bureaucratic) process model (posits that decisions are not necessarily rational, but made based on bureaucratic procedures that excluded certain information and viewpoints), and the governmental politics model (where decision-making was characterized by negotiation and compromise between competing interests).⁵¹

Robert McNamara & Systems Analysis

The final stage of the evolution of decision-making theory that developed in the post-Second World War period witnessed a proliferation of technical works in the form of game theory, statistical decision theory and computer-based decision aids, and mathematical programming and simulation.⁵² U.S. Secretary of Defense Robert McNamara's Planning, Programming, and Budgeting System, for example, largely fits within this framework. McNamara epitomized the quest for control, predictability, and rational management. From an early age he developed a quantitative way of thinking and was

⁴⁹ For example: Gore, William J. and Dyson J.W, eds., *The Making of Decisions; A Reader in Administrative Behavior* (New York: The Free Press at Glencoe, 1964); and Herbert A. Simon, *Models of Man: Social and Rational, Mathematical Essays on Rational Human Behavior in a Social Setting* (New York: John Wiley and Sons, Inc., 1957);

⁵⁰ Graham T. Allison, "Conceptual Models and the Cuban Missile Crisis," *Political Science Review* 63 (September 1969): 689-718; and *The Essence of Decision: Explaining the Cuban Missile Crisis* (Boston: Little, Brown and Company, 1971).

⁵¹ Detomasi, p. 335.

⁵² Anderson and Anderson, p. 6. See: Herbert A. Simon, *Models of Man: Social and Rational, Mathematical Essays on Rational Human Behavior in a Social Setting* (New York: John Wiley and Sons, Inc., 1957); Willem K. Brauers, *Systems Analysis, Planning and Decision Models: With Special Reference to National Defense* (Amsterdam: Elsevier Scientific Publishing Co., 1976); John Little, "Models and Managers: The Concept of a Decision Calculus," *Management Science* (April 1970); and John P. Crecine, *Governmental Problem Solving: A Computer Simulation of Municipal Budgeting* (Chicago: Rand McNally and Co., 1969).

always curious about how the logic of mathematics could be applied to problem-solving, whether philosophical or political. In her unofficial biography of Robert McNamara, *Promise and Power* (1993), science journalist Deborah Shapley states that he talked and thought in numbers. While attending Harvard Business School as a graduate, he became increasingly interested in a new field of specialization that went by many names: financial control, management control, statistical control, or control accounting. It was the focus on control and predictability that drew him in. After graduating with top marks, he took his skills in control accounting (which had roots in American business, particularly Du Pont), and applied them to the military—first training new military officers in statistical control and then working for the U.S. Air Force as a consultant, seeking to make operations more efficient, displaying the power of statistical analysis, and proving the efficacy of the meaning of figures in decision-making. After the war, he, along with a number of other colleagues, went to work at the Ford Motor Company. Seeking to improve the efficiency and effectiveness of management there, the *Whiz Kids*⁵³, as they came to be known, applied many of the same skills and techniques they developed during the war to the auto industry. In building a financial control system McNamara and the “Whiz Kids made over Ford with the tools of modern finance.”⁵⁴ The system was designed to infuse a greater degree of control over management and operations. It controlled resources, assured profits, and sought to decentralize responsibility while at the same time centralizing planning.⁵⁵ Power was to be concentrated at the top as only the top managers had access to the information needed to make decisions. When President Kennedy offered McNamara the position of Secretary of Defense, he accepted on two conditions: that he would be free to run the department as he saw best; and that he would be free to appoint whomever

⁵³ See John A. Byrne, *The Whiz Kids: The Founding Fathers of American Business—and the Legacy They Lefts Us* (New York: Doubleday, 1993).

⁵⁴ Deborah Shapley, *Promise and Power: The Life and Times of Robert McNamara* (Boston: Little, Brown and Company, 1993), p. 49.

⁵⁵ *Ibid.*, p. 67.

he wanted to his staff. In 1960, McNamara left Ford, after having served as the company's first president from outside the Ford family for only a matter of weeks.

The key to McNamara's approach to defence management was the subjecting of military problems to strict analytical scrutiny, applying the same kinds of approaches he developed early on in his career and which he applied to both the Air Force and Ford. Defence issues would not only be subjected to rational and analytical analysis, but this would be done so in reference to force requirements, military strategy, and defence budgets would be balanced in accordance with foreign policy. This was a central component to his decision-making system, known as the Planning Programming, and Budgeting System (PPBS)—an approach that Hellyer would introduce in Canadian defence in its own unique form. PPBS established a process that allowed for the identification, costing, and assignment of resources for programs, while at the same time forecasting the costs over long timelines. It not only allowed for planners to be forward looking with respect to cost and finance, but enabled defence to balance military and foreign policy. Political scientist and management advisor Clark Murdock explains that the intention of McNamara's approach sought to fix the lack of "rational foundation for military force planning" in the policy process, as well as the goal of improving "the quality of decisions by applying improved analytic techniques."⁵⁶ In contrast to a decision-making environment that is characterized by compromise between actors and institutions, PPBS was intended to provide explicit criteria upon which to base decision-making. From national goals, programs to achieve them were developed, as were alternatives and criteria upon which to judge those alternatives. Bernard Brodie says of McNamara, that he was a "restless seeker" of ways to understand the effectiveness of alternatives—he wished to know specific reasons for views and opinions and the logic behind them.⁵⁷

⁵⁶ Clark A. Murdock, *Defense Policy Formation: A Comparative Analysis of the McNamara Era* (Albany, NY: State University of New York Press, 1974), p. 44.

⁵⁷ Bernard Brodie, "The McNamara Phenomenon," *World Politics* 17, 4 (July 1965), p. 672.

Perhaps the most important idea behind PPBS was the use of an analytical staff to examine problems, prepare and process information, and analyze facts.

McNamara instituted this kind of scientific approach when he established the Systems Analysis Office. The office included economists, political scientists, philosophers, engineers, and mathematicians. Some of these men were military while others were civilian. Although the office centred on “computerism,” Alain Enthoven, the U.S. official in charge of systems analysis, stated that “good analysis isn’t computation; it is formulating and defining the problem, clarifying objectives, and determining which assumptions ought to be considered.”⁵⁸ Systems Analysis was based on a reasoned approach to problem solving, or “quantitative common sense,” as McNamara put it. Rooted in welfare economics and cost-benefit analysis, systems analysis essentially sought to aid decision-making through two principles. First, decisions were to be considered in a broad context (the “system”). And second, it sought to reduce the complexity of problems and issues to their component parts in order to aid in understanding (the “analysis”). Systems analysis was a way to untangle the complexity of defence problems in order to study them and design the best course of action, and it was intended to make for more efficient choice: “that is allocation of scarce resources in such a way as to maximize military output.”⁵⁹ The elements of the approach included the definition of objectives and goals; the articulation of alternative means to achieve these goals; the costs associated with all alternatives; a situation model; and criteria upon which to make the decision. When boiled down, systems analysis is a process that allows for the comparison of alternatives in terms of cost and benefits and provides statements as to the criteria upon which the comparison is made. As Murdock explains, it was not intended to replace judgement but to increase the quality of information that was available to decision-makers.⁶⁰ The

⁵⁸ Enthoven and Smith, p. 165.

⁵⁹ Murdock, p. 54.

⁶⁰ Ibid., p. 57.

primary functions of systems analysis in the Cold War were to assist in the allocation of scarce resource within and among programs, as well as between defence and other national needs.

When understood in relation to the theories of decision-making, such efforts were representative of a perspective that aligns with a rational outlook. Systems analysis presupposes that people can be problem solvers and can make decisions by collecting available information and known alternatives. There are those at the time who disagreed with the applicability of economic theory to decision-making and the ability of decision-makers to know alternatives and consequences, including the ability to develop criteria upon which to base decisions about alternatives. Instead, policy-making is seen as a bureaucratic process of bargaining and consensus-achievement where centralization is less workable. Defence is an environment where a low level of understanding of the complexities of war requires incremental change based on adjustment and adaptation—decisions in policy are many, affecting change in a small scale.⁶¹ Complexity, dispersion of power, diverse group of political participants—these are real inhibitors of comprehensive rationality, negating the ability to make clear, comprehensive, forward moving decisions and change. However, even set against the concept of bounded rationality, that known alternatives are limited and thus so is rational decision-making, systems analysis as applied to defence was a step towards reducing those limits and strove to come as close as possible to full, rational, deductive decision-making.

MANAGEMENT AND CONTROL

Defence under McNamara was not only about rational management decision-making, but was also rooted in firm control over the process. Echoing the same ideas and intentions as Hellyer did in Canada, McNamara stated:

I spoke much more bluntly about intending to shake things up. I made it clear that I was determined to subordinate the powerful institutional interests of the various armed services

⁶¹ Ibid., pp. 59-60.

and the defense contractors to a broad conception of the national interest. I wanted to challenge the Pentagon's resistance to change, and I intended that big decisions would be made on the basis of study and analysis and not simply by perpetuating the practice of allocating blocs of funds to the various services and letting them use the money as they saw fit.⁶²

In fact, control was a major theme of management in the Cold War period. David Noble's *Forces of Production* (1984)⁶³ examines this idea in relation to the more subtle aspects of the military, political, industrial, and scientific relationship. He argues that the work of wartime scientists derived power not only from their intellect, but from the political and military establishments which made use of their innovations. The capacity of scientists and engineers to push the boundaries of what was possible, coupled with the power endowed upon them by those in command, produced a shared sense of total control. Understanding the obsession with control, which was a core concern with the managers of the Industrial Revolution and which continued in the Cold War period, is aided by an awareness of James Beniger's *The Control Revolution: Technological and Economic Origins of the Information Society* (1986).⁶⁴ Regarded as a classic sociological and historical work, the study contends that the origins of the information age were not in the development of communication technologies, but instead emerged in the late stages of the 19th century. The increasing speed of the material processing system during the Industrial Revolution had the effect of creating a crisis of control as innovation in information processing and communication technologies could not develop at a pace quick enough to match manufacturing and transportation.⁶⁵ Since the beginning of the crisis, control was established by the enlargement of

⁶² Robert McNamara and Brian VanDeMark. *In Retrospect: The Tragedy and Lessons of Vietnam*. (New York: Vintage Books, 1995), p. 23.

⁶³ David Noble, *Forces of Production: A Social History of Industrial Automation* (New York: Knopf, 1984).

⁶⁴ James Beniger, *The Control Revolution: Technological and Economic Origins of the Information Society* (Cambridge, Mass.: Harvard University Press, 1986).

⁶⁵ The development and expansion of markets beyond small isolated ones disrupted the ability for producer and customer to communicate due to the disparate, diffused markets, disturbing economic functions. New means of communication and information handling were needed to process the immense flow of information and materials. This was done through new branch offices, transportation lines, and complex systems of manufacturing—thus facilitating a revolution over control. As such, computers and other modern technological information processing machines that developed in the post-Second World War period can be understood as the most recent installment of a continuation of

bureaucracies—they themselves control technologies and solutions to the crisis of control. As a component of this technology, rationalization is added. Rationalization represents a reduction of the amount of information to be processed and therefore helps control the overwhelming rise of information that bureaucracies face. This has led to the development of the information society. Information machines (such as computers) and information services (finance or insurance) are characteristics of our daily lives, and emerged in response to the lack of control. Thus, Western society has been engaging in a quest for ever-greater control for most of the 20th century. Information processing emerged as the essential aspect to purposeful activities because knowledge is considered power.⁶⁶

It is easy to understand how the themes of control and information are paramount in defence. In terms of administration and management, defence establishments are massive and complex organizations. In the post-war period, information gathering was paramount for strategic planning. Reconnaissance and intelligence of enemy forces were essential and scientific advances and technologic innovations were needed, requiring complex defence scientific establishments. Moreover, the military industrial complex created new information and communication networks. All of this had to be done within the overall context of federal budgets and competition for resources with other areas of government spending. Control is thus a key concern for defence. To a large degree, the defence management revolution in the 1960s in Canada was a control revolution—a revolution of control over efficiency and effectiveness. As we will be seen, the management tools development by in Canada, were tools of control to varying degrees.

The purchase over the defence environment sought by managers, politicians, military men, and science in the post-war world was fueled by innovations like computers, offering further control and predictability. This was itself rooted in the growing importance of scientist to military planning. During

the need to manage this control revolution. See James Beniger and Alfred Chandler, *The Control Revolution: Technological and Economic Origins of the Information Society* (Cambridge, Mass.: Harvard University Press, 1986).

⁶⁶ Beniger, *The Control Revolution*.

the 1930s and 1940s the Canadian and U.S. governments (as well as the private sector) had to respond to two very significant strategic threats to the very fabric of their societies—the Great Depression and the Second World War. Both were tackled successfully and both required a concerted strategic focus combined with innovative, practical, and effective management practices. These longer term trends and the growth of organizations after the war, including government, military, non-governmental and private, required a renewed attention to general management theory because the specialists required to run large-scale bureaucratic organizations (and the general increased complexity) made management that much more important. In particular, during and following the Second World War, experts were needed to apply, develop, and produce wartime technologies on a national and international industrial scale not previously realized (a factor which led to new relationships between the military and industry), both in the private sector as well as their continued use in defence. It was the increased number of variables needing to be taken into account in decision-making that pushed management thought from shop level perspectives to more general theory.⁶⁷ New tools emerged such as advanced statistics and mathematics, linear programming, queuing theory, game theory, decision trees, and simulations as management became increasingly oriented towards long-term strategic planning. The foundation of this approach was the scientific method of problem-solving. Decision theorists sought control and predictability, combining economic concepts of choice and modern quantitative tools. Operations were simulated by using computers and mathematics: “The search for order through quantifications is an attempt to quantify variables in industrial and organizational problems, to enhance the measurement and control of performance...”⁶⁸ This was reflected in defence.

Originally, the role of the scientist in the military sphere was to be the inventor of arms and weapons. However, as the value of the scientific method began to be more generally recognized,

⁶⁷ Wren, p. 348.

⁶⁸ Ibid., p. 398.

military men began to call on the scientist for advice in issues of an operational nature.⁶⁹ Automatic Data Processing began in the mid-1940s and was, from its inception, closely related to armed forces. Military science during the Second World War contributed to decision-making through not only the use of computers, but also through techniques which sought to understand problems through quantitative analysis. Operational Research (OR) and Operational Analysis (OA) became the tools to improve the operational effectiveness of the military.⁷⁰

Operational research seeks to determine the optimum solution for a fixed level of resources, where systems analysis takes a broader approach, examining alternatives and exploring their implications. For OR, objectives are given and it is more focused on analyzing in depth the implications of a single set of assumptions, as opposed to exploring a range of alternate assumptions. The scientific method of observation, measurement, hypothesis and experiment were the basis for OR, which was concerned with prediction of the most likely outcomes of future strategy, policy, and operations. Operational Research was used in the evaluation of weapons in order to understand their functionality. It was also used in the analysis of operations to understand the degree to which these weapons and equipment meet the tactical and operational requirements, and the extent to which tactics dictate the weapons chosen. In slight contrast, operational *analysis* focuses on the collection and manipulation of data already known.⁷¹ In both cases, they were important tools of information collection for improved decision-making. Operational Research had been well established within the Canadian military and was used through the Second World War.⁷² Sixty Canadians participated in wartime OR and after the war the

⁶⁹ John C.T. Downey, *Management in the Armed Forces: An Anatomy of the Military Profession* (Maidenhead, Berkshire, England: McGraw-Hill Book Company (UK), 1977), p. 136.

⁷⁰ Sometimes referred to as Operations Research/Analysis.

⁷¹ Downey, p. 145. For a history of Operational Analysis origins in Britain, see p. 148

⁷² See Terry Copp, *Cinderella Army: The Canadians in Northwest Europe, 1944-1945* (Toronto: University of Toronto Press, 2006); N.W. Morton, "A Brief History of the Development of Canadian Military Operational Research," *Operations Research*, 4, 2 (1956), pp. 187-192.

DRB established a permanent OR group in 1949.⁷³ The use of such techniques began to move away from assessments of specific operational equipment and activities to the evaluation of overall systems and strategies. For example, instead of being concerned with a specific technology, such as the effectiveness of a new kind of bomb sight, in the early Cold War OR began to be used to evaluate larger systems, such as air defence systems which included radar, interceptor forces, data handling , etc. This represented an advance of OR as a useful branch of military science. More generally, it represented the advancement of the role of civilian analysts and the reliance on their expertise as important for decision-making.

Within both the military as well as industry (which were becoming increasingly intertwined), enthusiasm over the ideology of total control was boundless. In context of the development of Numerical Control in industry, David Noble states: “And here the new outlook was promoted by an army of technical enthusiasts, peddled by the vendors of war-born gadgetry, subsidized by the military in the name of performance, command, and national security, legitimized as technical necessity, and celebrated as progress.”⁷⁴ Within industry, managers further developed their desire for efficiency. Work simplification, capital as opposed to labour, and control over production were all heralded as not only the means of efficiency but as a right of management. According to Noble, it was the overlapping of managerial and military communities that was at the root of this. The result was “a preference for formal, abstract and quantitative approaches to the formulation and solution of problems, an obsession with control, certainty, and predictability and a corresponding desire to eliminate as much as possible all uncertainty, contingency, and change for human error.”⁷⁵ Automation, computers, and digital techniques were seen as the key to overcoming reliance on men and workers. Implicit in this view is a devaluation of the skill of workers and the preoccupation with the idea of control—over both worker

⁷³ George Lindsey, “Operational Research and Systems Analysis in the Department of National Defence,” *Optimum* 3, 2 (1972), p. 32.

⁷⁴ David F. Noble, *America by Design: Science, Technology, and the Rise of Corporate Capitalism* (New York: Knopf, 1977), p. 57.

⁷⁵ *Ibid.*, p. 191.

activities, as well as production outcomes. Management control was equated with efficiency.

Simplification, deskilling, and division of labour were all the means to achieve this goal.

David Noble's work shows the ascendancy of management in the post-Second World War world (albeit in the American context).⁷⁶ His arguments—that the new generation of managers in post-war industry (largely supported by the military) represented the expropriation of skill and knowledge that once belonged to the shop worker—are strikingly similar to those made by critics of the Hellyer era who argued that the Management Era in defence is characterized by the same phenomena: The new style of defence management that Hellyer (and McNamara in the U.S) ushered in represented the end of the “traditional” military way of managing defence, the loss of the officer's role as the principal source of knowledge for decision-making, and the military man's transformation to little more than a keeper of technology. The art of war was replaced (improperly, according to critics) by the science of management. Noble's *American by Design* argues that academically trained engineers replaced “rule of thumb” methods with their own developed knowledge as they moved from being more than simply engineers—they were trained and groomed as managers as well. Similarly, in defence during the nuclear and supersonic age—where warfare was less about the warrior spirit and more about pushing buttons (for example, radar detection stations, nuclear strike facilities, submarine warfare)—the soldier was led to feel that they had become little more than the keepers of technology or the controllers of machines. This was compounded by the fact the more and more civilian scientists and analysts moved into defence. Policy-making and advice moved away from being the sole responsibility of military experts, based on their traditional expert knowledge and intuition, and widened to include new voices and opinions. This led to a crisis of professional identity within the armed forces whereby the traditional role of the military was rapidly changing. Control was being gained by some but the dominant perception was that it was also being lost by others.

⁷⁶ See David F. Noble, *America by Design: Science, Technology, and the Rise of Corporate Capitalism* (New York: Knopf, 1977).

It was within the context of the rise of the military industrial complex—the newer higher levels of spending on technology and procurement and the concomitant need for accountability for such spending—that the managerial revolution in defence emerged. In *How Much is Enough? Shaping the Defense Program 1961-1969* by Alain Enthoven and K. Wayne⁷⁷ explain that by the late 1950s and early 1960s there was recognition of the central role of technology and the pressure it was placing on the cost of defence as spelled out in studies that emerged from, among other places, RAND and Harvard Business School.⁷⁸ Efficiency and the goal of achieving defence capabilities at a reasonable cost became the focus and economic analysis and long range planning became the means to achieving this. When compared to what was happening in Canada, as it will be shown, there were some interesting parallels in terms of Hellyer's approach to defence, the tools he instituted, and the general management trend. In the U.S., it was Robert McNamara and in Canada it was Paul Hellyer who brought a new approach to defence based upon long-range planning and management principles rooted in efficiency and value for money. Thus when Hellyer came to the role of Secretary of Defence, he brought a skill, philosophy, and managerial ability that was cultivated from his combined experience in business and the military, but set within a much wider historical and philosophical context of control and rationalization.

The purpose of this chapter was to provide some of context in which to assess some of the criticisms that have been directed towards the defence reforms of the 1960s and early 1970s; namely that they were rooted in scientific management and business theories that some have argued to be ultimately inapplicable to the military context. While the organizational components to Taylor's scientific management had largely been eclipsed by the time Hellyer came to defence, the underlying philosophy was well ingrained in management thought. However, the idea of applying rational, critical,

⁷⁷ Enthoven was .S. Deputy Assistant Secretary of Defense, 1961–1965 and Assistant Secretary of Defense for Systems Analysis from 1965–1969 and Wayne was from the RAND Corporation.

⁷⁸ Alain C., Enthoven and K. Wayne Smith, *How Much is Enough? Shaping the Defense Program 1961-1969* (Santa Monica, CA: RAND, 2005), p. 335

and scientific problem solving to management issues in the pursuit of efficiency, does show some parallel with the conceptual underpinnings of the Canadian defence reforms. Although the U.S. did not integrate and unify its forces to the degree that Canada did, it nonetheless displayed its own management evolution which was also rooted in the changing strategic and economic times and based on the need for a firmer control over management and administrative processes, particularly in terms of the relationship of budgets to long term planning. As a case study it adds to our understanding of a general trend of military management towards new forms of rationality and new levels of information management control in order to cope with military and strategic uncertainty. Perhaps most importantly, the new management tools were an attempt to cope with the difficulty of creating and responding to Cold War defence technology which was financially costly and incredibly destructive. The relationship between military and science was further reinforced in the Cold War and formed the backdrop for the need for a new system of management to administer the defence agenda which itself became decidedly more scientific with important implications for the military profession.

It should be noted there were other management theories that competed with scientific management and which gained acceptance in their own right, even though they too were succeeded by different approaches. What is beginning to emerge is an understanding of the overall management picture, the differences and similarities to approaches, and their interaction. It might even be recognized by some that the management ideas discussed are all equally applicable to varying degrees within the context of Canadian defence experiences. In fact, it must be remembered that it is often believed that the four models of management efficiency in which most of the theories can be situated, are all true and applicable in some way. Despite their differences, it appears that there are some core management and organizational problems that are common to large-scale bureaucratic institutions and the best arrangement for any one organization will be a combination of the different approaches. As it will be shown, the management evolution in the 1960s and 1970s is representative of such a combination—

albeit this combination was not a conscious effort of those instituting the change. What's more, one can view the criticisms levelled against Hellyer's particular scheme as a criticisms for not more fully recognizing the importance of combining different approaches, particularly ones that place emphasis on the defence organization's cultural identity.

CHAPTER 2

CANADA'S POST-WAR DEFENCE ESTABLISHMENT

During the late 1940s and the 1950s, military institutions were in a constant state of evolution as the tension between the East and the West developed and emerging technological innovations presented new threats to combat. Although the Second World War had required nations to muster an unprecedented effort to cope with the war, and bringing to bear all sectors of society, the end of hostilities did nothing to lessen the complexity of military management. Newly established alliance structures such as NATO (1949), and NORAD (1958) required high levels of internal coordination; technological and scientific developments needed huge levels of economic, manpower, and industrial resources; standing armies required administration and supply infrastructure; and the stakes—nuclear annihilation—were high. Wartime command and control, management frameworks, and defence ministries needed to evolve to meet the new challenges. For military leaders, career paths necessitated new sets of management skills in addition to military background, and some even enrolled in business schools to achieve them.¹ The amount of administrative work required within defence ballooned, and the military started down a path that would have dramatic effects on the nature of the profession.

Complexity and uncertainty were everyday challenges in the defence and security arena. According to Alan English and G.E. Sharpe, command and control during this time was gradually eroded by management-oriented systems as defence establishments expanded. This was partly due to the reliance on technology as bureaucracy became more involved in procurement, leading to closer interaction with industry: “Closer relations with civilian industry were fostered and the traditional military culture based on regimented and hierarchical decision making which focussed maximum

¹ David Detomasi, “Re-engineering the Canadian Department of National Defence: Management and Command in the 1990s,” *Defense and Security Analysis* 12, 3 (1996), p. 334.

authority and responsibility on individuals was overshadowed by a business culture that slowly crept into DND.”² As a consequence, the number of officers in administrative roles grew.

This chapter examines the nature of Canadian defence and security in the 1950s, outlining the evolution of defence organization and management in Canada from the end of the Second World War until the early 1960s. Brooke Claxton’s reorganization efforts in the late 1940s show a precedent for both the idea of integration as well as seeking input from experts outside the government and the military with respect to how the department should be managed. The alliance structures placed constraints on policy-making in Canada which had to relate all defence and security policies to this framework. The difficulty of reconciling the desire for autonomy and sovereignty at home while being subordinate to foreign powers within alliances stressed the defence portfolio and contributed to the fall of the Diefenbaker government. Of particular importance was aerospace policy. The cost associated with R&D, production, and procurement put pressure on management and administration in defence which needed to provide the necessary equipment for its forces while keeping costs at a reasonable level. These difficulties, along with the political and strategic justifications for aerospace policies, were the primary defence issues of the time. Perhaps the most pressing issue was the question as to whether Canada would acquire nuclear weapons.

CANADIAN DEFENCE MANAGEMENT: EVOLUTION & DEVELOPMENT

After the First World War, proposals to combine the administration of the three services into a single department were attractive. The promise of both economy and efficiency was met with approval not only by politicians and bureaucrats in Ottawa, but the military as well. Chief of the General Staff, Major-General James MacBrien wrote that “The object of all organization in Government Departments is to secure a maximum of economy combined with the most efficient execution of work. It involves the

² Alan English and G.E. Sharpe, *Principles for Change in the Post-Cold War Command and Control of the Canadian Forces* (Kingston, ON: CF Leadership Institute, 2002), p. 12.

carrying out of the work with a minimum of friction. The fewer component parts of any organization—the less change of friction there is.”³ With the idea of integration for efficiency in mind, the National Defence Act (NDA) was passed, coming into effect on the first of January, 1923. The NDA created the Department of National Defence and endowed the Minister of National Defence with authority over all matters relating to defence. It also established the Chief of Staff with responsibility for directing the three armed services (the Canadian Militia, the Royal Canadian Navy, and the Canadian Air Force). With DND’s creation, the Department of Militia and Defence the Department of Naval Service and the Air Board were disbanded and all three services and their administrations were combined under one single authority, representing the earliest form of integration. Much like the amalgamations of the 1960s, this early attempt was not without problems, leading to friction between the Army, Navy, and Air staffs, and hampering cooperation—an indication of the inter-service rivalry that would plague defence for decades to come.

Throughout the interwar years, defence went through the process of demobilization and retrenchment from the size and scope it had achieved during the Great War. Defence expenditures fell from \$335 million in 1919-1920 to a low of \$14 million in 1932-1933.⁴ Resources and personnel shrank and defence matters were dealt with by a single Minister, within a single department. Colonel Maurice Pope wrote in 1937 that this arrangement suited Canada, whose defence problems were simpler and narrower in scope, but where co-ordination of service efforts was still necessary.⁵ Inter-service rivalry did not disappear, however. The 1920s witnessed a bitter rivalry between the Chief of the General Staff and the Director of the Naval Service, principally over the creation of a Chief of Staff, Department of

³ James Eayrs, *In Defence of Canada: From the Great War to the Great Depression* (Toronto: University of Toronto Press, 1965), p. 227.

⁴ Brooke Claxton, *Canada’s Defence, 1947* in *Canada’s National Defence, Vol I: Defence Policy*, ed. Douglas Bland (Kingston, ON: School of Policy Studies, 1997), p. 27

⁵ Maurice Pope, “Memorandum on a Canadian Organization for the Higher Direction of National defence: 8 March 1937,” in *Canada’s National Defence, Vol II: Defence Organization*, ed., Douglas Bland (Kingston, ON: School of Policy Studies, 1998), p. 10.

National Defence within the chain of command. The intent of the position was to improve the nature of departmental coordination between the fighting services, however Director of the Naval Service, Walter Hose, feared that whoever held the position would have undue influence and superiority over the service to which that officer did not belong. The position was created after much debate, but abolished a short time later in 1926. General MacBrien was the only person to hold the position. The successor to the position was appointed Chief of the General Staff and the director of the Navy Staff was retooled as the Chief of Naval Staff (a position coequal to the Army's Chief of General Staff). The Navy Chief was directly responsible to the MND but the senior Air Force Officer continued to report directly to the Chief of General Staff (Army). This was again altered in 1938 when the Senior Air Officer was reconstituted as the Chief of the Air Staff, who became the third coequal service head, reporting directly to the MND and giving the Air Force the same status as the Militia and Navy.⁶ A year later the Joint Staff Committee—established in 1927—was replaced by the Chiefs of Staff Committee, which included the Air Force as well as a strong civilian presence from External Affairs, Finance, and Cabinet, in addition to the three service Chiefs.⁷ Overall, the pre-Second World War period was one in which coordinating service activities were severely hampered by competing interests.

The effect of the Second World War on Canada's defence establishment was enormous. The resources mobilized to fight the war were immense and the administrative arms of the military were strained. In June of 1940, with the war just underway, DND was divided into three departments to cope with the expanded responsibilities and different roles of the services during wartime. Each had their own Minister (with James Ralston as overall MND), essentially ending the early developments towards integration.⁸ To maintain coordination, however, the Defence Council was used, with the Minister of

⁶ The RCAF had already been reconstituted in 1924 as part of the Canadian armed services, no longer a component of the Civil Air Board.

⁷ See C.P. Stacey, *Arms, Men and Governments: The War Policies of Canada, 1939-1945* (Ottawa: Queen's Printer, 1970), pp. 67-71.

⁸ See Stacey, *Arms, Men and Governments*, pp. 125-128.

National Defence as chairman and the Ministers of the Navy and Air Force, three Chiefs of Staff and three Deputy Ministers as members. As the defence establishment burgeoned during the war, the Chiefs of Staff Committee continued to act as the main source of military advice, while the Defence Council emerged as a purely administrative body. The size and scale of the defence organization grew as a result of the increased administrative need to manage the effort. Consequently, defence became much more bureaucratized. During the war the separate service headquarters were established overseas for the Canadian Active Service Force, the Royal Canadian Air Force, and the Royal Canadian Navy. The direction of the services emanated from these offices, known as the Canadian Military Headquarters.

With the end of hostilities, control over defence reverted to a single Minister in order to bring about “the maximum possible degree of co-ordination and to eliminate duplication of functions...”⁹ In addition, the overseas headquarters were disbanded. Despite this, the increasing bureaucratization of defence establishments continued into the post-war era due to a number of factors. First, NATO and the stationing of forces abroad, beginning in 1951, required new complex administration. Second, the increased nuclear threat in the Cold War made planning and programming even more significant than it had been in the past. And finally, the technological dimension affected defence as the new relationship between defence and civilian research needed to procure defence weapons led to complex symbiotic relationships. David Detomasi argues that a consequence of this was that “military organization in many respects came to resemble their civilian counterparts closely, as administrative costs increased dramatically and the need for standardized procedures in procurement, planning and supply became apparent.”¹⁰ He also states that during the Cold War it gradually became clear that command concepts that were popular after the war and through the Korean War were eroding, “to be replaced by more administrative and management orientated systems of directions [and that] administrators observed

⁹ Claxton, *Canada's Defence, 1947*, p. 29.

¹⁰ David Detomasi, “Re-engineering the Canadian Department of National Defence: Management and Command in the 1990s,” *Defense & Security Analysis* 12, 3 (1996), p. 336.

this phenomenon and attempted to utilize new management techniques to obtain a more efficient department”¹¹—in other words the transition from the so-called Command Era to the Management Era.

During the Command Era, the military concept of command was the underlying philosophy of the process. The process itself was made up of committees to coordinate inter-service issues while functional coordination was achieved through the command network. Issues that could not be readily solved at lower levels of command in the field were generally passed up the chain of command to higher levels. While DND was comprised of a plethora of committee and sub-committees, the three most important were the Defence Council (DC), Cabinet Defence Committee (CDC), and the Chiefs of Staff Committee (CSC). Furthermore, Departmental policy was the product of two main components: the Chiefs of Staff who were responsible for advising the Minister on operational aspects of defence and the DM who was responsible for non-operational matters. These two worked in close cooperation with each other and the Defence Council served as the main forum for discussing and formulating policy that had to do with administrative matters within the Department and the Canadian armed forces.

The Defence Council is the oldest of the three bodies, established in 1922 by the National Defence Act, replacing the Militia Council. After the war it was reconstituted as a body to assist the Minister with administrative matters that affected DND and inter-service issues, no longer playing the coordinating role it had during the war because of the creation of a single department. The Chairman of the Council was the Minister of National Defence, and included the Parliamentary Assistant, the Deputy Minister, the Assistant Deputy Minister, the three Service Chiefs, and the Chairman of the Defence Research Board. The purpose of the Council was to advise the Minister on administrative matters and non-operational policy matters, in contrast to the Chiefs of Staff Committee who advised him on policy issues pertaining to strategic and military matters. Departmental policy was the product of the military and civilian side of the organization, as was implementation of that policy. On the civilian side it was

¹¹ Detomasi, p. 337.

represented by the Deputy Minister whose responsibility was to oversee and direct officers, clerks, and civilian employees of the department, and whose role was purely in the domain of administrative policy. In terms of broad defence policy, the DM's responsibility was less clear. Although not a formal member, he attended the meetings of the Chiefs of Staff Committee and many policy issues necessarily touched on non-military issues, such as foreign, economic, and financial policy. In fact, one the key functions of the Deputy Minister was to Chair the DND Estimates and Review Committee—a committee which examined the means of implementing the military programs which had been approved, and which also made recommendations regarding the means of “obtaining the effective military requirements of such programs at a minimum economic and financial cost.”¹²

Second, the Cabinet Defence Committee was established with the purpose of considering defence policy matters related to the maintenance and employment of the three services. The Committee was chaired by the Minister of National Defence (until 1946 when the Prime Minister became Chairman and the MND became Vice-Chairman) and included Ministers from other departments, including Finance and Veterans Affairs. By the time Louis St. Laurent became Prime Minister, the CDC had become the principal forum for considering, recommending, and deciding on Canadian defence policy. While it fell into disuse under John Diefenbaker, it was revived under Prime Minister Pearson, although never fully regaining its former relationship with the military. Finally, the Chiefs of Staff Committee was renamed and updated to include the Air Force in 1939, comprised of the Service Chiefs with a strong civilian representation from External Affairs, finance, the Cabinet Secretariat, and DND, the committee's role was to be the focal point of defence policy coordination among the services and advice to the Minister of National Defence.

Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review of Unification), vol. 18,189, file Category VI, pt. 1, R.L. Raymont, “The Evolution of the Structure of the Department of National Defence 1945–1968,” 30 November 1979, p. 39, app. A.

With the appointment of Brooke Claxton in 1946, there occurred important changes to the policy-making apparatus in an effort to increase coordination and reduce duplication. Previously, coordination of military recommendations had been conducted within the Cabinet Defence Committee. However, Prime Minister King felt that inter-service rivalries over their own agendas, backed by the separate ministers, made it difficult to coordinate policy recommendations.¹³ This was the context in which Claxton revised the terms of the Chiefs of Staff Committee in 1947, giving it responsibility for coordinating efforts of the services and the execution of policy. The new terms included advising the Minister and Cabinet Defence Committee on policy matters, preparing strategic plans, and importantly, it had “responsibility for coordinating the efforts of the Armed Services in fulfilment of a single defence policy.”¹⁴ Claxton thus intended that the job of the Chiefs of Staff was to establish one agreed upon perspective that could form the basis for policy recommendations. The Committee was further reinforced in February 1951, partly driven by the military build-up resulting from the Korean conflict. The services were ardent supporters of their parochial interests and the appointment of a fulltime independent Chairman—the Chairman, Chiefs of Staff. The purpose of this position was to add some objectivity and facilitate coordination. He was not intended to impinge on the responsibilities of the Service Chiefs or to give arbitrary rulings and any differences of opinion not reconcilable within the Committee would be taken to the MND. In the spirit of rationalization the position was explained a Chiefs of Staff Committee meeting in 1951 that the evolving organization was intended to deal with the question of how to keep the Service Chiefs more fully informed but help cut down on the amount of detail with which the Chiefs had to deal.¹⁵ Lieutenant-General Charles Foulkes was first to hold the position of Chairman with Colonel R.L. Raymont heading his personal staff. This new independent Chair provided relief for the Chairman at the time who was also the Chief of the General Staff (Army), and

¹³ Ibid., p. 15, app. A.

¹⁴ Ibid., p. 15, app. A.

¹⁵ Library and Archives Canada (LAC), RG24 B-1(Fonds of the Department of National Defence), vol. 21815, file CSC Minutes Part 13, “Chiefs of Staff Committee—Minutes of the 485th Meeting,” 21 February 1951.

who in addition to overseeing his own Service had to contend with negotiations between the services within the Committee. These functions required his continuous attention. The independent Chairman, Chiefs of Staff, also had the benefit of providing the Minister with a source of advice that lay outside the inter-service rivalry that had been common, allowing for unprejudiced military advice. During this period the Chiefs of Staff Committee served as the main vehicle for handling all major policy issues, the Chiefs of Staff acted as the professional military advisors to the government, and the Chairman was the coordinator of inter-service and international matters, facilitating negotiation and compromise.

It is important to note that although the three policy bodies outlined above served the Minister, they had no executive function. Also, in addition to these three committees there was an array of sub-committees and organizations that served coordinating activities for the separate services. According to policy expert Douglas Bland, up to 1964 “the major internal influence on the processing of policy was the fact that the Service Chiefs retained under the NDA responsibility for the ‘control and administration’ of their respective Services.”¹⁶ The effect was that decentralization was maintained to a degree and the decision-making process was a reflection of this principle. This included budgets. The difficulty is that budgets and allocations must be established within an overall coordinated framework. Each of the three Armed Services during this period acted quite independently of each other, each responsible for his own operational plans and executions. The major planning body was the Joint Planning Committee, which reported to the Chiefs of Staff Committee on strategic and operational problems and included both military and civilian members. However, each Chief administered his own service within his understanding of policy, thus hampering coordinated efforts at common functions and acquisitions.

¹⁶ Bland, *The Administration of Defence*, p. 152.

Brooke Claxton's Reorganizations and steps towards Integration

During the Second World War, defence reached a peak of 800,000 men and 60,000 civilians. Immediately after the end of hostilities, Canadian defence planners had to deal with matters of reducing the size of the Forces, including massive demobilization, dismissal of civilians, and disposal of surplus equipment. This was in addition to making the new armed forces efficient and giving them a realistic mission.¹⁷ The rapid demobilization and shrinking of Canadian defence under Minister of National Defence, Douglas Abbott, left Canada with three, small, multi-purpose services. There existed an increasing need for coordination as commitments and agreements were sought with respect to small details of equipment policy, or broad defence issues and security policy. With the advent of NATO and the UN, as well as the Korean War, there occurred a rapid growth in professional knowledge within the three Canadian armed services, leading to the development of Canadian approaches and characteristics to organizations, combat development, equipment, and training. One example is the 1955–1956 Canadian Army “Gold Rush” studies—the first full range of doctrine manuals that were fully Canadian and part of a total plan for equipping, training, and developing the military. However, with the increasing advances in technology, the cost for equipping and re-equipping the military was rising. This was putting greater pressure on the need for coordinative activities and pushed the integration of functions in an effort to find savings. A growing preoccupation with social programs at the federal level accentuated these problems.¹⁸

It was Brooke Claxton (Minister of National Defence under Prime Minister King and St. Laurent from 1946-1954) who faced the challenge of streamlining the three separate departments created during the war back into a single department. Having to choose between the military and a social agenda, King gave Claxton the responsibility of saving money and bringing about the “utmost possible

¹⁷ David Bercuson, *True Patriot: The Life of Brooke Claxton, 1898-1960* (Toronto: University of Toronto Press, 1993). p. 158.

¹⁸ Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review of Unification), vol. 18,188, file 1, “T-F Working Paper-DRAFT,” 5 January 1980, pp. 5-6.

degree of unification and coordination.”¹⁹ When Claxton became MND, the infrastructure had not yet changed much, despite the fact that the Forces were 1/20th the size that had been.²⁰ There were three large wartime buildings in Cartier Square, each occupied by a single service but without any connecting corridor or tunnel. Overlapping staffs and wasted manpower was not uncommon. Claxton remembers that there was “some cooperation, little coordination, and no unity.”²¹ The Chiefs of Staff Committee had met regularly but was on the decline by the time Claxton arrived as Minister. Instead, it had become informal and ad hoc. Claxton recounts in his memoirs that, by and large, the three services were about as far apart as if they had been in different countries.²² Services saw themselves as the masters in their own spheres, suggestions by other services on how to best do operations were resented, and the system invited completion and duplication and kept the budgets higher than necessary.²³ Disunity, lack of cooperation, and rivalry provided Claxton with the incentive to rationalize. Claxton remembers:

My job as the first post-war Minister of National Defence was to bring together and make into a team three mutually resistant and highly competitive services staffed by bands of aggressive young men who had little or no experience of peacetime responsibility but who had won the war. There would be bitter and biased opposition to anything I did. Despite this we must build up the strength and bring about unity in the forces.²⁴

His aim, however, was not unification. Historian David Bercuson argues that Claxton knew that the exercise of command meant something different and unique to each service, each having its own customs and traditions.²⁵ Instead, Claxton decided in favour of the greatest amount of coordination and elimination of duplication, short of unification. He created the post of the Chairman of the Chiefs of Staff Committee, reopened the Royal Military College as a tri-service institution, and integrated the legal,

¹⁹ Library and Archives Canada (LAC), MG32 B5 (Fonds of Brooke Claxton), vol. 221, file “Memoirs,” Brooke Claxton, “1946-1954 Defence (4),” 17 September 1948, p. 827.

²⁰ Bercuson, p. 159.

²¹ Library and Archives Canada (LAC), MG32 B5 (Fonds of Brooke Claxton), vol. 221, file “Memoirs,” Brooke Claxton, “1946-1954 Defence (4),” 17 September 1948, p. 818.

²² Ibid., p. 827.

²³ Bercuson, p. 160.

²⁴ Library and Archives Canada (LAC), MG32 B5 (Fonds of Brooke Claxton), vol. 221, file “Memoirs,” Brooke Claxton, “1946-1954 Defence (4),” 17 September 1948, p. 828.

²⁵ Bercuson, p. 162.

dental, and medical services. In his 1947 *White Paper, Canada's Defence*, he directly pointed to combined functions of the services as a "problem." In order to solve the duplication and bring about greater co-ordination, an Inter-service Combined Functions Committee was established to examine more than thirty different armed service activities, of which fourteen had been amalgamated at the time.²⁶

These were not, however, the first efforts at integration and unification. At the end of the Second World War the first steps towards unified control of the armed services occurred when Prime Minister King appointed D.C. Abbott as MND (Army) and Associate Minister (Navy) (the Air Force was left separate and Abbott treated the Army and Navy as separate elements, despite being responsible for both). At the time, the services competed to maintain the privileges that they had developed during the course of the war, and this competition was on full display when attempts were made to integrate the research effort of the services. Whereas the National Research Council (NRC) had been responsible for implementing service requirements during the war, each still maintained its own development establishments. When the war ended, the president of the NRC wanted to pass responsibility for military research to the armed forces, allowing his institution to return to peacetime activities. However, the Air Force, an ardent opponent of any type of joint research organization, insisted on maintaining control over all air research pertaining to the military. There are a number of reasons to account for this. First, the RCAF felt it had not received its full due in the Second World War and that its identity had been blurred with the RAF, giving rise to the determination to not allow this to happen any further. Moreover, the Air Force had very specific attitudes towards defence research, believing that there would be a need for an all-weather jet fighter in the defence of Canada and which would be a unique Canadian requirement. The belief that the defence of North America rested on proper equipment was supported by the air industry and it was not unnatural for the RCAF to be determined to develop its own programs

²⁶ See Claxton, *Canada's Defence, 1947*, p. 35

and be suspicious of organizations that might remove this from its control. Finally, air defence research had been built from nothing during the war and was continuing in peacetime, creating doubt that a change in administration would be a good thing.²⁷

The RCAF was therefore resistant to research integration—one example of the competition between services that was not uncommon. As D.J. Goodspeed articulates in his history of the DRB, good reasons for integrated efforts existed, however. Duplication of research efforts worked during the war when budgets were high, but in peacetime restricted resources and smaller scales of effort would preclude research efforts undertaken within each individual service. Beyond that economic factor, the also existed concern over the influence of inter-service rivalry on the effectiveness of the research programs.²⁸ Despite this strong case for a unified approach to defence research which would streamline activities and reduce duplication, General Charles Foulkes, Chief of the General Staff at the time, argued that there “clearly existed conflict of interest between what was in the best interest of the defence effort as a whole and what was most advantageous to the individual service.”²⁹ In the end, the Defence Research board was established in 1947 in order to coordinate military R&D, although the three services retained a great deal of autonomy over their own scientific pursuits.

In order to help him in his reorganization, Claxton enlisted the help of Walter L. Gordon—an accountant and government advisor who served in the Bank of Canada and the Ministry of Finance during the Second World War. Gordon first enrolled as a twenty year old student with the firm in which his father worked—Clarkson, Gordon & Dilworth, Chartered Accountants—in January of 1927. Gordon started out learning how to be an auditor but had interests in more specialized areas. He was particularly intrigued in learning about what went on behind the scenes of firms and “how to make

²⁷ D.J. Goodspeed, *DRB: A History of the Defence Research Board of Canada* (Ottawa: Queen’s Printer, 1958), pp. 59-60.

²⁸ *Ibid.*, p. 20.

²⁹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 82, file 82-8, General Charles Foulkes., retired, “The Case for One Service,” July 1961, p. 4.

individual businesses more profitable and efficient. This was the kind of work in which [he] wished to specialize.”³⁰ His first effort in this regard came shortly after he began work with the firm, which was retained by the Royal Commission on Customs and Excise (1926) to examine the books and records of a variety of enterprises. During his time studying with the firm Gordon learned accounting theory, auditing techniques, and how to conduct financial and business investigations. He became a chartered accountant in 1931. In 1935 he became a partner in the firm, along with J. Grant Glassco, to whom Gordon referred as the “outstanding professional accountant of his generation in Canada, acting as president of the Institute of Chartered Accountants, and the Canadian Tax Foundation.”³¹ Gordon became close friends with Glassco who would later become the Chairman of the Royal Commission on Government Organization—a Commission that would have a great impact on defence organization.

Gordon emerged as an expert of practical business problems and brought his skills to bear on a variety of government investigations by the time Claxton approached him regarding the reorganization of defence. The use of Gordon is indicative of the crossover between the military and business. Although he did not serve in the military, his background at the Royal Military College gave him an appreciation for the military way of thinking. And while he did not apply any specific theories or models of the private sector, the use of his skills and background—and their application to investigations of defence—is a subtle indication of the overlap between the private and public (defence) environments and a clue that ideas outside the public sector were seen as having some relevance, with applicability within government.

Fearing resentment from the military regarding his assignment (although Gordon also felt that his education at RMC meant he was not a complete outsider to the military), which never came, Gordon was welcomed by senior personnel who proved cooperative in his investigation. In his memoirs Gordon indicates how senior personnel complained to him about the amount of red tape that they encountered

³⁰ Walter L. Gordon, *A Political Memoir* (Toronto: McClelland and Stewart, 1977), p. 15.

³¹ *Ibid.*, p. 16.

in administering defence.³² For example, Major Generals of a large command post were not allowed to authorize expenditures which exceeded 25 dollars without HQ approval, and steps to secure approval of a maintenance project at camp Borden required 116 days to get contract approval with 152 days spent on paperwork for a project which cost less than 7,000 dollars. Ultimately, Gordon concluded that a great deal of decentralization was needed. He travelled to both London and Washington where he met with a number of government and military officials. On the topic of integration and unification, these officials showed some passive interest in the concepts, but ultimately pointed to the difficulty of inter-service rivalry as the main obstacle to success. Moreover, with the rebuilding process in Europe still underway, anything that might slow that process or detract from ensuring security from Russia must be carefully thought through. The impression left by these meetings on Gordon was that caution was the best approach.³³

Walter Gordon presented his findings in the J.D. Woods and Gordon report and made his recommendations to Claxton. The report recommended that the Deputy Minister's "position in the Department should be strengthened and his opinion sought on all questions relating to manpower, supply, and finance."³⁴ Finances and efficiency were a primary concern: "The Government machine is now too big to function efficiently under such a system of detailed control from the centre," he remarked, and thus delegation of financial authority was needed, contingent on a system of uniform financial control systems.³⁵ Additionally, the importance of a Deputy Minister who could be an *ex-officio* member of the Chiefs of Staff Committee—someone accepted as the equal of the Service Chiefs—was articulated. This type of Deputy Minister required someone who had achieved a high rank in the war and who was capable of integrating civilian and military activities and cutting through red tape. Claxton

³² Ibid., p. 52.

³³ Ibid., p. 53.

³⁴ Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review of Unification), vol. 18,189, file Category VI, pt. 1, R.L. Raymont, "The Evolution of the Structure of the Department of National Defence 1945–1968," 30 November 1979, p. 1, app. B.

³⁵ Ibid., pp. 3-4, app. B.

was, however, reluctant to increase the workload of the DM, fearing the office would become a bottleneck.³⁶ The Deputy Minister's role and the DM organization was, however, further altered in 1951 upon recommendations of a report, conducted by Morton Mendel—a lawyer and consulting economist who had been a Brigadier General in the Second World War and who was known for being an expert in organizational matters. He proposed that the DM organization be completely functional and his recommendations were accepted by Claxton who reorganized the civilian side of the department on this basis. The three separate Deputy Minister organizations were amalgamated into one civilian staff, with one DM and two assistants, each in charge of a separate function—finance and supply, personnel and pay. In order to achieve economy, clerical functions were to be performed by civilians and perform common functions for the three services. In addition, instead of a separate building for each service, all Chiefs of Staff and their General Staffs were regrouped in a single building with the Minister, while the administrative staffs regrouped on a functional basis in separate buildings. The planners during these reorganizations were sure to recognize the essential differences between the services and the difficulty of amalgamating institutions and functions: “In making these recommendations [Claxton] cautioned, in part, that the dual task of amalgamating the three services ministries and unification of common functions of the services, wherever possible, involved reconciliation of different methods and personalities which were not necessarily complementary, consistent or even compatible.”³⁷ Finally, Claxton also set in motion the steps needed to revise the National Defence Act, incorporating a common approach to the legal aspects of military law, amalgamating all three Service Judge Advocate General office, and providing a uniform code of discipline and administration. In addition to this, standardized pay and other privileges were established—all important preludes to the full integration that would occur under Paul Hellyer.

³⁶ Library and Archives Canada (LAC), MG32 B5 (Fonds of Brooke Claxton), vol. 32, file “Gordon, W.L.,” Brooke Claxton, 17 September 1948.

³⁷ *Ibid.*, p. 27, app. B.

Ultimately, the international situation had a major influence on Claxton. Records show that Claxton was indeed a cautious Minister in the face of unclear futures. As a result, he sought to approach defence with flexibility in mind in anticipation of the difficulties that potentially lay ahead. Not unlike Hellyer in the 1960s, Claxton envisioned long-term integrated planning as the cornerstone to his approach: "Defence today is a complex business which must be balanced, integrated and planned. Our plans are being made now for up to five and even ten years ahead, with changes provided for to meet expected development. We are trying to ensure that everything we do today will be a sound basis on which to make future developments of any kind and at any time. Our plans are flexible."³⁸ The prime difficulty he articulated was the lack of control defence planners had over the future, hence adaptability and flexibility were key: "The program and the plans I have outlined are all subject to change as the world situation changes. We in Canada cannot control that situation...We cannot hope to have security unless we are free to adapt our plan and our program to meet new situations which can—and may—be created at any time by the potential aggressor."³⁹ This approach reflected the open systems style of management as indicated in the Quinn and Rohrbaugh framework, showing concern for adaption and a flexible management approach. While his integration efforts can be seen as representation of a concern for structural control—on the opposite end of the "structure" axis compared to flexibility—Claxton had in mind other values and features of the defence portfolio that required attention. Therefore, like Hellyer after him, Claxton can be understood as exercising his duty as manager to search for the best balance between competing management and organizational values.

Cold War commitments, the threat of nuclear weapons, and the buildup during the Korean War were all main determinants in defence, pushing expenditures higher in the 1950s than had been in the past, and leading to the contest between needs and resources. There existed new pressures to reduce

³⁸ Library and Archives Canada (LAC), MG32 B5 (Fonds of Brooke Claxton), vol. 32, file "Committee on Defence," Brooke Claxton, "Statements made by Honourable B. Claxton, Minister of National Defence Indicating Flexibility of defence Policy or Anticipation of Difficulties," n.d.

³⁹ Ibid.

duplication and find efficiencies, and increasing degrees of unification/integration seemed to hold the key. Claxton's challenge was attempting to reduce the Canadian military while at the same time maintaining an up to date and capable force, should the need for one arise. Canadians had witnessed the results of appeasement attitudes towards aggressors, and the military might need to stand up to foes and would want to ensure that some bulwarks against foreign aggression were maintained. The three main roles for the services that Claxton articulated were: a) defend Canada against aggression; b) assist the civil power in maintaining law and order within the country; and c) to carry out undertakings which by our own voluntary act we may assume in co-operation with friendly nations or under any effective plan to collective action under the United Nations.⁴⁰ This commitment was first and foremost made with the defence of the continent in mind. But Mackenzie King spelled out that such cooperation also had the added bonus of allowing for "efficiency and economy" in defence. Collaboration included interchange of individuals, exchange of observers in connection with exercises and with development of tests of material, encouragement of common designs and standards in equipment, organization, and methods of training, and reciprocal availability of naval, military, and air facilities. This was clearly a recognition of the mutual interests of Canada and the U.S. (that is, security of the continent), but at the same time, a recognition of the difficulty of ensuring complete defence security on one's own. Essentially, it was an effort at simplifying—or rationalizing—continental defence. The continental focus that emerged during the war remained front and centre in defence planning and the Canadian military increasingly dealt with pressures for greater integration with American forces for the purpose of defending the continent. In a period where Canada sought to push for greater degrees of sovereignty within the Commonwealth, at home, continental defence undermined that effort; ironically, in order to guard against the Soviet threat and contribute in a significant way, sovereignty was subordinated to U.S. continental defence integration. Whitaker and Marcuse refer to this as Canada's "paradox of national

⁴⁰ Claxton, *Canada's Defence, 1947*, p. 20.

sovereignty” in the Cold War.⁴¹ In 1952 for example, a military base at Goose Bay was leased to American Strategic Air Command. Continental defence required Canadian territory as a location for U.S. Air Force operations and Canadian soldiers required equipment and standards that met U.S. specifications. Geography made it impossible for Canada to remain neutral in the Cold War or appear strategically irrelevant.⁴²

THE POST-SECOND WORLD WAR STRATEGIC CONTEXT

The Cold War grew out of the Second World War. Although the origins of the Cold War are debated, it was clear toward the end of the war that the relationship between the Allies was strained. The Soviet Union was concerned for its security after its experiences with the invasion and the destruction of the war, and it was not surprising that it sought to dominate the affairs of bordering nations. After a Soviet coup in Czechoslovakia in 1948 and the Berlin Blockade from 1948–1949 heightened the tensions between East and West, NATO emerged in April of 1949—a collective political alliance, originally signed by the U.S., Britain, Canada, and nine other European nations. However, it was not until the outbreak of the Korean War in 1950 that NATO developed into an integrated defence organization, with Dwight Eisenhower as the first Supreme Commander. With the north Atlantic world divided, fears over the threat of another war were high. This was particularly acute as the next war was seen as likely to be a nuclear one with dire consequences. Based on the fear that nuclear weapons would be used to intimidate him, Joseph Stalin initiated a successful production program, with the

⁴¹ See Whitaker and Marcuse, pp. 138–139.

⁴² This understanding was the basis for cooperative efforts at detecting and engaging Soviet bombers in North America. In the early 1950s Canada and the U.S. established an agreement allowing for aircraft to cross international boundaries in order to carry out interceptor roles, followed by a series of early detection radar systems—first was the Pinetree Line, built at about the 50th parallel in 1951, followed by the Mid-Canada Line (in 1954), and the DEW Line (in 1957) in the far north of Arctic Canada. Canada realized that a radar system that was on U.S. territory would result in a response time to Soviet bombers that would likely lead to nuclear confrontation above the heavily populated areas around Southern Ontario and Quebec. The decision was thus made to establish radar systems further north, on Canadian territory, that would allow for earlier detection and response that would be above arctic territories. Thus allowing a strong U.S. presence in Canada for defence purposes through NORAD was largely unavoidable.

Soviet Union testing its first atomic bomb in August of 1949. Counter-offense was seen as the best defence. By the late 1950s, both the U.S. and Soviet Union had deliverable megaton yield weapons, and the advent of the Korean War led President Truman to unleash the full potential of U.S. nuclear production. In 1952 the U.S. was the first nation to test a thermonuclear device with the potential to wreak destructiveness beyond what was possible with fission bombs. Bombs that fused hydrogen and helium released nuclear energy whose fireballs were measured in miles, not feet, and whose power was measured in megatons, not kilotons.⁴³ The first Soviet thermonuclear test was in August of 1953, but did not achieve a truly powerful one until 1955. U.S. Strategic Air Command identified 1,700 enemy designated ground zeroes, including 409 airfields. Moreover, they had 2,400 ready flight crews representing a mix of medium and long range bombers.⁴⁴ While the Soviet bomber fleet was young, the improved intercontinental bomber, the Bison B, posed a new threat to the West from its longer range and improved aerial refueling. At the same time, the U.S. Navy and Army added nuclear weapons to their capabilities. The coordination of U.S. nuclear strike forces was becoming increasingly difficult, compounded by the emerging capability of fighter bombers to carry megaton weapons, and the development of the first true Intercontinental Ballistic Missiles (ICBMs), capable of carrying nuclear bombs thousands of kilometres. The launch of Sputnik on October 4, 1957 helped usher in the missile age and as a result of the possibilities of this new technology, armed forces developed a three-pronged nuclear approach: submarines, bombers, and ICBMs. The Soviets, in 1954, were developing their own ICBMs and cruise missiles. Missiles and rockets emerged as a key piece of hardware. At the time of the Cuban Missile Crisis in October of 1962, the Soviets could deliver 270 nuclear weapons to U.S. territory.⁴⁵ Although the U.S. had formidable arsenal of bombers, Atlas and Titan ICBMs, Polaris-equipped submarines, and Minutemen missiles, the Soviets likewise continued to develop the quality of

⁴³ Richard Rhodes, *Arsenals of Folly: The Making of the Nuclear Arms Race* (New York: Alfred A. Knopf, 2007), p. 70.

⁴⁴ Ibid., p. 84.

⁴⁵ Ibid., p. 92.

their missiles in the early 1960s. The number and power of their warheads increased, deliverable from heavier SS-9 and SS-11 missiles as well as new Soviet submarines. Fears over missile gaps pushed the race ahead, and both sides poured resources into working on missile defence systems. The U.S. entered into NORAD with Canada, which employed the Bomarc missile and fighter jets to counter the threat of Soviet bombers.

The major threat was the difficulty in defending a nation from nuclear attack. This fact has been documented by Canadian historian Andrew Burtch in his work *Give Me Shelter* (2012),⁴⁶ which outlines the complex policy history of Canadian civil defence planning in the post-war period. Moreover, that Canada's aerospace experiences involved controversies surrounding the cancellation of the Avro Arrow jet and the nuclear equipped CF 101-Voodoo and Bomarc missile was further evidence of the complex effect that the nuclear threat had on defence planning in Canada. Policymakers were working to respond to evolving threats, to economic constraints, to public opinion, and to partisan politics. The planning of defence during this period had grave consequences for both the security of the nation and the life of political parties, making sound decision-making imperative. The cost—in both dollars and manpower—of the coordination, management, and administration of defence in the nuclear age was huge. Not only was the development of weapons and counter-weapons rapidly evolving and incredibly expensive, but the need for coordinated efforts and sound decision-making in tense periods such as the Cuban Missile Crisis was vital. Added to this was the information analysis needed for activities such as reconnaissance and surveillance, tactical and strategic planning, and war gaming. It is within this overall context—the fear, tension, cost, uncertainty and extreme consequences of getting it wrong—of the nuclear Cold War environment, that defence policy, and the management and administration of that policy, was pushed to new and uncertain places. As colonial Empires were dismantled, the threat of communism spreading was very real; as was the fear and risk that local wars could become global in

⁴⁶ Andrew Burtch, *Give Me Shelter: the Failure of Canada's Cold War Civil Defence* (Vancouver: UBC Press, 2012).

order to protect the democratic ideals that so many lives had been sacrificed for in defeating fascism. To policy-makers in the U.S. and Canada at the time, the Cold War was more than a label. It was their world view and operational reality. They had to approach defence policy as if they were engaged in a real and present war for survival of their way of life, with the battle against fascism in the Second World War as their historical model, while facing the new threat of mobile, un-trackable, high speed and weapons of mass destruction, against which there was no defence.

The Defence Industry, the Avro Arrow, and the Cuban Missile Crisis

In the war's immediate aftermath, economic stability was the top concern. International economic problems were the result of a dollar shortage and the decline of traditional markets for exporters. It was defence, however, that appeared to offer a solution. In March of 1947, President Truman introduced a bill for economic and military aid to Europe. The Marshall Plan became the main source for economic recovery of Europe and Canada saw it as a way to stem the tide of communist expansion. Economic stability was a key means of political stability as the link between the Great Depression and the Second World War was not lost on observers. 1947 also saw Canada and the U.S. establish a joint statement regarding defence cooperation which called for common designs and standards in arms and equipment as well as methods of training and development. The health of the economy and defence procurement and production were intimately tied as a result of the war (and the emerging Cold War), and an economic boom as a result of the Korean War only confirmed the idea that war meant business. Canadian industry became an integrated, regional element of American defence production but Canada did not develop a military industrial complex anywhere to the degree that emerged south of the border. Although the Soviet threat and the Korean War did inject defence (and industry) with a great deal of funding, in Canada there was no elite within defence industry that helped shape policy-making as was the case in the U.S. Military spending did pump-prime the economy in

Canada in the early Cold War, but Whitaker and Marcuse's *Cold War Canada* argues that the role of the military men in Canadian policy-making in Ottawa was not decisive.⁴⁷ This is not, however, to underplay the impact of the military, especially in terms of the bearing on the federal budget. In the mid-1950s Canada had significant military commitments on both sides of the Atlantic. In 1955 Canadian armed services stood at 118,000 people, all volunteers, and backed by a substantial militia. There was also the promise of even greater numbers, if the need should arise. Moreover, at the height of the Korean War in 1952, defence production cost \$1.9 billion—and that number remained fairly constant in 1955 at which time defence was 40% of the federal budget and 23% of all expenditures by all three levels of Canadian governments.⁴⁸ Thus, defence was the major factor in federal spending.

In 1956, three years after the conclusion of the Korean War, the signing of the Defence Production Sharing Agreement between Canada and the U.S. would help offset the amount of money spent by Canadians in the U.S. and correct the trade imbalance in cross-border military spending. This trade agreement opened the U.S. to Canadian industry, giving it access to the vast American defence market. It was also was beneficial to the armed forces that had access to lower prices on U.S. produced equipment due to their longer production runs. This led to the strategy of Canadian industry focusing not on producing the entire range of weapons and equipment needed by the Canadian Forces to accomplish their missions, but on specialized products that were internationally competitive and could be sold in U.S. markets as well as those of other allies⁴⁹—essentially it represented the economic principle of comparative advantage, which was a policy component of the Defence Research Board at the time.⁵⁰

⁴⁷ Whitaker and Marcuse, pp. 151–152.

⁴⁸ Bothwell, p. 110.

⁴⁹ Dan Middlemiss and J.J. Sokolsky, *Canadian Defence: Decisions and Determinants* (Toronto: Harcourt Brace Jovanovich, 1989), p. 23.

⁵⁰ The Defence Research Board who focused on working in areas where Canada had particular interest, talent, or resources (in particular, geographically based research such as Arctic and oceans), while allowing the U.S. and the U.K. to focus on other effort that would then be shared with Canada.

The defence industry in the 1950s was in a difficult position. It was able to produce high quality final products, however the costs were higher and delivery times were later—thus industry was thus economically inefficient in comparison to U.S. counterparts, but not so inefficient as to be ruled out completely by Canadian defence decision-makers as a viable option for defence production.⁵¹ J.B. McLin argues that the fact that the difference was so marginal allowed other more political considerations to creep into the decision-making process to tip the scale. Non-military considerations such as the effect on Canadian industry and political pressures to buy Canadian were factored in. Job creation/loss, national prestige—these became core considerations. So too were national economic issues such as the effect that purchases had on balance payments and the desire not to further worsen the purchasing deficit with respect to U.S. defence spending. In the end, it became hard for Canadian decision-makers to choose U.S. equipment over Canadian equipment, even if there was no comparable item being produced domestically.⁵²

This issue of prestige and nationalism had an important impact on policy-making because the choice of weapons and equipment were made within a complex framework in which alliance interoperability and the desire to produce indigenous advanced technological were as salient as the cost dimension as the Avro Arrow story shows. More so, the development and cancellation of the Arrow is important for the weakness in Canadian defence planning that it highlighted. Not only was the program costly and inefficient from a production stand point but its cancellation was wrapped up in a confused and contradictory policy debate. John Diefenbaker's Progressive Conservatives came to power on 22 June 1957, establishing a minority government and quickly approved the plans to establish NORAD (despite criticisms that he had committed Canada without due consultation from Cabinet or Parliament). The defining defence issues under Diefenbaker from 1957 to 1963 were the Canada-U.S. strategic

⁵¹ J.B. McLin, *Canada's Changing Defence Policy 1957-1963: The Problems of a Middle Power in Alliance* (Baltimore: John Hopkins Press, 1967), p. 171.

⁵² *Ibid.*, p. 171–172.

relationship and the related issues of defence aerospace policy—particularly the issue of nuclear armament and the strategic and economic justifications for aerospace policies and technology. This was a time characterized by procurement decision blunders, programme delays and cost overruns, and policy confusion. The Avro Arrow and Bomarc missile debate are prime examples of this. The aerospace controversy together with the Diefenbaker government's handling of the Cuban Missile Crisis served to weaken the Conservative position, leading to a new Liberal government. More importantly, the problems in defence that became apparent in Diefenbaker's downfall were witnessed by the incoming Liberals would serve as a warning of the potential political dangers in the defence arena as well as a guideline for where changes could be made in order to avoid those pitfalls.

The Arrow was an all-weather interceptor intended to be a replacement for the CF-100 Canuck, and designed by A.V. Roe Canada Ltd. The Canuck was the standard aircraft of the RCAF at the time but its subsonic speed threatened to make it obsolete by the end of the 1950s. The Arrow was initially accepted over other planes in development, and when cancelled was considered to be one of the most advanced aircraft available—it surely was an impressive technical achievement. The development was problematic, though. While the design began in 1953, by 1957-1958 it was becoming clear that the costs and development troubles threatened the project. Part of the problem was that through a series of technical choices, Canada became responsible for not only producing the airframe, but also the engine, the fire control system, and the air to air missile—the entire technological system of the craft. In addition to this, the program shrank from its initial intention to produce 400 Arrows to just one quarter of that. The program became a target of critics for two primary reasons: the cost, and the strategic need. According to Jon McLin, the accounting system used during the Arrow development was a reflection of the piecemeal way in which the program had progressed. It was inefficient as it did not provide figures of the total cost of all components of the craft and it was not until 1957-1958 that there

emerged a system to accurately portray the cost of development.⁵³ From 1955 to 1958, the estimated cost of each Arrow produced fluctuated wildly, from \$2.6 million, to \$8 million, \$6.1 million, and \$4.5 million.⁵⁴ The management of the program appeared, to many observers, to be lacking. Part of the problem stemmed from a lack of clarity as to which kinds of estimates were being used—flyaway costs, which did not take into account development costs, or average unit cost, which did. The confusion made it possible for officials to avoid the facts of cost escalation, but not forever. The potential consequences were larger than the actual program. While Minister of National Defence George Pearkes had been persuaded to support the Arrow program, there also existed Navy and Army programs which he defended. However, the budgets were such that it was impossible to carry out the Arrow program in addition to those of the other two services.⁵⁵ Eventually the Prime Minister was forced into a decision. Diefenbaker had been elected on a platform that included reduced expenditures and balanced budgets. In order to acquire both the Arrow and other essential equipment, defence expenditures would have had to increase dramatically. Moreover, with both the U.S. and U.K. turning down purchases of the Arrow in favour of focusing on their own domestic developments, the Arrow was scrapped in February, 1959.

Cost, however, was not the only variable. The research of Palmiro Campagna, an expert on the Avro Arrow, shows that the cost of the Arrow would not have bankrupted the government.⁵⁶ Instead, the changing assessment of the strategic threats was the decisive factor such as the launch of Sputnik by the Soviet Union in 1957 changed the strategic scenario. Pearkes remarked that there was little point in remaining committed to the acquisition of obsolete weapons.⁵⁷ In addition, there was the issue of the Bomarc. The Bomarc was a surface to air missile designed to destroy oncoming Soviet bombers and was

⁵³ McLin, p. 67.

⁵⁴ Ibid., p. 67-68.

⁵⁵ J.V. Allard, *Memoires du General Jean V. Allard* (Boucherville: Editions de Mortagne, 1985), p. 206.

⁵⁶ Palmiro Campagna, *Storms of Controversy: The Secret Avro Arrow Files Revealed*, 4th ed. (Toronto: Dundurn Press, 2010).

⁵⁷ McLin, p. 69

controversial in terms of its strategic reasoning and its relation to the cancellation of the Arrow, as well as the debate as to whether it would be nuclear equipped. The device was essentially worthless without nuclear warheads needed to destroy Soviet bombers and their payloads in mid-air, but Diefenbaker was reluctant to equip Canadian equipment with nuclear weapons, delaying a decision on the issue for the duration of his three mandates.⁵⁸ The main confusion surrounding the Bomarc was in the attempts to justify the acquisition of the weapon in relation to the intercontinental ballistic missile and bomber threats. The problem was that the Arrow was cancelled based on the notion that the threat had changed from long range bombers to ICBMs. However, the Bomarc was designed to destroy bombers, not missiles, and thus if the Arrow was obsolete, then so too was the Bomarc. The cost of both was more than Canada could afford, and since the Bomarc commitment had been made due to the NORAD agreement, re-allocations of funding was required to pay for it. The Arrow was sacrificed for the Bomarc.⁵⁹

The second major defence issue under Diefenbaker's leadership was the Cuban Missile Crisis in October of 1962. Upon learning of the build-up of Soviet missiles in Cuba on 22 October, the U.S. committed to a policy of confrontation without consultation with Canada, despite the fact that Canada could surely be drawn into the events as a key ally. Diefenbaker's relationship with President Kennedy was already rocky and when Diefenbaker was briefed by the former Ambassador to Canada on the reasoning behind U.S. action, the Americans expected support from Canada. However, Diefenbaker was less supportive of the U.S. position, calling instead for a U.N. investigation of the situation. At the same

⁵⁸ The established perspective on Diefenbaker's nuclear position is that he was indecisive on the course Canada should take on the issue, discounting public opinion data that suggested Canadians were in favour of accepting nuclear commitments. In more recent years, Patricia McMahon has offered a more nuanced view, arguing that his indecision was more apparent than real. Instead she puts forth the perspective that he wanted to acquire nuclear weapons but feared the political fallout that might result from the decision, and it was this preoccupation with political consequences that gave the impression of indecision. It was a rational, political worry. See Patricia, McMahon, *Essence of Indecision: Diefenbaker's Nuclear Policy, 1957-1963* (Montreal & Kingston: McGill-Queen's University Press, 2009).

⁵⁹ See Appendix II in Palmiro Campagna, *Storms of Controversy: The Secret Avro Arrow Files Revealed*, 4th ed. (Toronto: Dundurn Press, 2010), pp. 241-254.

time, Diefenbaker was slow to ready Canadian Forces. The crisis was discussed in Cabinet on Monday, 22 October where potential options for response were weighed. Although not moving at the same pace as the U.S. could be embarrass Canada, some members felt that Canada needed to exercise independent decision on defence issues.⁶⁰ The events spoke to Canada's insecurity as a junior partner in alliance frameworks and decision-makers felt that ensuring their political autonomy was exercised was important so as not to look "stampeded" by their powerful ally. Moreover, the opinion among Cabinet members was that where the U.S. had ten days to make their decisions, Canada likewise needed more time to consider its position.⁶¹ Minister of National Defence, Douglas Harkness, made several attempts to get Diefenbaker to increase the state of alert of the Canadian Armed Forces, but Diefenbaker delayed. By the time he gave the order to go on the alert on 24 October, Minister of National Defence Douglas Harkness had already given the order without the knowledge of the Prime Minister, due to his hesitation.

Moreover, the Prime Minister had refused to approve the naval blockade of Cuba—referred to as a "quarantine"—that President John F. Kennedy had ordered. This was considered a minimal display of force intended to persuade the withdrawal of strategic missiles, but "resonated too closely" with the U.S. economic sanctions against Cuba that the Canadian government felt was inappropriate.⁶² Despite proper authorization in participating in the quarantine, Rear Admiral Kenneth Dyer, flag officer Atlantic Coast, engaged naval and air forces in anti-submarine operations in the North Atlantic, in conjunction with the U.S. operating around Cuba. It is widely accepted that these events not only showed the indecision of Diefenbaker on tough defence issues but more importantly they indicated a breakdown of civil-military relations—Dyer, although courageous, had exceeded his terms of reference in participating

⁶⁰ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 21653, "Cuban Crisis—Alerting of Canadian Air Defence Forces," 23 October 1962.

⁶¹ Ibid.

⁶² Nicholas Tracy, *A Two-Edged Sword: The Navy as an Instrument of Canadian Foreign Policy* (Montreal: McGill-Queen's University Press, 2012), p. 139.

in anti-submarine patrols without full political authority to do so—therefore, political control appeared to be lacking.⁶³

The Cuban Missile Crisis revealed weaknesses in the structures for civil control and these structural weaknesses were compounded by human factors. For example, Diefenbaker mistrusted senior civil servants and military officers which resulted in a singular leadership style where he cut himself off from valuable sources of advice and information.⁶⁴ His style also served to weaken the formal planning process because of his neglect of the Cabinet Defence Committee and the erosion of coordination between DND and Cabinet. Diefenbaker paid little notice to national defence policies and the CDC—which had convened monthly under the previous government—met only seventeen times in 6 years under Diefenbaker, while the Canada-U.S. Defence Committee, only three times.⁶⁵ An inherent weakness of the system of defence was the lack of provision for national direction of operational plans—a flaw rooted in the lack of requirement for centralized control of the Armed Forces. This was because many believed that the Canadian military would operate under international command, a perspective echoed by the Glassco Commission. While the NATO framework included an emphasis on consultation and formal political procedures, Haydon argues that coordination for North American defence was less formal and almost entirely a military function.⁶⁶ A series of service-to-service agreements and plans created the formal framework for operational procedures for North American defence and there was little need for politicians to be involved in the conduct of routine operations. Therefore, the political system relinquished control of the military under the assumption that it would be regained in a crisis. While the control of military operations was founded on a system of delegated

⁶³ See Marc Milner, *Canada's Navy: The First Century*, 2nd ed. (Toronto: University of Toronto Press, 2010); Peter Haydon, "The Cuban Missile Crisis 50 Years Later," *Canadian Naval Review* 8, 3 (2012), pp. 10-14; Peter Haydon, "Canadian Involvement in the Cuban Missile Crisis Re-Considered," *The Northern Mariner* 17, 2 (2007), pp. 39-65;

⁶⁴ Peter T. Haydon, *The 1962 Cuban Missile Crisis: Canadian Involvement Reconsidered* (Toronto: The Canadian Institute of Strategic Studies, 1993), p. 10.

⁶⁵ Peter C. Newman *Renegade in Power: The Diefenbaker Years* (Toronto: McClelland and Stewart Ltd., 1963), p. 343.

⁶⁶ Haydon, *The 1962 Cuban Missile Crisis*, p. 91.

authority, the problem, as Haydon points out, was that “crisis” was not well defined and there were differences of opinion regarding whether the Cuban crisis fit this criteria. Such issues of command and control were recognized by the Glassco Commission—which was underway during the Cuban Missile Crisis—which would eventually recommend that the MND receive greater support in directing defence through a strong civilian staff and Chairman, Chiefs of Staff, in addition to integration of common service functions.

Other peculiarities of the system of North American defence were to blame. A major one was Diefenbaker’s relationships with the Canadian military and President Kennedy. While the Canada-U.S. Basic Security Plan (BSP) recognized the need for political consultation, this component of the system deteriorated in the late 1950s. Coordination of Permanent Joint Board on Defence diminished and infrequent contact with the Canadian Chairman kept the Prime Minister out of touch with bilateral defence issues, which was further damaged through Diefenbaker’s poor relationship with Kennedy. In this political vacuum the military communities in Canada and the U.S. developed a “cohesiveness” and “philosophy of mutual support” that functioned well at all levels, but where civil-military relations and civilian control weakened.⁶⁷ When the crisis broke out, the mechanisms for political coordination and direction were weak, while the military framework for cooperation and implementation of a joint response was stronger. Canadian and U.S. air and maritime Commanders had a stronger link, meeting frequently and exchanging information.⁶⁸ The framework for crisis response therefore existed at the command level. When bilateral planning failed to emerge, the operational levels took over as coordination between Canadian and U.S. operational levels was standard procedure and actions to be taken were routine. Canadian decision-makers were, however, deficient in their response. Diefenbaker’s

⁶⁷ Ibid., p. 185.

⁶⁸ Ibid., p. 202.

apparent hesitation to make decisions further tied the hands of military Commanders in meeting the response and assisting their U.S. counterparts.⁶⁹

What is important to note is that the political consequences of the Arrow cancellation, the Bomarc debate, and the Cuban Missile Crisis were serious. In terms of the aerospace debated, it appeared to some that Canada had become dependent on the U.S. What is more, the opposition was critical of how the entire issue was handled. Paul Hellyer, the defence critic at the time, was upset over the Arrow cancellation, claiming in his memoirs that “I wanted to condemn the government outright. Both the Arrow airframe and its Iroquois engine were monumental, world-leading achievements, and throwing in the towel on the production was a national disgrace.”⁷⁰ The whole program had shown itself to be inefficient and wasteful—production costs and timescales grew to an unacceptable degree, and the whole program was eventually scrapped amid confused policy justifications. It was a poor example of sound defence management and as its cost threatened the ability to pay for programs of the other two services, it was an indication of poor coordination. Although financial cost might not have been *the* major factor in the cancellation, it certainly contributed to a view that development and procurement planning held the potential for spiralling cost overruns and a myriad of costly unknowns within a context of tight resources. The Cuban Missile Crisis, on the other hand, indicated a need to take a new look at the issue of civilian control. It also further cemented the view of Diefenbaker as indecisive and unwillingness to stand with our allies on tough defence issues, similar to the nuclear arms debate. Minister of National Defence Harkness clashed with Diefenbaker over both the acquisition of nuclear

⁶⁹ What is more, in Canada a series of war books existed to outline the conditions under which states of military readiness would evolve as well as the kinds of actions to be taken in response. The war books, however, were removed prior to the crisis for updating, eliminating a key mechanism for the Canadian crisis management. Without the war books—an important source of political control—and with Diefenbaker’s reluctance to heighten the military’s state of readiness, Harkness circumvented the system and told senior officers to discretely take preliminary steps for increased readiness.

⁷⁰ Paul Hellyer, *Damn the Torpedoes: My Fight to Unify Canada’s Armed Forces* (Toronto: McClelland & Stewart Inc.. 1990), p. 19.

weapons and the crisis in Cuba, straining the relationship between the two. Not only did the Liberals witness the entire debacle unfold, but they would be sure not to let the same fate befall themselves.

Defence policy through the 1950s was a hot-button issue. The Korean War, NATO, increasing cooperation and integration with U.S. defence, the Cuban Missile Crisis, and the question of nuclear arms for Canada—these were the topics with which politicians and military planners had to contend. As defence bureaucracies grew and administration costs rose, less was available for capital equipment. From 1958 to the early 1960s, the defence budget held stable. At this time, however, spending on defence equipment dropped from a quarter to less than 19% of the budget while spending on research was almost cut in half. However, personnel costs in defence rose from less than 33% to nearly 37% of the budget.⁷¹ One consequence of this was an erosion of military strength. Harry Halliwell of the *Telegram* argued in 1962 that Canada was spending a lot of money in defence but was getting little for it; we were withering our military potential. The economics of defence was high in everyone's mind in the early 1960s. The Liberals returned to power in 1963, largely as a result of taking a firm stance on agreeing to accept nuclear weapons—something Diefenbaker was never able to do. Determined not to befall the same fate as the Conservatives, the defence portfolio became key, looking to be more decisive and economical than it had been under the Tories. A memorandum to members of the Liberal caucus outlined in 1962 the need, among other things, to ensure that defence policy was “realistic” (not hesitant to make decisions in light of changing circumstances), and the importance of “prevention of waste” in the defence effort. The Liberals felt that they could not afford indecision or to be unrealistic in their defence methods. Instead they saw a need to constantly reassess the changing facts and do what

⁷¹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 72, file 72-27, Harry Halliwell, “So Little for So Much,” 31 October 1962.

was necessary with view of their responsibilities.⁷² Thus, a primary consideration of the Liberals when they came to power, including that of Paul Hellyer as Minister of National Defence, was to prevent costly hesitation and excess. Political control over defence and a rationalization of management and organization would be the means to achieving this.

While the process of policy-making would be significantly altered in the 1960s, many of the themes of defence policy organization through the 1950s were consistent with what came after. Minister of National Defence, such as Brooke Claxton, searched for the ideal organizational framework in context of the changing Cold War environment. Affected by cost, fluctuations in the size and complexity of defence administration, and the need for coordination of effort, Claxton undertook management reform in the direction of greater integration. He was engaged in management activity in the same way than those who came before and after—the quest to balance organizational goals and values in relation to the strategic, economic, and political environment. Not only would Hellyer continue the trend, but his opinions and perspectives were shaped by defence during the 1950s and early 1960s. Although Claxton certainly did not attempt to implement an integration and unification scheme to the degree that Hellyer did, the development of the defence environment would appear to suggest that major change was needed—a suggestion explored by the Glassco Commission. The financially and politically costly Arrow program and the weaknesses of political control that the Cuban Missile Crisis alluded to would play into the Pearson government's own attempt to design the best organizational design for Canadian defence.

⁷² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 72, file 72-27, Office of the Leader of the Opposition, "Our Place in the World," 30 April 1962.

CHAPTER 3

DEFENCE MANAGEMENT UNDER REVIEW IN THE EARLY 1960s

Although Paul Hellyer initiated great and far-reaching change in defence management and administration in the 1960s, defence management had come under review prior to his arrival at DND. The Royal Commission on Government Organization, also known as the Glassco Commission, was established in 1960 in order to examine all aspects of administration of the federal government and to recommend ways to improve the efficiency of management practices. A close examination of defence formed a large part of the Commission. This chapter examines the report and its recommendation with respect to defence in order to gain an understanding of not only the observations made by the Commissioners but to uncover some of the key philosophical conceptualizations of how defence should be managed, as many of the ideas expressed in the final report formed the basis for the management perspectives that came after. The Glassco Commission was an important document referenced by both reformers and critics of defence administration in the following years, each arguing the merits and disadvantages of some of its more fundamental observations.

Many of the recommendations for defence made in the report were not acted upon immediately. Instead the importance of the report is that it provided a conceptual foundation for ideas and concepts that would be used for the reorganizations of the mid-1960s under Hellyer. The concept of integration of the Canadian Armed Forces, the strengthening of the role of the Deputy Minister, and the idea that greater reliance should be placed on civilian workers at DND were all part of the Commission's recommendations. Moreover, the investigation into the Department led to a number of inquiries and discussions with respect to financial management, departmental administration, and program and planning policies, all in the hopes of uncovering inefficiencies and areas of improvement. Although the mandate was perhaps more than could be reasonably handled in the time given to the investigators, the Commission nonetheless represents a concerted effort at examining administration and management in

defence with an eye to applying certain modern management techniques such program budgeting and the potential use of Operations Analysis.

THE ROYAL COMMISSION ON GOVERNMENT ORGANIZATION

The Commission was chaired by J. Grant Glassco. Glassco, born in Los Angeles, received his education in St. Catharine's before attending McGill University. As a businessman and accountant he worked with such institutions as Trans-Atlantic Fund Inc., the Canadian Imperial Bank of Commerce, and the Canadian Corporate Management Company Ltd., before being appointed to the Royal Commission. The Commission made use of 176 specialists from industry and government with many representatives from management consulting firms in Canada. Management consulting in Canada at the time was an emerging profession and it was only in 1963 that the Canadian Association of Management Consultants (CAMC) was created to foster standards, quality, and competence in the services to clients and to enforce professional rules of conduct. The Glassco Commission used the services of many of the firms that would comprise the association, such as Peat, Marwick and Mitchell, which investigated financial management, and staff from Urwick Currie, Payne-Ross, Leetham Simpson, Stevenson & Kellogg, Riddell Stead, and the Thorne Group which investigated paperwork and systems management.¹ One recommendation that resulted from the Commission was that the federal government make more use of external advisors and the Commission helped establish the government as a major market for CAMC firms. In the process of its investigation, the Commission visited both the U.K. and the U.S. Uneconomic processes and duplication in the administration of federal departments came under scrutiny, and defence was singled out due to its size and cost, in addition to the range and scope of its activities. In the end, the Commission investigated 23 departments, 21 statutory boards, and 42 corporations, including its investigation into the Canadian military.

¹ Edward Bruce Mellet, *From Stopwatch to Strategy: A History of the First Twenty-Five Years of the Canadian Association of Management Consultants* (Toronto: Canadian Association of Management Consultants, 1988), p.22.

F.S. McGill & Project 16

In going about its investigation, the Commission established project teams to address particular issues. One of these projects at DND was Project 16, headed by Air Vice Marshall F.S. McGill. His mandate was to “assess the administrative system of the unique characterization of the operation of DND and on the basis of this assessment to coordinate the conduct within the Department of all [Glassco related] functional investigations.”² In addition to McGill, the team consisted of Brigadier (retired) Earl Suttie (VP, Economic Research Corporation, Montreal), Captain Eugene F. Noel, and John Outram from DND. Due to the scope of the investigation, it was decided that the analysis should be confined to broad aspects of administration and their related organizational structures. The McGill reports became a key document from which much of the Commission’s final report on Defence was based, providing the broad conceptual framework for recommendations (although the final report did not use all of them). The proposals were intended to “achieve a permanent and effective organization” and result in “improved efficiency and economy” at DND.³ Despite the difficulty of investigating DND in depth with the resources and time available to them, the team on Project 16 did their best to examine and highlight the unique nature of administration in defence. As a starting point, McGill established that the nature of the armed forces conditions both considerations of administration in the Department as well as stated government policies. In other words, defence management and organization is tied directly to defence policy, which at the time was based on alliance commitments and the need to maintain large standing forces, ready for defence.

² Douglas Bland, *Canada’s National Defence, Vol II: Defence Organization* (Kingston, ON: School of Policy Studies, 1998), p. 21.

³ F.S. McGill, “Royal Commission on Government Organization: Project 16. Interim Report: Presentation to the Commissioners,” in *Canada’s National Defence, Vol II: Defence Organization*, ed., Douglas Bland (Kingston, ON: School of Policy Studies, 1998), p. 31.

McGill acknowledged that alliance frameworks were the core to Canadian defence policy and touched on the unique character of defence in the advanced technological world. Whereas defence could previously be assured through a small capable military force that could be expanded if needed, technological advances in modern weapons systems made the preparation time much shorter. The best approach to defence thus became maintaining fully trained and equipped forces, ready with advanced weapons/technology and support infrastructure, and which were capable of deploying quickly. Thus the size and cost of defence grew incredibly after the war and even in periods of peace massive and costly bureaucratic defence establishments were wholly necessary, especially in light of unlikely reductions of Canadian commitments. Such large and costly bureaucratic establishments were needed in order to cope with change and to act as bulwark against obsolescence:

Another special characteristic of modern defence requirements is the enormous cost of obsolescence, created by the rapid advance in technology. Equipment for the Navy, Army and Air Force may become obsolete between the time the decision is taken to adopt a particular weapon system and the time of delivery. As a result there is constant pressure to spend substantial funds on new programs. In competition with other departments which require larger budgets to provide better public welfare and services the needs of defence tend to be regarded as wasteful and negative.⁴

In defence of the military administration, however, McGill stated:

It is important to emphasize and affirm at the outset that Canada is well served by the officers and men who have voluntarily chosen to make the defence of their country their career. Unfortunately only the unusual is good copy and as a result the general impression is given that those in uniform are wastrels and irresponsible spendthrifts. Nothing could be further from the truth. In the course of our investigations we found evidence of competence and dedication to duty that should be a matter of pride for all Canadians.⁵

Thus, McGill's assessment of defence in the early 1960s followed in this way: In support of the military and the job that they were required to accomplish within their alliance commitments, the bureaucratic nature of the Department necessarily expanded. Of particular importance was the technology which was required for effective defence and security and the successful completion of military tasks. The

⁴ Ibid., p. 30.

⁵ Ibid., p. 28.

advancement of such technology was indeed financially costly, but even more costly was the threat that rapid advancement had on operational capabilities: "The ultimate in waste and irresponsibility would be to allow the defence forces to become ineffective due to obsolete equipment or incompetent personnel."⁶ This was the basis upon which McGill approached defence administration and made recommendations. Military capability came first and the effect of rapid technological change required effective planning and sufficient funds. With the health of operational capabilities as the top concern, this need, along with the need to make the Department as effective as possible, required a new look at defence administration. McGill saw administration as the starting point for any changes that were intended to find economies and improved efficiency within the department. And although DND's unique character of DND was always an important context when discussing such change, it does not preclude the applicability of sound and proven principles of administrative management. For McGill, the goal was to have an organization that was designed to be as efficient in war as it was in peace. The struggle that he faced was the need to find balance within an organization that is intended to be able to cope with war while at the same time providing economical and efficient administration during peacetime. The very fact that defence administration must run as smoothly and efficiently when and if a war comes as it does otherwise suggests that the this field requires a unique approach to management. Defence should not necessarily be approached in the exact same way as any other organization. Its uniqueness, however, means that its management, organization, and administration, requires close and careful attention. Implicit within this attention is the recognition of the need to change when, and if necessary, and the need for creativity and innovation when faced with the need for such change.

The duality between operating in peace and war (and the uncertainty therein) required careful, long term planning. McGill stated: "The major changes in the basic organization are essential if the economies in operational costs are to be obtained. What is proposed is a beginning of a process which

⁶ Ibid., p. 31.

requires careful planning and precise timing over an extended period of time, not less than five years and possibly as long as ten years to achieve.”⁷ Consequently, in Canada there was recognition of the need for a management process that was rooted in a more ‘realistic’ approach to defence planning. Much like the system established by McNamara, it was equally viewed in Canada that the particular conditions of defence in the 1960s required a more in depth process that strove to achieve greater precision in planning. Like McNamara’s PPBS system, this was seen as being achievable through planning periods longer in scope than had then been the norm.

The major changes McGill proposed were the appointment of two Assistant Deputy Ministers (ADM) in order to relieve some of the onerous tasks of the Minister in terms of administrative responsibilities; the appointment of a Commander-in-Chief of Defence Forces as the first step towards a unified command, not a unified service or operational command, but an executive head who can accelerate decision-making; the establishment of identical service functional departments in order to attain commonality of administration; standardized accounting procedures within the Army; and changes in the civilian structure—principally moving the responsibility of procurement of military hardware (at the time purview of the Department of Defence Production) within DND itself, in order to meet the pressures of technological warfare. In addition, the report was recommended that economies could be found by using civilians in positions other than skilled trades or professional positions (i.e. in support and non-operational roles); the delegation of financial authority to the heads of the three services, eliminating paperwork and delays⁸; and finally, decentralization of authority from HQ to Commands as over-centralization was seen as the cause of excessive paper work, unnecessary costs, and long delays. The report recognized that both the U.K. and the U.S. were beginning to give greater authority to Commands, where effectiveness was seen as being rooted partly in decentralization.

⁷ Ibid., p. 28.

⁸ The delegation of financial authority down the chain was seen as a way to gain economies by giving greater control over those who are in control of the wasteful practices. It was seen that certain budgeting principles used in the U.K. that were based on extending authority down the chain, were successful.

Commanders in the field with authority to make administrative decisions were seen as holding the potential to relieve some administrative burdens within the system. Moreover, it allowed Commanders to maintain their skills in decision-making and judgement calls which were needed in times of war.

For McGill, defence administration was a unique situation among the other kinds in the federal government, in large part due to the uncertainty factor. To be sure, nobody can predict the future or what obstacles departments or policy areas will face, but defence had the unique dichotomy of having to function in war and peace. Moreover, the Cold War's political, strategic, and technological environment only heightened this uncertainty. The effect of this was pressure on maintaining efficiency of management and operations of the services. This does not, however, suggest that dollars and cents are necessarily the overriding measure of efficiency. Although it appears that efficiency seems to be steeped in the issue of cost, the undertone to McGill's report was that an ineffective military which was the result of obsolete equipment and poor management was the true issue at hand and military/operational effectiveness is a major, if not *the* major component of conceptions of "efficiency" that must be borne in mind. Accomplishing the main goals of policy (satisfying of commitments) within the constraints of defence (the uncertainty that characterizes warfare), was to be the guiding light for measuring defence administration and organization and its efficiency. And while sound management principles are applicable to defence, there are indeed cautions. Douglas Bland quotes one memorandum in his *Administration of Defence* with regards to McGill's view on military effectiveness: "The Commission, therefore, regards DND as a field to which all principles of management and organization developed in the first five reports will apply except where military considerations of a compellingly convincing kind could be produced to show why these principles should not apply."⁹ In addition, McGill stated: "Better organization and better management of manpower would certainly accomplish something but it would be doing DND and the Government an injustice for anyone to suggest these

⁹ As quoted in Bland, *The Administration of Defence*, p. 27.

measures are likely a panacea for the difficult problems which face the government in the defence field.”¹⁰

Report 20: The Commission's Perspective on Canadian Defence

The part of the Glassco Commission official report that dealt directly with the Armed Forces is titled “Report 20: Department of National Defence” (published in 1963), and its investigation and recommendations highlighted problems within the organization of defence in Canada, leading to changes in the management of the department and defence policy-making. The report was shaped by the Commissioners’ opinion that DND’s principal task was the implementation of government defence plans. In addition to this, Cabinet was squarely identified as the source of formulating defence plans, not only due to such formulation being the responsibility of elected officials, but because defence necessarily permeates so many other departments and ministries. It is also important to note that the Commission saw the collective nature of defence as a chief importance for understanding the higher organization of defence. As it was not envisioned by the Commission that Canadian defence arrangements were to be independent military actions, but part of collective defence arrangements of NATO and NORAD, the supposed outcomes of this were twofold: the tasks of Canadian Armed Forces would consist of missions that often had little direct relationship with one another, necessitating a balanced collective effort; and second, the lines of operational command for Canadian Forces led directly to international commands. Thus, the Commissioners interpreted the principal function of defence headquarters organization as one of support and administration—that is regulating the manning, training, arming, and supplying of the Forces—instead of operational command.¹¹ Whether the Commissioners believed this interpretation in full, or such an impression is merely the result of a

¹⁰ As quoted in Bland, *The Administration of Defence*, p. 27-28.

¹¹ Canada, *Royal Commission on Government Organization*. Chair: J. Grant Glassco, four vols., Vol 3: *Special Areas of Administration Report 20: Department of National Defence* (Ottawa: Queen’s Printer, 1963), p 66.

poor articulation of their perspective, it nonetheless seemed to neglect the fact that even within the context of alliance operations, Canadian forces committed in the field would still require active control and leadership by Canadian officers. It is also interesting to note that such an interpretation limited the ability of Cabinet to control the armed forces, a fact the Commissioners stated is one of the fundamental tenets of the organizational system, due to the apparent lack of control over operational capability within the alliance framework. Glassco also saw the alliance system as having an important impact on the management of defence: The alliance framework created “rigidities”—that is, alterations in resources and force strength could only be accomplished by changing commitments made within collective defence arrangements, and this affected equipment purchases and budgets. Due to the rather inflexible nature of commitments, attempts to curtail expenditures tended to fall on controllable items such as equipment because personnel, operations, and maintenance costs were less controllable.¹² The dichotomy between what could be controlled or not, and what was certain or not, was also discussed with reference to the emerging concept of “forces in being.” Glassco made the point that any future emergency within the context of Canada’s commitments to collective security would be met with the forces immediately available. The idea of a peacetime force upon which the forces would grow in a time of war was no longer seen as valid. Glassco saw this as a simplifying concept for organization where planning for future hypothetical forces was not needed. Instead, in the tradition of the rationalist perspective, the Commissioners argued that the armed forces could be designed for relatively known tasks and with known resources and dimensions.¹³

Interestingly, there appears to be a contradiction of strategic outlook here. On the one hand, Glassco’s perspective implied a simplification of future planning within known parameters. At the same time, defence thinkers were always cognisant of the general uncertainty of the future as a result of rapid technological developments, the uncertainty of whether mutually assured destruction would keep

¹² Ibid., p. 66.

¹³ Ibid., p. 68

nuclear war at bay, and the shaky political stability abroad due to decolonization and the domino theory of communist expansion. Whether or not this contradiction was a result of the Commissioner's lack of understanding of the defence realities, or simply a flaw in the clarity of the report's language, is not clear. What is clear is that where predictability existed within the report's perspective of defence planning, the idea of administration, support, and financial management as the fundamental function of defence headquarters was reinforced.

Integration, Organization, and Civil-Military Relations

In the section entitled "Direction of the Armed Forces" of Report 20, Glassco showed some suspicion regarding the application of unification to the organization of defence but endorsed the idea of integration. This was due particularly to combined military operations which were becoming the norm and which required "close cooperation of all three Services." The Commission recognized that the soldier, pilot, and seaman all required different kinds of training and equipment, yet also argued that the distinction between the three environments was declining due to the impact of technological development which was creating more commonalities. Commonalities existed as the technology of a traditional service came to be used by others, such as the use of aircraft in the Navy. In addition, the Cold War saw an increase in the general technical content of defence and the operational elements, a large degree of which was common. The need to maintain separate organizations for common functions was becoming "uneconomic" due to the growing administrative tail (although exactly which "functions" this referred to was not spelled out). Integration was seen as one way of fixing that.

The Commissioners explored four different ways of accomplishing tri-service integration, ranging from the assignment of operational responsibilities, to one service to removing control from all services through a committee system, to a "Fourth Service"—consolidation of common functions under a single executive authority that was independent of the three Chiefs of Staff. The Commission felt that

the first approach would suffer from competition and resistance between the services—particularly where functions important for combat effectiveness of a particular service was in question.

Coordination by committee was also an option considered, instead of integration of common functions. The primary vehicle for such an approach was to be the Chiefs of Staff Committee. At the time, however, this approach suffered from the fact that the Committee had no voting system and the Chairman had no authority, meaning that decision-making required unanimous agreement. However, members of the Committee had virtual veto power over issues. What is more, when there was agreement among Chiefs, the implementation of decision was “strangled in a maze of different practices and methods” within each service.¹⁴ According to one author writing at the time of unification, the CSC failed at achieving its goal of sorting out problems relating to overlapping jurisdictions because of the personalities involved and ingrained separate service training, traditions, and loyalties.¹⁵ The Glassco Commission also considered integration under committee direction but this would not overcome the deficiencies of committees as teams designed to preside over common functions would be hindered by inter-service disagreements. The committee system in general at DND was not looked upon favorably by the Commission. Over the decades, the role of committees at DND had evolved from an occasional useful tool to an institutionalized method of administration and this formalized approach led to a large number of standing committees and sub-committees—during the pre-integration period there were as many as 200 standing committees and huge number of inter- and intra-departmental committees, that might have been as high as 6,000.¹⁶

As for the Fourth Service approach, the commissioners were concerned that this might not have eliminated service fears of reliance for essential functions on another service, or the fear over the loss of control of administrative functions, but the Commissioners were of the opinion that unified command

¹⁴ Thomas Stevens, “Committees: A Management Technique in the Department of National Defence,” in *The Canadian Military: A Profile*, ed. Hector J. Massey (Toronto: Copp Clark, 1972), p. 238.

¹⁵ *Ibid.*, p. 239.

¹⁶ *Ibid.*, pp. 235, 240.

would not be affected by integration of common functions under an independent executive—an opinion rooted in their belief that the primary role of the directing organizations was one of support. The principal source of responsibility under the Fourth Service concept was to reside in the Chairman, Chiefs of Staff, and the Deputy Minister. The Commissioners called for a close working relationship between the two. In fact, the evolution of the relationship between the Deputy Minister and senior military officer(s) was a constant feature of the 1960s, ultimately culminating with the redefinition of that relationship in 1972 with the establishment of NDHQ, which fused together the civilian and military arms of defence in the management of the department. Referencing the unavoidable dichotomy that exists in administering defence, and the overlap in the discharge of responsibilities, the Commission stated:

The statutory responsibility of the Chiefs of Staff for the control and administration of their Services necessarily affects the way in which the deputy minister discharges his responsibility, since there can be overtones of military effectiveness in almost any judgement of administrative efficiency. As a result, the administration of the department requires a continuous and close working relationship between, on the one hand, the deputy minister and his officers, and on the other, the Service Chiefs and their officers. The ultimate authority and responsibility is ministerial, and it is at this level that the relative roles must be decided.¹⁷

In an effort to strengthen the roles of the Chairman and the DM in the service of greater integration and administrative efficiency, the Commission made a number of recommendations. In terms of the Chairman, Chiefs of Staff, they recommended that the Chairman be given power of direction of the forces, be given the control and administration of elements common to two or more services, and that the title be changed to Chief of Canadian Defence Staffs. In terms of the Deputy Minister, the Commissioners felt that his role was too narrowly circumscribed in practice, the outcome of which was a lack of staff assistance to the Minister that was needed in the execution of his role in directing defence. This conclusion emerged from their perspective that the Armed Forces are subject to civil power—control by ministers answerable to Parliament. And, in the control and management of the

¹⁷ Canada, *Royal Commission on Government Organization*. Chair: J. Grant Glassco, four vols. Vol 3: *Special Areas of Administration Report 20: Department of National Defence* (Ottawa: Queen's Printer, 1962), p. 76.

Forces, responsibility rests with the Minister. However, "Given the present size and complexity of the Armed Forces, the Minister must have strong support if he is to discharge his responsibility effectively."¹⁸ Thus, the Commissioners posited that there existed the need for a strong staff group, civilian in character, that existed outside the framework of management of the armed forces, and with "sufficient intimate knowledge" of the administration of the services "to enable it to assess the standard of management and advise the minister of changes in organization or methods of operation that appear to be needed."¹⁹ The Commissioners felt that the fact that the DM's organization was free of inter-service rivalry made it more capable of taking a comprehensive and unbiased view of defence organization and administration. This would help establish greater integration of common support functions. The Commissioners thus recommended with respect to the DM: that he be given greater responsibility for assisting the MND in the discharge of his responsibilities for the control and management of the Forces as well as keeping under review the organization and administration of defence. Importantly, questioning the reliance of the Minister on military advice, Glassco felt that the role of the Deputy Minister needed strengthening, particularly to improve civilian control of the armed forces. The reliance of the Minister on the Chiefs of Staff Committee for advice on military effectiveness led Commissioners to doubt the degree of civilian control that existed if the Minister was forced to rely on it excessively.

Control was therefore at the heart of the matter and led to the Commission's recommendations, a theme that would play out dramatically as the decade rolled on and some these ideas passed from observation and recommendation to implementation and reality. Politics and civil-military relations, therefore, were contributing factors in addition to operational effectiveness and administrative rationalization. As the history of rationalization efforts in the rest of the Cold War show, it

¹⁸ Ibid., p. 76.

¹⁹ Ibid., pp. 76-77.

has been near impossible for managers to create administrative change without being affected by politics and conceptions of civil-military relations, nor affect these things with their efforts at change.

Civilians in Defence

The Commission also weighed in on the nature of civilian involvement in the running of defence. It is worth outlining the report's views on the matter as it is a factor that emerges during the reorganizations of the late 1960s and early 1970s. As the organization, management, and administration evolved so did the nature of the roles and responsibilities of actors, particularly civilians who appeared to gain new prominence in defence due to increased emphasis on supposedly civilian and private sector management concepts. As such, the perceived civilianization of defence became one of the more prominent complaints of the management environment that emerged in the 1970s.

Report 20 called into question the effectiveness of having most senior positions in defence filled exclusively by service officers. The Commissioners felt that the effectiveness of activities of support and non-combat functions suffered from early retirements of officers and their frequent rotation from post to post. It was their opinion that this limited the opportunities for specialization and caused a lack of management continuity. As a result, they believed that the career opportunities of civilians in senior management positions with regard to supporting activities needed to be enlarged. It was also argued that many senior administrative tasks of the services could be efficiently accomplished by civilians and their increased employment in this area would have the benefits of bringing new backgrounds and experiences to the table, improving performance. A further point was that more civilians working on the military side could increase civilian familiarity with service matters. This would help to better equip them for senior positions in the Deputy Minister's Office "and would reduce the tendency—to which civilians are all too prone—to regard military affairs as professional mysteries comprehensible only to

the military mind.”²⁰ Civilians in such postings would assist the services and not have any powers of control or checks over service activities. Instead, they would help provide continuity of administration. It is important to note that the Commission had the same view with respect to the services—that service officers play a role in the civilian establishment. Thus, the Glassco Commission recommended improving the civilian technical and administrative career opportunities in the armed forces and an increase in the interchange of service and civilian officers which would reduce the possibility of antagonisms.

McGill endorsed the section on manpower in Report 20 and its recommendations on civilianization. He felt that a proper ratio of military and civilian personnel had never been properly determined and that the recommendations of the report would help eliminate delays and excessive paperwork which had proliferated in defence. Such rationalization would help provide better career opportunities for civilians and improve administrative efficiency. Furthermore, in *Notes on Authority and Responsibility within Canadian Defence Organization*,²¹ McGill provided an outline of some of the opinions of senior personnel on the matter of civil-military relations. He indicated the need and desire to clarify the authority of the Deputy Minister but recognized that it could only be done after a careful look at civil-military relations in Canada, particularly the issue of civilian versus military judgement. It was acknowledged that a common view that had been advanced by military personnel was that there was an area of defence decision-making that belonged particularly to the military. True, ultimate authority rested with the Minister, but there was indeed resentment among some military personnel of attempts to incorporate civilian judgements into military decisions, supposedly challenging the technical competence of the military expert—with potentially dangerous consequences.

²⁰ Ibid., p. 79.

²¹ See F.S. McGill, *Royal Commission on Government Organization: Notes on Authority and Responsibility within Canadian Defence Organization: 24 April 1962*, in *Canada's National Defence, Vol II: Defence Organization*, ed., Douglas Bland (Kingston, ON: School of Policy Studies, 1998). This was a paper completed in April of 1962 that outlined some “bits and pieces” of information and opinions regarding two main issues: unification of command, and civil-military relations.

This type of perspective must be qualified, however. McGill stated that there is a distinction between the integration of technically qualified civilians, whose views are in fact welcomed, and those of the non-technical “generalist” and the outside civilian, such as Treasury Board staff who would ask for justification of proposals or alternative recommendations—essentially second guessing military wisdom. McGill implied that the military personnel were unduly sensitive towards civilian input and involvement. With respect to the idea that the military can claim certain areas as “their right,” he called it an anachronistic view of civil-military relations: “It will have to be stressed that there is simply no such thing as an area wholly exempt from either prior approval or review by civilian authority...”²² In understanding the changing situation in the context of modern defence, McGill referred to Georges Clemenceau’s famous line that war was “too serious a business to be left to the soldiers.” According to McGill, the general mood of the majority of officers and civilian officials was that of an acceptance of radical change in light of the revolution the military was facing in the Cold War. Moreover, in the face of nuclear war it is “one of the requirements for our Defence institutions that they should be so established as to bring to bear the best judgements, the best policies, the best men and the best equipment, under conditions of peace so that they could act effectively to prevent a deterioration of any situation into the state when the thermo-nuclear exchange would take place.”²³ Overall, the Glassco Report’s endorsement of greater reliance on civilian staffs in defence administration as a counterweight to too much reliance on military advice opened the door to criticism that civilian staffs were negating the merit of the military profession (a factor explored in chapter two with respect to McNamara’s approach to U.S. defence.) Although the exact nature of civilianization trends in defence are debatable, it is important to note that in the Glassco Report we see some of the early articulation of the enlarged role of civilians in the administration and management of defence who have particular skills to bear on

²² Ibid., p. 45

²³ Ibid., p. 47.

the problems of defence, and thus the report has an important place in the historical development of this trend.

THE QUEST FOR CONTROL & RATIONAL MANAGEMENT IN DEFENCE

Recommended Changes to Planning in Defence: PPBS

In 1961–1962, over \$1.5 billion dollars was spent by DND (as well as the Defence Research Board).²⁴ Without a doubt, the scale of the defence portfolio was massive by the early 1960s. It is thus understandable that the Commissioners were interested in the financial management of the department, stating “The scale of defence expenditures lends particular importance to the principles set forth by your Commissioners in the report on *Financial Management*, relative to the administration of financial business throughout the government. Subject to special considerations, these principles are fully applicable to the conduct of business by the Armed Forces.”²⁵ One of the principal recommendations was that departmental estimates be prepared on the basis of programs of activity rather than by standard objects of expenditure, much like the PPBS system introduced in the U.S. around the same time. It was noted, however, that there existed difficulty in developing classifications of programmes due to the overlap of programmes and responsibilities of the services and the need for joint activity. Integration was alluded to as a necessary step for improving coordination of support functions. It was implied that modern financial management would be best suited to an integrated system, but until that time came, for the purpose of control and assessment, it was necessary to program separate identical functional activities of the three services.

In addition to adopting an accrual accounting system, the Commissioners suggested that the classification system be geared towards permitting control of expenditures in an orderly manner

²⁴ Canada, *Royal Commission on Government Organization, Vol 4: Special Areas of Administration Report 20: Department of National Defence*, p. 62.

²⁵ *Ibid.*, p. 62.

(including comparisons of actual and estimated costs), as well as to present an informative breakdown of Service expenditures in both the Estimates and Public Accounts. Although the Commission only published a handful of pages on planning, its recommendations led to a new approach to budgeting in Canada, essentially setting in motion the development of a PPBS program budgeting system. Prior to integration, the services undertook their own planning. Instead of being parts of a whole, planning was related neither to functionality, nor was it related between the armed services. The new system sought to change and establish a more logical approach. The list of requirements was greater than there were funds and the difficult task of deciding was hampered by the fact that there was poor policy guidance and no proper management of the budgetary process.

In November of 1963, the same year as the publication of the Commission's report on DND and only seven months after Paul Hellyer came to DND as the Minister of National Defence, the Minister was presented with a paper from R.J. Sutherland, Chief of Operational Research at the Defence Research Board, on the subject of PPBS.²⁶ The paper arose from unsuccessful attempts to cost alternative defence budgets and the inability to timely produce serious estimates of value. As a consequence, an ad hoc committee looked for a means of improving the estimates and costing function, resulting in a close look at PPBS—particularly with how the U.S. system could be of value if implemented in Canada. It examined features of planning, programming, and budgeting in Canadian (and U.S.) defence. The paper started by stating that the most important task of defence management was the reconciliation of military plans with annual budgets; a task that can “never be simple or painless.” The first problem was that the time periods associated with military planning and operational capabilities were expressed in terms of forces, weapons and readiness, which contrasted with budgets which were related to single years and expressed in terms of dollars. It was this difference in scale and language that necessitated a rationalization of the process. This was McNamara's goal in instituting the PPBS systems, of which the

²⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 68, file 68, Defence Research Board, “Budgeting and Programming as Tools of Defence Management,” 5 November 1963.

Five-Year Structure and Financial Program was the central feature. According to the ad hoc committee investigating the matter, the centralization of responsibility for planning and policy-making, along with decentralization of responsibility for execution was one of the most attractive features of such an approach. This was in addition to the continuity and consistency in planning that resulted.²⁷

In terms of programming, each service at the time prepared its own annual five-year program outlining the requirements of that service. Together, these programs were known as the “Mark Document”—a general statement of the requirements of manpower, equipment, and money, for each service for a five-year period. Requirements were expressed as “activities” (NATO, territorial defence, etc.). Reviewed by the Chiefs of Staff, the DM, and with input from the Treasury Board, the Mark Document made its way to the Minister before budget ceilings for the following year were established. This was done, however, in an overall process that was informal and poorly documented. The system suffered from the fact that it was almost entirely concerned with the cash needed for the following year and long term implications of changes in the budget were not followed up on in depth. The five year program was not continuously maintained and although the Mark represented a collection of programmes, reviewed by the Chiefs of Staff Committee, the document was not developed into an official program which was representative of consensus, and was not formally approved by the Minister. According to the ad hoc committee, the document “lapses into obscurity and plays only a minor part in

²⁷ Ibid., pp. 5-6. The Committee was aware, however, of the differences between the U.S. and Canadian situation, the first of which is simply the differences in scale and the size of budgets allocated for defence which required a more formal and systematic procedure of management. Another fundamental difference is between the parliamentary and presidential system. In Canada policies are the collective responsibility of government, which is dependent on parliament for its existence. In the U.S., the separation of powers between Administration and Congress and the fact that the Secretary and his staff defend the budget before Congress is important. The Administration is not tied to Congressional support and any changes made by Congress are part of the system. The system must therefore be able to cope with such changes. Thus, budgetary process is exposed to a degree of publicity which is not the case in Canada. There are also, obviously, major differences in the organizational establishment of the respective defence departments. Yet, there are some similarities which the Committee highlighted, the principles one being that planning, programming, and budgeting, are fundamental activities conducted in DND. In this regard, the main difference in Canada was the lack of a comprehensive long term defence program..

subsequent budgeting and planning operations.”²⁸ As a new Mark was prepared each year, it was essentially an annual statement of a long-term program which was not systematically amended, which lacks clear relationship to annual defence estimates, as well as consistency and uniformity between services. Because there was no continuous long-term program it was difficult to reconcile needs as a result of commitments and the resources available to meet them—in other words, a commitment-capabilities gap.

The budgeting process was also seen to be deficient. In Canada the main focus was on “cash” requirements to be voted by Parliament as part of the following year’s estimates. The funds were voted on in terms of standard objects of expenditure and then allocated to various commands. Overall, the process of budgeting was carried within a strained timeframe and without much regard to the five-year program represented by the Mark Document. One of the other major deficiencies was that project postponements and cancellations—an inevitable part of any budgeting system—were not incorporated into a long-term defence program which would allow for a clear understanding of the long-term impact. According to the Committee there was “a strong tendency to ‘try again next year’ and for the services to accumulate an unrealistic backlog of projects awaiting a favourable budgetary climate. This makes rational long-term planning extremely difficult.”²⁹ Additionally, the budget was prepared in terms of “end-items,” providing little basis for decision-making in terms of activities. The Committee was critical: “The most fundamental decisions of defence management tend to be made in the context of the annual budget. There has been little organized data available to assist management in assessing the consequences of these decisions over the long term and especially from the point of view of their impact on military capabilities.”³⁰ It continued:

²⁸ Ibid., p. 10.

²⁹ Ibid., p. 12.

³⁰ Ibid., p.12. At the time, the Treasury Board was considering the prospect of having all departments prepare annual Estimates on a program/activity basis, rather than categories of expenditure.

Finally, the present process offers no very rational basis for reconciling military programs with whatever budgetary ceiling the Government imposes. Estimates are prepared on a Service-by-Service basis in terms of end-item expenditure. There is no comprehensive program of activities suitable for the determination of priorities within a total budget ceiling...The weakness of the present Canadian system arises out of deficiencies in staff organization and procedures.³¹

The Committee recognized that although some differences existed between the U.S. and Canadian contexts, the basic principles of planning between the two countries were the same. The recommendation was the redesign of the system, the first step of which would be a Chief of Defence Staff responsible for military planning at the national level, essential for establishing a Five-Year Program as a management tool. Thorough policy-planning was not seen to be possible through the joint Planning Committee or other coordinative efforts. Additionally, it recommended that the Cabinet Defence Committee gain a more active role in directing national security policies as well as an officer under the Deputy Minister responsible for coordinating the preparation of the Program. Finally, it proposed an active study program of budgeting, which would consider decentralized financial controls in terms of activities rather than budgetary items. Changing the budgetary process to a program basis, and over a longer term (as opposed to one year) were seen as the two most promising changes which would help lead to more cost-effective comparisons of budgets, and would be, overall, a better system of managing information and decision-making. It was hoped that this would both improve authority and responsibility as well as reduce paperwork. Much of their conclusions on the Canadian system are worth quoting in full:

An organization as large, and complicated as the Department of National Defence cannot be managed easily or painlessly. To this extent, there are no ideal procedures. It is clear, however, that efficient management cannot be carried out on a day to day or year to year basis. This demands that a long-term Program be established in order that decisions can be made in the light of a reasoned consideration of their consequences...It should be said that the deficiencies of the present Canadian system are intrinsically a matter of staff organization and procedures. So far as basic concepts are concerned there can be no question of adopting the American methods....What is required in Canada is the closing of the relatively small gap in the existing system so as to provide top management with a truly effective management tool. With minor exceptions, the necessary staff work is being done. However, this work is not adequately

³¹ Ibid., pp. 13-14.

organized and coordinated at the Department level...by providing a more articulate philosophy of defence management the public image of the department would almost certainly be improved...A second advantage is that more systematic procedures should produce substantial economy in the time of senior officers and more prompt and clear-cut decisions. It is in this latter respect that present procedures appear most vulnerable to criticisms.³²

Therefore, in assessing and responding to the difficulties of defence, a new, more rational approach to management was sought in order to aid decision-making and efficiency.

Operations Management

The planning and budgetary system was not the only aspect of management that came under review during the period of the Glassco investigations. A number of aspects of management and administration were examined in DND as part of the evaluations, including the use of computers, operational analysis, manpower management, and paperwork management. What is more, much of the discussion existed within the theme of 'control.' In 1961, the Third Annual Conference of the Operational Research Society with representation by the Civil Service Commission examined the role of operations research in government.³³ As has been outlined already, operations research is the application of the principles and methods of science to the study of complex organizations, men, and machines. The principle characteristics were: a systems approach (the study of the functioning of an organizational system complete in itself); measurement; the identification of variables and parameters effecting organizations and the numerical obtained for them; the use of modern mathematical techniques such as linear programming, queuing theory, and information theory, and the use of computers for solving problems; and finally, a mixed team of persons trained in different branches of

³² Ibid., pp. 23-24.

³³ Library and Archives Canada (LAC), RG33-46 (Fonds of the Royal Commission on Government Organization), vol. 46, file 18, Frank A. Low, Civil Service Commission, Third Annual Conference of the Canadian Operational Research Society, "Operational Research in Government," May 1961.

knowledge.³⁴ All of this had the purpose of advising management in the areas of policy-making, policy implementation, and streamlining management.

In terms of implementation, one of its functions was to improve interdepartmental control. It was recognized by the Conference that there was a conflict in defence between providing high speed of government services while maintaining economy of operations. At the time, the military had already begun to use semi-automatic systems of control rooted in operational research for the purpose of the complex equipment and personnel situations. As for streamlining management, there were three main components included in optimizing operations: the design of new systems, procedures and processes, and planning operations. Management Advisory Surveys were conducted by department specialists, outside management consultants, and the Management Analysis Division of the Civil Service Commission in an effort to make improvements. The Management Analysis Division provided an advisory management service available upon request to all departments and agencies of the federal government and was to assist administrators who might be “overloaded” with day to day operational problems to the point that they could not keep their administrative machinery under review nor conduct detailed examinations of problem areas. The division was also intended to aid administrators who simply required more specialized studies of a problem than their own resources permitted, and helped create administrative manuals and training of management analysts for the establishment of Departmental Management Analysis Units. Officers from the Management Analysis Division were drawn from within and without the civil service, most with years of management experience and analysis. From 1948 (when it was known as the Organization and Methods Service) until the early 1960s, the division produced nearly 500 surveys with over 30 departments and agencies. The surveys assisted in formulating policy, reducing work backlogs, improving simplification, and achieving cost reductions. The Civil Service Commission Management Analysis Monthly Reports for 1961 indicate that the defence

³⁴ Ibid.

sector made good use of their services, getting help in the areas of cataloguing and equipment electronic data processing, naval personnel documentation, defence production administration services, telecommunications, library services, supply, procurement, and financial advice.³⁵

The Operational Research Society argued that OR had much to offer, but too few people in government knew what it was. In addition, it was not as easy to identify problems in government in such a clear way as it was in industry and the military. Both industry and the military were seen as having greater incentives to initiate such research. In the military context it was the desire for victory over the enemy that provided clear incentive to use all the tools available and for management to be well informed in terms of what operational research was capable of doing. Indeed, discussions were well under way in the early 1960s within the military of the applicability and value of techniques such as automatic data processing. The use of computers in defence was a topic of discussion in 1963 during meetings of the Deputy Minister's Office at DND with respect to the Glassco Commission. At a meeting in February of that year, the office discussed a paper entitled "Common Computer Services in DND," prepared by the Comptroller of Office Services and Supplies. It argued that the practical use of computers in DND was proven in pay and supply and that there will be further need for automation in the department. Although, it was explained that computers had the greatest value in areas of pay, personnel, and supply accounting and was doubtful how they might fit into headquarters and the field. Thus, a central electronic data processing centre at DND was endorsed without delay. Moreover, a Minister's Manpower Study Group further advocated accepting emerging modern administrative techniques and tools. Citing DND as "big business" the report posited that it should be organized and managed in a way to take advantage of continuing developments in sound business management. This would include improvement in the utilizations of department resources by staying abreast of

³⁵ Library and Archives Canada (LAC), RG33-46 (Fonds of the Royal Commission on Government Organization), vol. 46, file 18, Civil Service Commission Management Analysis Division, "Monthly Reports," 1961.

developments in the field of modern management control as well as the adoption of any organizational changes that would help meet changing departmental conditions.³⁶

Much of the report sought to make a case for strengthening managerial control. First, it was recognized that responsibility for effectiveness of the overall department rested with the Minister, while each Service Chief was responsible for the effectiveness and efficiency of their own service. However, it was argued that authority of these managers was limited. The increasing pressure for integration was seen as a factor: As weapons systems—the entire complex of men and machines that are required for performing military tasks—were becoming the dominant trend cutting across service boundaries, this affected the responsibility for management of each service. For example, the system of communication, naval and air vehicles, and radar and sonar technologies served to integrate Air Force and Naval capabilities. Hellyer’s vision for the Armed Forces also included a closer relationship between ground troops and air support. Services were becoming less distinct from each other. What is more, the increasing cost of weapons systems (such as was the case with the Arrow) was argued as having important effects. Decisions on their acquisition and management needed to be more integrated and increasing pressure to construct an optimal system of defence management. Citing the defects of the committee system—the lack of true authority and difficulty in resolving issues—integration was implied as a solution.³⁷

The study summarized its position in this way: “Sound management of departmental resources can only be obtained by a deliberate effort to take advantage of developments in the field of modern management control.”³⁸ It was therefore recommended that an organization be established within the Department to study and recommend improvements to organizational structures, management

³⁶ Library and Archives Canada (LAC), RG 24-F (Fonds of the Defence Research Board of Canada), vol 29777, file DRBC 120-G4-1 (Glassco Commission: Deputy Ministers Study Group), DRB, “Common Computer Services in DND,” January 1963.

³⁷ Ibid., p. 2.

³⁸ Ibid., p. 2.

procedures, and administrative systems. The objectives of this organization would be: to examine overall adequacy of departmental organization and prepare submissions and plans for its “progressive reorganization” and adjustment in order to achieve “effectiveness, efficiency, and economy”³⁹; review resources applied to the Department and Service administration and support functions and ensure they are appropriate to overall defence objectives; and effect coordination and dissemination of management information between service organizations. Ideally, it would be competent in military organization as well as modern management techniques, comprised of combined military and civilian personnel.

The Tools of Office Management

All areas of management and administration were considered in light of how improvements could be made. It has already been outlined how budgets and planning were examined, but even more clerical aspects such as paperwork management came under consideration. During the Glassco Commission’s work an Advisory Committee examined the new range of computing devices available for assisting activities of authorizing actions, recording transactions, analyzing initiatives, and transmitting and storing information. Again, as evidence of the increased concern for information management and control, it was stated that “Good paperwork management seeks to have the right information at the right times and places for use in decision-making.”⁴⁰ Part of paperwork management was seen as equipment management—that is, ensuring that the right tools are being used, such as adding machines, typewriters, and electronic equipment. All of this helped work towards the goal of control as well as efficiency. Statistical sampling was cited as a means of ensuring control over quality, in addition to the emerging trends of operations research and effective organization of workers. A Project Group working

³⁹ Ibid., p. 3.

⁴⁰ Library and Archives Canada (LAC), RG33-46 (Fonds of the Royal Commission on Government Organization), vol. 219, file 25, Mr. R.J. Grenier, Advisory Committee Meeting Project #3, “Paperwork Management,” n.d., p.2.

on the Commission in 1962 also examined the role of statistical methods in administrative systems in government offices, arguing that statistical methods and mathematical techniques had already shown themselves to be of value in industry but were only in their infancy in terms of application to managing government clerical activities. Their value was that they help reduce operating costs in tight economic climates, and provide valuable information for management.

Much of the Glassco Commission investigations and recommendations can be situated within the historical context of an administrative revolution that had already begun in the private sector by the time Glassco came to examine the federal government. Graham S. Lowe is an organization expert, president of Graham Lowe Group Inc. (a consulting and research firm), and professor of Sociology at the University of Alberta who has published extensively in the area of human resources, organizational change, and employment policy. His paper “The Administrative Revolution in the Canadian Office: An Overview” (1984)⁴¹ examines the evolution of many of the themes under consideration—control, rationalization, and efficiency in management—in the context of the history of Canadian office administration. He argues there occurred a revolution in administration between 1911 and 1931, during which time both private and public offices established the framework for the modern office where control and rationalization by management was the central feature. Lowe contends that it was the rise of corporate capitalism and economic forces that put the office at the centre of operations. In the early 20th century offices started to become the control hub of emerging large bureaucratic organizations, in contrast to the unsystematic nature of 19th century offices. Lowe identifies the rationalization of office work by new “scientifically oriented, efficiency-conscious” managers.

The resulting rise of bureaucracy was accompanied by the rise of the expert salaried manager who gained authority over daily operations of enterprises due to their increasing complexity, leading to the specialization of administrative activities after 1900, and rationalization became the strategy for

⁴¹ Originally part of his PhD dissertation, but reproduced in Tom Traves, ed., *Essays in Canadian Business History* (Toronto: McClelland and Stewart, 1984).

manger to achieve organizational goals in an efficient way. Lines of authority and hierarchies and control accounting procedures emerged for the purpose of production control. Like David Noble, Lowe maintains that labour skills were broken down and control over the process of production was passed to managers with standardization and mechanization.⁴² By 1910 the science of management was catching on in Canadian industry as well as government, attracted by the promise of efficiency. Frederick Taylor published on the issue of scientific management in *Industrial Canada*, and *Journal of the Canadian Banker's Association* covered managerial reforms. In addition, according to Lowe, the federal civil service rationalized operations by hiring American efficiency experts. All of this served to further administrative control over the office which was becoming the “nerve centre” for management of organizations and their operations. It was the managerial attempt to exercise concerted control and coordination over operations and employees that contributed to the revolution, not just the invisible hand of economic development. Lowe states:

For the office to function effectively...increasing control had to be exercised over office administration. The notion of administrative control thus has a dual meaning. In the first sense, control can help us explain the growth of clerical occupations. The second can account for the rationalization of the office and the clerical labour process. In short, we are suggesting that for administrative control to be exercised *through* the office, managers had to apply the same principles of control *over* the office.⁴³

This concept of administrative control was encompassing as it included organizational, occupational, and economic aspects of administration. In the modern corporation, professional salaried managers were delegated authority over operating procedures who became concerned with organizational design, processes, and nontechnical factors that might affect organizational goals. By the First World War, managers recognized the benefits of rationalization and the drive for efficiency in operations and regimentation of the office underpinned the rationalization process.⁴⁴ Offices became the source of authority and power, as well as the instrument of decision-making. Something similar was

⁴² Ibid., pp. 122-123.

⁴³ Ibid., p. 125.

⁴⁴ Ibid., p. 126.

taking place in defence in the early 1960s. It has already been shown that under Robert McNamara in the U.S., new management techniques of operational and systems analysis emerged as a core component to defence planning and decision-making. Likewise, in Canada defence planners began to see the benefit of such an approach. Subjectivity and experience were still components of defence planning, but they were increasingly seen as needing to be supplemented by mathematical and analytical techniques in administrative and decision-making centres.

New administrative and management techniques were being introduced in order to keep pace with the new defence and security environment and the seeds were planted by the Glassco Commission for the increased power and authority of managers, particularly civilian. The Glassco Commission report on defence provided the intellectual justification for changes made over the coming decade which saw not only the creation of the Chief of Defence Staff, but increased roles for the Deputy Minister and civilian employees within defence. Although Hellyer took steps to ensure that the role of the military in the decision-making process was preserved, it nonetheless contributed to trends that would continue until the amalgamation of the civilian and military arms of defence at National Defence Headquarters in the early 1970s when the Deputy Minister and public service employees would gain further power and influence.

Decision-Making

Although much of the discussions surrounding the use of computers and other techniques such as operations research were done within the context of logistics and clerical duties, not military operations, this does not mean that during the Glassco investigations that higher decision-making of defence was not also targeted for scrutiny. A DND working paper entitled “The Process of Decision” (author unknown) questioned the state of defence decision-making, the difficulties it confronted, and the future it faced. Identified at the heart of the issue, was complexity. The technological explosion in

the defence sphere, spurred by technologies such as missiles and complex guidance and avionics systems, was a major cause of this complexity and prevented a general background of knowledge on the subject upon which decisions could be based; in other words, the complexity in defence eliminated experts. The perspective at the time was that decision-makers were falling behind as advances made it such that only the specialist was able to comprehend the full implications of advances made within their own areas of expertise.⁴⁵

In addition to the technological explosion and the complexity that was eroding the adequacy of decision-making, bureaucratic inertia was also a contributing factor. The defence environment was constantly evolving and shifting, but the cost and complexity of decision-making made it difficult for decisions to be changed or altered. In addition to this were difficulties related to obvious political considerations (both partisan considerations as well as the vested interests of particular services once commitments or policies are put in place) and the bureaucratic effort necessary to enact a change of course, once committed to. Consequently, reversing or altering decisions requires a great deal of courage. Another aspect to decision-making that was touched on was the propensity to accept expert advice on complex issues, as “it is reasonable to expect that recommendations should be based on research and expertise rather than intuition, and full use made of any technique that might assist the decision process.”⁴⁶ The paper implied that some of the senior officers in positions to make decisions based on their experience in the Second World War (and even the pre-war period) were beginning to lose their relevance as the factors of decision-making in international strategy were too far removed for many of the senior officials at the time. What was gaining in relevance, however, was knowledge of theories relating to linear programming, game theory, probability theory, and other modern concepts of decision-making despite the criticisms of technocracy which were to be expected. Such a criticism,

⁴⁵ Library and Archives Canada (LAC), RG33-46 (Fonds of the Royal Commission on Government Organization), vol. 412, file 105 (Miscellaneous Notes and Working Papers—DND, “The Process of Decision,” n.d., pp. 3-4.

⁴⁶ Ibid., p. 6.

however, might have been a consequence of ignorance: “There is little understanding of the fact that scientific disciplines and the...intellectual effort they represent can contribute significantly to the problems of international strategy.”⁴⁷

Indeed, there were no sure-fire techniques to solve the complex problems of the day or to fully overcome the conditions of “extreme uncertainty” that was part of the international sector. However, the applicability of methods of analysis was argued to be on the rise and intuitive decision-making was giving way to operational methods in the military sphere. It was said: “Decision-making, in the sense of choice between alternative courses of action, is basic to military science, yet there is considerable room for improvement in the application of modern techniques to military decision-making, and in the understanding by service decision-makers of these techniques.”⁴⁸ What was needed, according to the author, was the development of a “vigorous intellectual tradition” that would foster an “effective decision process” and establish a “really rational bases [sic]” for decision-making.⁴⁹

The Glassco Commission identified basic problems of defence: it criticized Treasury Board control of funds; recommended the decentralization of spending authority to those who already had responsibility for decision-making; the control exercised by the Civil Service Commission over employees was deemed inefficient; the Chiefs of Staff Committee was determined to not be effectively directing the Forces; and recommendations were made for the transfer of control of common requirements to the Chairman, Chief of Staff. Essentially, the reports indicated a need and a desire for change—particularly the need to eliminate costly overlap and to achieve the benefits of improved planning and programming. Many recommendations were shelved, however, seen as going too far.⁵⁰ It was Paul

⁴⁷ Ibid., p. 6.

⁴⁸ Ibid., p. 7.

⁴⁹ Ibid., p. 7.

⁵⁰ Library and Archives Canada (LAC), MG30-E522 (Fonds of Admiral Brock), vol. 4, file: A.B. German’s “Dwindling Defences” 1966, A.B. German, “Dwindling Defences,” 1966, p.3.

Hellyer who tackled the task of making changes in an environment traditionally seen as resistant to change. Inspired by Glassco, he instituted many reforms/reorganizations: He established a single Chief of Defence Staff, integrated the Defence Staff and HQ, reorganized the field commands into functional commands, and instituted the policy of Armed Forces Unification—abolishing the RCN, Canadian Army, and RCAF, and in its place created the Canadian Forces. The intention was to establish a rationalized policy process.

But the Glassco Commission was not without its faults. Moreover, in using the recommendations of McGill, Bland argues that some key features were misunderstood. He argues that McGill's principle that the Forces, department, and administration should be organized to be efficient in peace and applicable without change in war was distorted in the Glassco report. Glassco suggested this principle was applicable only for units intended for emergency situations, not the whole of defence.⁵¹ What is more, McGill's idea that inefficiency be measured in terms of military effectiveness, as opposed to financial efficiency, was not as explicit in the Glassco Report. The importance of small details such as this is that when subsequent defence managers make use of previous reports, it can embed such distortions into the policy-making process. Where Hellyer was heavily influenced by Glassco, the final report failed to take into account some key ideas of the McGill report that it made use of. Furthermore, Glassco indicated to Hellyer that financial savings were achievable in defence through administrative adjustments, but no clear indication existed in terms of exactly where large savings existed and how they could be obtained. This perhaps created an overly optimistic outlook on reorganization. While managers and investigators are free to decide how to make use (or not) of previous investigations, it does run the risk of creating a bureaucratic evolution driven by shifting interpretations—and misinterpretations—with significant consequences if the ideas and recommendations of those that came before are not clearly understood, advanced, or implemented. Errors can accumulate creating a

⁵¹ Douglas Bland, ed., *Canada's National Defence, Vol II: Defence Organization* (Kingston: School of Policy Studies, 1998), p. 52.

final product different than what had originally been intended. This process of bureaucratic “broken telephone” occurred in the early 1970s with the partial implementation of the MRG report.

There was also a more generic underlying problem with the Commission and its investigation into defence. Whereas investigators were sure to touch on some of the factors that made defence unique and set it apart from other departments, they were still operating within the Commission’s guiding principles of “efficiency, economy and improved service to the public.” These principles had to be connected to defence and defence policy. But in defence, the administrative and management component is connected to a vast policy world, where both military and civilian issues—issues of economic efficiency and military efficiency, operational effectiveness and administrative effectiveness, military command and political control—cross paths and overlap. Administrative and managerial outlooks must be made in context of the defence policy world in which they exist, and this opens the door to the entirety of that complex environment. It can be very hard to examine administrative practices and make recommendations in such a context without being drawn, consciously or not, into the vastness of the defence portfolio and all of its interrelated aspects and components. Thus, it is very tempting to wade into issues that some might argue should not be waded into. For example, it could be argued that making recommendations on civil-military relations and the roles and responsibilities of senior actors in the policy-making process was outside the purview originally intended for those working on the Commission.

It comes back to uncertainty. The struggle of defence administration is in producing a military that is effective, in an efficient way, while operating in a world of change and uncertainty. The uncertainty in the defence world is equally reflected in assessments of it; that is, it can be uncertain how to approach and examine it. The Commission was representative of one attempt, in the history of policy development, at further shaping and improving defence. There was inevitably a degree of trial and error. This is why policy and the history of defence must be understood as an evolution. Paul Hellyer’s

reforms were shaped by ideas that came before him, such as those of the Glassco Commission. The Glassco Commission can therefore be seen as a turning point for defence organization. Its existence did not necessarily mean far reaching change would occur. It was Hellyer who was inspired by the report and initiated many of its recommendations. In doing so, Hellyer accelerated the momentum of change and rationalization that had been creeping along in the post-Second World War world of Canadian defence. Hellyer further contributed to the evolution of defence bureaucratic based on his assessment of defence in 1960s, which themselves would have dramatic and long standing effects on the future of the defence establishment.

CHAPTER 4

CANADIAN FORCES INTEGRATION

The Liberal Party returned to power in April of 1963, defeating John Diefenbaker and winning a minority government. The arrival of Lester Pearson as Prime Minister started a period of transition for Canadian defence. The size of the forces began a decline from its post-war high and decisions were finally made over the role of a nuclear-equipped Canadian force in NATO. Moreover, commitments remained high, with alliances in the North Atlantic as well as in North America, the cost of which, along with growing re-equipment costs, strained government coffers at a time when Pearson was looking to better fund social welfare programs. He charged Hellyer with the task of making defence spending work within the overall national budget and it was defence, in fact, where Pearson's government received some of its greatest and most focused criticisms, due to the controversial program of unifying the armed forces.

Integration and unification were, in part, intended to help solve the financial squeeze by reducing personnel and administrative overhead, ending duplications, and freeing up valuable funds which could be reallocated to procurement and costly equipment purchases. Instead of being two separate events, integration and unification were to be two parts of one overall process. The first phase, known as integration, represented the formation of one single headquarters, with one command and logistics support system for the armed forces who maintained their separate services and identities. The second phase, unification, was the assimilation of the three separate services into one force, the components of which were each capable of conducting operations either on land, at sea, or in the air. Integration and unification were simply the next stage in a continuous development, evolution, and advancement of defence management and organization that began well before Hellyer. According to Douglas Bland, the program marked the beginning of what he has termed the 'Management Era,' characterized by a trend towards more civilian and business-oriented culture in defence headquarters

based on management theories and concepts of functional unity, and where organizational structures were based on centralized functional forms.¹ In *Principles for Change in the Post-Cold War Command and Control of the Canadian Forces* (2004), Allan English and Joe Sharp describe the effect of the management era on command and control in this way: “an increasingly unwieldy, bureaucratic structure and culture [which] have sustained inflated staffs and, in particular, led to a serious blurring of statutory responsibilities and accountability...and...thwarted the evolution of a necessary, disciplined, and unified military staff system.”² It was during this period that the objectives of rationalization and control within planning, that had been making its way through organizations and institutions for decades, came to defence in Canada. Such a philosophy of management became formalized within the defence structure, its administrative procedures, and its decision-making process.

At such a time of fundamental change in the management of the defence bureaucracy in Canada, there was also change occurring in general management theories, as concepts and models of management continued their own evolution. Hellyer was influenced by his experience as defence critic in the early 1960s, and although he might not have explicitly used management theories of the time in his reorganization of defence, those reorganizations displayed some conceptual parallels. Theories at this time sought to re-evaluate the characteristics of organizations as well as sought to understanding of how they operated. One of the dominant theories of the 1960s was to view organizations as systems which respond and adapt to their environments. Moreover, organizations were seen as rational seeking, but where the satisfaction of human elements was also needed. Ultimately, management of each organization had to find the best fit for its institution depending on its particular make-up and environment, indicating that there is no particular best approach to structuring organizations. Instead there are many paths to success which must be sought by those in charge of design. This is a useful way

¹ Allan D. English and G.E. Sharpe, *Principles for Change in the Post-Cold War Command and Control of the Canadian Forces* (Kingston, ON: CF Leadership Institute, 2002), p. xi.

² Ibid., p. xi.

of understanding defence management, particularly in the 1960s, which displayed these themes and characteristics. Although Hellyer did not use particular management or organization theories in his reorganization, what he did make explicit was his intention to introduce modern business principles in defence in the hopes of increasing political control of the armed forces, reducing waste and duplication, and improving efficiency of defence planning and management. His reorganizations, and the ideas that underpinned them, can be understood as existing within the managerial tradition of seeking efficiency, control, and rationality in organizational design and operation. This chapter provides an overview of the integration and unification of the armed forces and the structural reorganizations. It examines Paul Hellyer's road to office as the Minister of National Defence, the state of defence when he arrived in Parliament, and seeks to provide an understanding of his particular perspective of defence which helped shape his view of management and organizational change. The process of integration and unification is then traced in the second and third sections with a look at the purpose and intent of his reorganizations, as well as some of the criticisms and difficulties that Hellyer had to face in the implementation of his plan.

PAUL HELLYER & CANADIAN DEFENCE

Education, Military Service, & Entry into Politics

As a boy, Hellyer had a passion for aeronautics. He attended Curtiss-Wright Technical Institute of Aeronautics in California, earning a degree in aeronautical engineering in 1941 and returned home to Fort Erie Ontario, where he worked as a junior draftsman with Fleet Aircraft Ltd. After working his way up to group leader in the engineering department, he enlisted in the RCAF in 1944 as a trainee pilot during the late stages of the Second World War. Instead of applying for a commission as an engineer with the intent to move to aircrew at a later time, he made the decision to start at the bottom as 'aircrew-in-training.' He recalls that this decision ultimately proved to be frustrating. Due to

overstatements of losses, the policy of prioritizing pilots in Canada was reversed and only three of three hundred enlisted men were selected to train as pilots, of which Hellyer was one. His mathematics background kept him on track throughout his training to become either a pilot or navigator. However, at the same time, the Army was short of reinforcements. The consequence of this was that roughly 4,000 surplus aircrew were released so that they would end up in the army, helping to relieve the reinforcement shortage. Hellyer was one of the released. He returned to the RCAF Manning Depot in Toronto where it took nine weeks to gain his discharge, upon which he enlisted in the Army, assigned to the Royal Canadian Artillery (Mobile), due to his mathematical skills.³ However, he had to be completely re-indoctrinated into the military—he received new dog tags; had to re-learn drill; got new training in gas drill due to a different technique used by the Army (despite using the same mask as the Air Force); and finally, he had to be re-immunized. He remembers that the process was “so absurd that I didn’t know whether to laugh or cry.”⁴ Alluding to his eventual unification plan, Hellyer states in his memoir that at the very least, his military experience must have had some impact on his subconscious.⁵ The need to re-learn what had already been learned and the fact that so much time was wasted while reinforcements were needed stayed with him. As he remembers: “There was little effective cooperation between the services when each concentrated almost exclusively on its own interests.”⁶ Looking back at his experience, he stated that “it was ‘exhibit A’ for administrative incompetence in a wartime situation.”⁷ Hellyer’s personal background and only experience in the military was characterized by administrative inefficiency and duplication of effort. Hellyer spent only a short time in the military, not gaining any overseas or combat experience nor advancing past a fairly low level within the organization. He therefore had little time or ability to get to acquainted how operations in his chosen service worked.

³ Paul Hellyer, *Damn the Torpedoes: My Fight to Unify Canada’s Armed Forces* (Toronto: McClelland & Stewart, 1990), pp. 2-3.

⁴ *Ibid.*, p. 3.

⁵ *Ibid.*, p. 4.

⁶ *Ibid.*, p. 4.

⁷ Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

The most salient memory for would be the wastefulness of his involvement. Later, when confronted with problems of defence administration this experience would help make him receptive to change based on reports like Glassco.

After the war Hellyer married and decided to further his education. Faced with the difficult task of finding accommodations in Toronto, he and his wife purchased a women's fashion store which had a living space above. Hellyer also attended the University of Toronto, studying arts, including Political Science and Economics among other subjects. He became interested in two particular areas—housing and the economy. In 1949 he received his BA and then pursued a Liberal nomination after deciding that he could do more good in his particular areas of interest if he was elected to Parliament. That year he became Parliament's youngest member at the age of 25. Shortly after entering parliament, Hellyer invested in Curran Hall Limited, a house building firm, and quickly faced the prospect of losing his investment when we learned that the company was near bankruptcy. Instead of losing his investment (as well as that of some family members he had convinced to invest), he jumped into the business, reviving the company over the course of the next year—a testament to his managerial capabilities and business savvy.

In 1956 Hellyer became the parliamentary assistant to Defence Minister Ralph Campney, with whom, as former roommates, he had developed good chemistry. He recalls in his memoir that his first assignment gave him the chance to “put [his] business experience to work in government.”⁸ A citizen owed the department \$2,000, but was without assets, and was likely to never have any. Although the Treasury Board had wanted to sue, Hellyer states that his close reading of the evidence along with his practical training led him to the conclusion that spending thousands of dollars to obtain a judgement that could not be enforced was a waste of resources. Only a year later, in the spring of 1957, Hellyer was promoted to Associate Minister of National Defence in the Cabinet. He only held the position for a brief

⁸ Ibid., p. 11.

time because in June John Diefenbaker's victory swept the Liberals, and Hellyer, from Parliament.

Hellyer's one proposal to Cabinet under that position was for the disposal of the Long Branch Rifle Range which he saw as a bureaucratic mess because four levels of government were involved.

With the election loss, Hellyer was out of politics and went into business as the president of Curran Hall, attempting to reduce the costs of housing through the application of modern technology to production. His respite from politics was short, however, as he was convinced to run in the 1958 by-election in the Trinity riding, which he won. He became the defence critic for the Liberals, almost by default, by questioning the Minister of National Defence, General George Pearkes, over the quality of the Bomarc and the government's decision to obtain it as part of the commitment to the newly established NORAD agreement. Hellyer gained new opportunities to study defence issues and trends which included trips to Strategic Air Command and NORAD headquarters. At one point he had a five hour conference with Robert McNamara who made a great impression on him.⁹ Furthermore, Hellyer wrote a new defence policy for the Liberals in which he argued that long-range missiles were making systems such as the Bomarc obsolete. He further posited that Canada should opt out of the nuclear strike role and instead focus on a ground-support role in Europe as conventional forces would soon become the key form of armed forces as mutual assured destruction was rendering the idea of massive retaliation moot. Thus began to emerge Hellyer's policy of flexible conventional military forces, with an emphasis on mobility. In addition to the Avro Arrow and the events surrounding the Canadian response to the Cuban Missile Crisis are noteworthy. The effect of these was that the view of Diefenbaker as hesitant and indecisive leader was further cemented. Another outcome was the desire by the Liberals to re-evaluate defence policy and come up with a new approach to policy and commitments. A memorandum sent around to members of the Liberal Caucus outlined the opinion that the Cuban

⁹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-20, "Defence Minister Hellyer: Clear-sighted businessman and parliamentary prodigy who's unifying the Army, Navy, and Air Force," n.d. p. 13.

Missile Crisis showed that Canada's continental defence policy was futile—it was unequal to an emergency and was a clear indication that Canada had foolishly accepted defence commitments which it refused to meet. Of this “betrayal” of responsibility the memorandum critically stated: “It is getting the worst of both worlds; taking the wrong course in the first place, then refusing either to change it or to follow it.”¹⁰ Aware of it or not, this same type of thinking would be applied to the reorganizations at DND in the coming years as the Liberal government, and Hellyer in particular, struggled to implement their vision for defence. Despite some intense criticism that the wrong path was being taken with respect to unification, Hellyer refused to change course and worked against the grain to follow the path that had been set. In the end, the Cuban Missile Crisis was influential in shaping the Liberal decision to re-evaluate defence. Even though Hellyer has stated that the events had little impact on him or his view of the relationship between defence and government at the time, one surely has to question the degree to which this was in fact the case.

On one visit to NATO in 1962—Hellyer's last as opposition critic—he was shocked to see the poor morale of the Canadian troops, frustrated by lack of effective weapons—particularly nuclear.¹¹ In addition, he remarked that the army was in bad shape. In an interview with General Lauris Norstad, the Supreme Allied Commander, Hellyer was told that the general opinion was that Canada was failing to live up to its commitments. In his memoirs Pearson describes the position of the Armed Forces in Europe, as describe by Hellyer, as “hopeless.” Hellyer explained that the absence of nuclear weapons made it difficult for the Canadian to carry out their roles which were predicated on that type of weapon—without nuclear tipped rockets, the 101 Voodoo aircraft were less effective as an interceptor. This lack of effectiveness was tied up with morale, which was low among servicemen.¹² Upon returning

¹⁰ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 72, file 72-27, “Memorandum to the Members of the Liberal Caucus: Re: Foreign and Defence Policy,” n.d., p. 6.

¹¹ Ibid., pp. 13-14.

¹² Lester B. Pearson, *Mike: The Memoirs of the Right Honourable Lester B. Pearson, Volume III: 1957-1968*, John A. Munro and Alex Inglis, eds. (Toronto: University of Toronto Press, 1975), p. 71

to Ottawa, Hellyer began a campaign to convince the Liberal leader Lester Pearson of the need to announce a new policy. The Liberals took the opposite stance on nuclear weapons than the Conservatives, arguing the clear need for Canada to fulfill its defence alliance obligations. Writing years later, Pearson described it as a foreign affairs issue, not a moral one.¹³ Deifenbaker's Minister of National Defence, Douglas Harkness, a proponent of acquiring nuclear weapons for Canada, eventually resigned over the issue. Diefenbaker's government fell in 1963, principally as a result of the mismanagement of the defence issue—an interpretation shared by Pearson.¹⁴ In April of 1963, the Liberals returned to power with Paul Hellyer as Minister of National Defence.

The State of Defence in the Early 1960s

In 1962, just before coming to defence, Hellyer articulated his view on the subject. For him, the urgent need to be addressed was in developing the capacity to prevent local situations from growing into all out nuclear war. This was pointed to as the area in which Canada could make the greatest contribution to collective defence. Delivering and maintaining tactical mobile forces to wherever they might be needed to ensure the preservation of freedom was to be the core of his vision of Canadian defence policy. This mobile force was to be mechanized with high fire power, but also air transportable which could be airlifted with its necessary equipment anywhere in the world. Moreover, its intent was to be flexible enough to for the mobile reserve of the Supreme Allied Commander Europe or serve in UN operations.¹⁵ As such, reorganization was needed, as was new equipment to support this reorganization.¹⁶ He argued early on that tactical mobile strike forces of great fighting capacity could be

¹³ Ibid., p. 71.

¹⁴ Ibid., p 75.

¹⁵ Peter Kasurak, *A National Force: The Evolution of Canada's Army, 1950-2000* (Vancouver: UBC Press, 2013), p. 84.

¹⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 72, file 72-27 (Liberal Defence Committee 1962), Paul Hellyer, "A Note on Defence Policy," n.d., p. 1. The type of equipment needed was long range air transport for portability, short range aircraft, heavy helicopters, amphibious personnel carriers for

achieved, but Canada needed to spend more on equipment and less on overhead. Thus, there was the need to eliminate whatever waste was possible and conventional mobility, firepower, and flexibility were to be the key to increasing Canadian contributions to collective defence. Moreover, too great a proportion of the budget was being spent on operating and maintenance costs compared to other categories of spending, such as personnel, procurement, and construction. Personnel also came under scrutiny and it was felt that it could be reduced in order to funnel more money into necessary procurement. This line of thought would be the seed around which the reorganization plans would grow.

Economically, defence was in a tight spot. The federal deficit increased during the first years of the 1960s to just over \$1 billion and in order to control spending, defence was targeted for reductions. The defence arena faced a number of challenges, including a declining budget; competition among the services for resources and access to the Minister; six separate entities involved in formulating defence (Deputy Minister's office, Chairman of the Defence Research Board, the three Service Chiefs, and the Chairman, Chiefs of Staff Committee); over 200 committees; duplication of functions; and declining proportion of budget for equipment and greater a demand for more social programs which competed for funding. As Fetterly states, overall there was the dual pressure of reducing funding for defence coming from outside the establishment, and the pressure to increase funding coming from within.¹⁷ It was determined that to maintain the status quo in 1964–1965 there would need to be an increase in expenditures. The result was the need to reduce personnel or maintain personnel and accelerate the deterioration of procurement. But reducing personnel meant reducing commitments, a politically impossible move. The House of Commons Special Committee on Defence, which was mandated to consider all matters relating to defence, reviewed these commitments in 1963 and reiterated the need

mobility. In addition he envisioned better air force support from ground troops and a navy with assault landing ships to carry troops and equipment into enemy territory.

¹⁷ Ross Fetterly, "The Influence of the Environment on the 1964 Defence *White Paper*," *Canadian Military Journal* 5, 4 (2004), pp. 52-53, p. 52.

for continued support to NATO, NORAD, and the UN.¹⁸ However, maintaining commitments needed more money. These were the problems Hellyer faced as Minister of National Defence. This was a time when procurement of equipment and weapons was limited and the need to replace obsolete equipment was growing in importance. The high cost of new weapons systems added pressure to the situation. In a 2004 article Fetterly outlines the difficulty of defence procurement in fiscally tough times. The growing manpower costs at the time were encouraging the substitution of capital for labour. However, resource allocations can favour either current operations, or future ones. And funding that favours capital procurement, favours future operations at the expense of current operations. However, procurement contracts and development programs have long timelines. Contracts signed during one mandate benefit future forces, during future mandates. The result is that governments favour forces-in-being at the expense of future forces. The consequences of periods that favour current forces is that the average age of equipment increases, as does the cost of maintaining that equipment. In addition, a backlog of replacement requirements develops. This was the situation that the government faced in 1964. Declining purchasing power of the dollar, increasing equipment costs and personnel, and operations and maintenance costs which consumed three quarters of the budget all created a situation in which the capability to procure new equipment dropped dramatically. This tightening incentivised fierce competition among services for resources in order that they each could be effective in their respective operational duties.¹⁹ It was not only economics, however, that lay at the root of defence problems. For Hellyer, the entire system no longer worked. He recalls:

When I was named Minister of National Defence in 1963, I came fresh from being opposition defence critic for some time. This experience, together with my tenures as Parliamentary Assistant and Associate minister in the Defence Ministry, made me realize that, among other things, the system did not lend itself to adequate civilian control, resource management, or

¹⁸ Canada, House of Commons Special Committee on Defence, *Minutes and Proceedings and Evidence* (Ottawa, 1963).

¹⁹ Ross Fetterly, "The Influence of the Environment on the 1964 Defence *White Paper*," *Canadian Military Journal* 5, 4 (2004), pp. 52-53.

cohesive planning. Defence had been a political football for decades—a situation that was not good for the public, Parliament, the members of the Forces, or our international reputation.²⁰

As Hellyer stated that increasing political control over the military was a goal of reorganization, the question remains: was it impaired? There was indeed agreement in Canada among senior military officers regarding the principles that should regulate military and civilian relationships—clear political boundaries and roles which govern civilian and military functions in defence—and that the traditional role of the military is to be responsive to the government.²¹ The real difficulty, however, was not in agreeing to the necessary principles but in deciding how to best achieve an efficient distribution of power in order to allow for the proper function of relationships in support of those principles. This was crucial so that the link between the MND and his technical advisers was appropriate. Events such as the Cuban Missile Crisis certainly suggested that there were problems in this regard and Glassco likewise indicated difficulties which influenced Hellyer.²² In the early 1970s R.B. Byers analyzed the attitudes of two groups—Members of Parliament who sat on the Standing Committee on National Defence and senior military officers who retired from the Armed Forces between 1965 and 1966—in order to gauge the degree to which civil-military relations was understood to be effective or not, post-Second World War. The analysis indicated that there was no real consensus among MPs on the adequacy of civilian control. While 38.2% considered it to have been sufficient, 29.4% felt it to be weak and 20.6% viewed it as having varied.²³ The Conservatives showed the least concern while the New Democrats were most concerned. Interestingly, the Liberals—the party implementing the reorganization—were the most divided. When Byers adjusted attitudes to take into account opinions of those deemed “expert” versus “amateur” on defence issues, the expert MPs were the least as well as most concerned with the

²⁰ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 15, file 15-1, Paul Hellyer, “Canada's Defence Programme - A Sign of the Times,” n.d., p. 2.

²¹ R.B. Byers, “Canadian Civil-Military Relations and Reorganization of the Armed Forces: Whither Civilian Control?” in *The Canadian Military: A Profile*, ed. Hector J. Massey (Toronto: Copp Clark, 1972), pp. 198-199.

²² V. Allard, *Memoires du General Jean V. Allard* (Boucherville: Editions de Mortagne, 1985), p. 218.

²³ *Ibid.*, p. 204.

strength of civilian control.²⁴ Skepticism over the degree to which Hellyer's plans would improve control was largely based on the fear that the CDS or MND would gain too much power, and civilian direction would be confused with civilian control. Unsurprisingly, senior military officers were in general agreement that civilian control had been sufficient since 1945 and none indicated that control had been insufficient. Byers argues that this is indicative of the fact that the Canadian military has always been conscious of civil authority.²⁵ Regardless, Hellyer felt that civilians were at a disadvantage in the decision-making process and that civilian control suffered from the liability to adequately assess proposals put forward by the military. Not only were wartime experiences twenty years old—an indication that the new defence environment required new information sources as well as new forms of information management, dissemination, and control—but Hellyer had a distrust of the military because of the issue of inter-service rivalry; commitment to individual services was seen as a liability to the proper function of decision-making. The MA thesis of Joseph Varner—which consisted of extensive interviews with senior civilian and defence personnel—outlines some of this rivalry. He writes that not only did the RCAF and RCN spend much of the late 1950s squabbling over control of land-based Maritime Patrol aircraft, but the RCAF suppressed information regarding the value of the Navy's fighter-plane assets and denied its effectiveness.²⁶ Varner's interviews with Hellyer indicate that the Minister was aware of these rivalries, or at the very least, perceived such a rivalry to have existed.

However, it should be made clear that in Hellyer's assessment of defence, fault did not lie with the men and women in uniform as he saw them as expert professionals, without equals. Instead, "the fault was in the traditional military system..."²⁷ For Hellyer, problems of the system were related to the decision-making process. For example, Service Chiefs had direct access to the Minister—a feature

²⁴ Ibid., p. 2067-207.

²⁵ Ibid., p. 212.

²⁶ Joseph Bruce Varner, "Unification of the Canadian Armed Forces and the Impact of Inter-Service Rivalry" (MA thesis, Acadia University, 1991), p. 29.

²⁷ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 15, file 15-1, Paul Hellyer, "Canada's Defence Programme - A Sign of the Times," n.d., p. 3.

designed to allow from the proper dissemination of military advice based on service expertise, but which Hellyer found to be taxing on the MND. The Chiefs of Staff Committee was to act as coordinating body between the services but lacked executive powers, requiring the MND to adjudicate. The ability of the Chiefs to bypass the Committee also indicated to Hellyer that there was a lack of unity of planning. The major problem with this is that Hellyer disliked the competition for funds it created as services sought to advance their own programs. His assessment was that Canada was not getting good value for the defence dollar.²⁸ Two major problems were the fact that planning had been conducted on an annual basis with approval for equipment programs being given one at a time, along with the fact that military advice was reaching the Minister directly from the individual Service Chiefs and the weakness of the committee system. In 1965 Hellyer quoted Robert McNamara: "Committees have no place in the decision process except under the most unusual circumstances. They are of value only for exchanging ideas."²⁹ A new force structure based on readjusted priorities, new equipment, modern management principles, and importantly, integration, would be Hellyer's answer to these issues. In particular, Hellyer pointed to the lack of executive power of the Chiefs of Staff Committee; the consideration of proposals from purely technical standpoints; and the lack of unity of planning and commonly agreed upon goals as example of the poor way in which defence was being run. The Minister could not make proper and intelligent decisions on defence priorities "when the tentacles below were loosely spread and inadequately co-ordinated."³⁰

Other non-military related issues also confronted Hellyer in his early days in defence. Shortly after completing his staff, with Wing Commander Bill Lee as Executive Assistant, Hellyer and the Liberals had to contend with an issue over the Canada Pension Plan. Hellyer had thought Walter Gordon's proposed plan was "unimaginative" and more about political "gimmickry" than fundamental reform.

²⁸ Ibid., p. 2.

²⁹ Ibid., p. 3.

³⁰ Ibid., p. 4.

After making his views known, and at the behest of the Prime Minister, Hellyer drafted his own alternative. When he next met with Cabinet, however, neither Gordon nor Pearson had read his proposal. With the self-imposed deadline looming given Pearson's Sixty Days of Decision platform, there was not time to consider his alternative. Gordon's plan and budget were pressed forward. Providing some insight into his thinking of the appropriate approach to decision making, Hellyer recalls his impressions about this time:

Too much pressure had resulted from the silly election promise to do so many things of major significance during the first sixty days in office. The result was simply that few decisions, if any, were thought out carefully enough...The budget proposals dragged on for weeks...The government survived, and so did Walter [Gordon]. But the public's perception of us as a group of competent managers had been shattered.³¹

Hellyer took the opposite approach when he arrived at DND, determined that competent management would rule the department. His first step as Minister was the decision not to sign any document of substance during the first thirty days—the opposite to the platform that the Liberals came to office upon. His reasoning was that civil servants and military personnel might attempt to take advantage of a new and naïve Minister by presenting a flood of submissions dubbed “urgent.” He felt it more prudent to give himself time to come up to speed with projects and their background, and to figure out which proposals were pressed because they were pet projects as opposed to valid and necessary. He felt it more important to captain the ship than act based on the natural desire to simply cooperate in the early days and risk commitment of funds, as well as limit his freedom to a mere passenger of the ship.³² And he not only held off on signing major documents, but actually cancelled some projects, such as the general-purpose frigates that his predecessor had ordered during the election. He did so out of a fear that this had been done more for political purposes than on the merits of the program. He admits that they could have been the appropriate choice, but as the program was in its infancy, and he had not

³¹ Hellyer, *Damn the Torpedoes*, p. 31.

³² *Ibid.*, 33.

himself examined the alternatives, he decided at the time to halt the program. He did not want procurement to be set by politics but by thorough considerations. The acquisition of additional 104 Starfighters was also shelved. One could easily interpret such a decision as itself being politically motivated, cancelling Tory-initiated projects. While there must be suspicion of political motivations, the decision is also in line with a flexible management approach, similar to the one taken by Claxton; there was an inherent apprehension of decision which could be binding in the future. Long and expensive defence procurements have the tendency to tie the hands of future defence planners, and this necessitates careful forward planning. This was a key factor in Hellyer's decision, reminiscent of what MND Ralph Campney said about defence production during the expansion of the Arrow program: "...for every successful project that is launched there are many failures. Once you are committed to one particular phase it is difficult to detach yourself even if you find that you have made a mistake, I think it is better to be careful and try to get the answer as far as you can before launching upon production, because these are extremely costly to develop."³³ More than simply cost, however, the system for training, support, and infrastructure can create a path dependency once a particular technology has been put into practice, which becomes difficult to change if that hardware is deemed costly or inappropriate.

According to Hellyer, effectiveness was his stated prime concern. In a statement to the Special Committee on Defence in 1963 he explained that his approach to equipment was part of a careful review of defence to determine the "best and most effective contribution to collective defence," to review and consider all major procurement programmes, especially one "which could limit any future policy or interfere with future operations."³⁴ The decision not to proceed with certain outstanding programs was part of this overall review. The goal was to bring weapons systems to their full

³³ *House of Commons Debates*, 2nd Session, 22nd Parliament, Vol. VI, (13 July 1955), pp. 6089-90 (Ralph Campney).

³⁴ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 1, file 1-74, Paul Hellyer, "Statement by the Honourable Paul T. Hellyer Minister of National Defence to the Special Committee on Defence," 5 November 1963, p. 1.

effectiveness. In addition, he had the goal of not allowing passed decisions of the previous government to reduce his flexibility in policy planning, and the need to carefully consider the commitment of resources in the face of “so many uncertainties” with respect to defence.³⁵ Another important early step in the defence portfolio was the establishment of a parliamentary Special Committee on Defence, chaired by Maurice Sauvé. This had been promised during the Pearson election campaign. It was composed of members from all parties and was mandated to study defence and consider policy issues, but it was strictly advisory and did not have power to make decisions. The committee had the power to call independent witnesses and examine policy as well as expenditures, in order to achieve some significance in the investigations. The Minister of National Defence would review the findings of the committee and make recommendations to Cabinet where decision-making on defence policy would reside. It met frequently in 1963 (and was given permanent status in 1964) while Hellyer was attempting to get an insider’s view of defence. He held a series of meetings with the Chiefs of Staff on priorities, roles, force structure, and equipment (which the Special Committee also examined); Hellyer called for studies on a number of aspects of the defence portfolio, including maritime warfare, tactical air warfare, and mobile forces; Ministerial Study groups examined defence in preparation of a new policy; a Cabinet Committee on Security and Intelligence was established; and the Ad Hoc Committee on Defence Policy produced a report on the defence budget. One study group concluded that nuclear war was unlikely as was the conventional kind of war seen during the Second World War. It was concluded, instead, that insurgencies, “brush-fire wars,” and limited wars were the likely characteristic of the future.³⁶ This perspective was mirrored in the discussions of the Special Committee.³⁷ Such a perspective would eventually coalesce into Hellyer’s perspective of a mobile, flexible force. The Committee also heard from

³⁵ Ibid., pp. 7-9.

³⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-15, Paul Hellyer, “Memorandum to the Prime Minister: Canada's Defence Policy,” 14 Sep 1965, p. 1.

³⁷ Canada, House of Commons Special Committee on Defence, *Interim Report of the Special Committee on Matters Relating to Defence* (Ottawa: 1963), p. 23.

witnesses regarding varying degrees of integration and coordination of service activities—ranging separate services under a single general staff, to a single defence force. The U.S. Marine Corps was cited as a possible organization to study. The issue of integration was seen by the Committee to be influenced by future roles of the services, efficiency, economics, and the potential morale and esprit de corps that might emerge from a single force.³⁸ Although the Committee was not designed to make recommendations on these issues, the ideas presented surely made an impression on Hellyer, as many of them would emerge as part of his new defence policy. With testimony by officers such as Lieutenant General Guy Simmonds calling for more effective review of organization, manpower management, and utilization of “greater efficiency,”³⁹ the Committee provided not only an important source of ideas but also a philosophical justification for the policies that would emerge in his new policy paper.

Hellyer was concerned over what he perceived to be the preparation of each service for a different kind of war: the Air Force thought in terms of all out nuclear war; the Army envisioned a long war; and the navy a combination of the two. He states in his memoirs:

This was the ultimate confirmation, if any were needed, of inadequate coordination and joint planning at the strategic level...Instead of spending the time agreeing on the probabilities of different kinds of war and then adjusting their plans and priorities accordingly for different kinds of weapons systems, the [Chiefs of Staff] committee was little more than a back-scratching club...However, each chief had direct access to the minister and could present his case without any interference or negative comment from his colleagues. The result was policy by happenstance. The winner in the equipment sweepstakes too often was the service that could get to the minister first, when he was in a good mood, and with his pen handy.⁴⁰

He continues: “The lack of coordination at the top, the seemingly haphazard determination of priorities, exercised a profound influence on me as I began to think about the shape of things to come.”⁴¹ It would be wrong, however, to give the impression that Hellyer was the only one who perceived such problems with defence at the time. Prior to their election win, the Liberals received letters from citizens who were

³⁸ Ibid., p. 11.

³⁹ Ibid., p. 11.

⁴⁰ Hellyer, *Damn the Torpedoes*, p. 34.

⁴¹ Ibid., p. 34.

concerned with the state of defence that they witnessed in the final years of the 1950s. Moreover, John Gellner—associate editor of *Saturday Night Magazine*, a retired RCAF Wing Commander, and a defence policy writer/journalist—told the attendees at a meeting of the Montreal United Services Institute that Canadian defence policies might be rational from a political point of view, but not always from a military point of view. Decisions such as to have CF-101 Voodos and Bomarcbs, but without nuclear capabilities, made little sense in context of defence commitments to North America—something Hellyer agreed with in a statement made to the Special Committee on Defence in November of 1963.⁴² Moreover, on the nature of defence budgets he argued that Canada could not have it both ways: it could not have the most expensive forms of military establishment with professional forces only, while also avoiding having half of the defence budget consumed by professional costs. It is impossible to live up to commitments made abroad while facing the unavoidable commitments at home, all while reducing the costs of meeting them. A wasteful military (which it was perceived to be) was an ineffective one.

Maintaining financial strength and ensuring the availability of technology as the means of basic defence were prime concerns in the early 1960s. Victoria Cross winner and Minister of National Defence under Diefenbaker, George Pearkes, maintained that technology had the potential to change threats overnight, and that a realistic defence policy needed to be based on clear and comprehensive assessments of threats to security (rooted in that technology). Douglas Harkness, also a Minister of National Defence under Diefenbaker, stressed the importance of technology as well, arguing in a speech when presenting the estimates of DND to the House that forces needed to be equipped with comparable weapons to their enemies (if not better), and that they should not be required to face

⁴² ⁴² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 1, file 1-74, Paul Hellyer, “Statement by the Honourable Paul T. Hellyer Minister of National Defence to the Special Committee on Defence,” 5 November 1963.

threats with inferior weapons.⁴³ However, this was becoming increasingly difficult to achieve by the early/mid 1960s as the cost of technology outpaced budgets for defence. In 1961, former Chairman, Chief of Defence Staff, General Charles Foulkes, argued that the Canadian defence dollar was being wasted, and he called for drastic changes in the organization of defence. That year the defence budget was \$1.6 billion for a strength of 120,000 men. Three quarters of that was needed for pay, maintenance, and operations, leaving just about \$400 million for equipment; equipment whose complexity and cost was higher than it had ever been for effective defence. Foulkes argued that the Canadian forces were the “best-dressed, best-paid, and poorest-equipped forces.”⁴⁴ What he called for was a new approach to spending which achieved more for less. Efficiency was the goal and reshaping defence forces to achieve this, as well as the elimination of waste and duplication, was the clear need. Foulkes recommended uniting the forces into a single armed service, the end to the spider web of committees and power rivals, and one chain of command under one Chief of Defence Staff.⁴⁵ Around the same time, a draft report to the House of Commons for consideration by the Special Committee on Defence Expenditures also suggested that the drive towards integration needed to go beyond then current efforts.⁴⁶ And so, critiques of defence and calls for greater integration, even unification, already existed when Hellyer came to defence and he began to make his own assessment of the policy situation.

The 1964 White Paper on Defence

It was after reading the Glassco Commission’s findings and absorbing the reports that he had commissioned in 1963, that Hellyer concluded “duplication and triplication could be substantially

⁴³ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 68, file 68-4, Honourable Douglas L. Harkness, “Speech by the Honourable Douglas L. Harkness Minister of Nation Defence in the House of Commons,” n.d., p. 8.

⁴⁴ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 72, file 72-3, Charles Foulkes, “Our Defence Dollar is Being Wasted,” 14 October 1961, p. 1.

⁴⁵ Ibid., pp. 2–5.

⁴⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 72, file 72-25, “Draft of Report to the House for Consideration by the Special Committee on Defence Expenditures,” 27 July 1960.

decreased and that a considerable amount of money could be saved or re-allocated by improved management and organization...[and] that the change would facilitate civilian control and unity of purpose among our highly-qualified military staffs.”⁴⁷ The result was the creation of the 1964 *White Paper* and the articulation of a new direction for Canadian defence.

Although Hellyer is associated with integration/unification and other ideas contained within the 1964 *White Paper*, the policy represented the accumulation of ideas and concepts that originated in the post-WWII period. Moreover, the studies conducted in the spring of 1963 on policy and various military subjects were a key nucleus around which his ideas coalesced.⁴⁸ The first draft of the 1964 *White Paper* on Defence was, however, written solely by Hellyer in longhand. He admits that much of the “routine” material was adapted from the September 30 “Report of the Ad Hoc Committee on Defence Policy” (1963) (an internal document which was largely the product of Dr. R.J. Sutherland of the Defence Research Board), borrowing what Hellyer called “bland” and “not really controversial stuff.”⁴⁹ The first section of the document was a fairly straightforward restatement of the basic tenets of Canadian defence policy that had been agreed upon for years. For example, the recognition that defence policy cannot be divorced from foreign policy and international obligations; the assumption of continued threat from Communist expansion, especially in China; the threat of further development of nuclear weapons by belligerent countries and the need to establish deterrence against their expansion and use; the importance of cohesion and strength of NATO; the hope for détente with the Communist world; the

⁴⁷ Ibid., p. 5.

⁴⁸ The Directorate of History and Heritage, Department of National Defence (DHH), 85-333 (Fonds of J.C. Arnell), vol. 4, file 261, J.C. Arnell, “The Management Philosophy and the Canadian Governmental Organization for Defence,” 8 September 1967, p. 2.

⁴⁹ Hellyer, *Damn the Torpedoes*, p. 34.

pledge to defend Canada and North America in general; and emphasis on collective security and peacekeeping within UN operations.⁵⁰

Although reflecting discussions and testimony of the Special Committee on Defence, the ideas on major change were representative of Hellyer's unique contribution to the new policy direction. He posited that future wars would be conventional, not nuclear (due to mutually assured destruction), and that prevention of escalation, flexibility, and preparedness for a dual role (conventional and nuclear) was the key. The *White Paper* made a case for a Canadian contribution to the deterrence to major war, albeit limited by the size and degree of human and material resources. Canadian obligations were framed into terms of NATO strategy, where strategic policies were to be the basis for plans, military programs, procurement decisions, and R&D. The document advocated for a graduated and flexible response, as opposed to nuclear retaliation. Excessive reliance on nuclear weapons was downplayed in favor of conventional forces, reducing reliance of nuclear weapons, and the pressing of the belief that a wide spectrum of force was essential in deterring war. Canada was, however, expected to fulfill its obligations within NATO—a nuclear armed alliance. The cornerstone of the policy was to be a force that was more modest, flexible, and mobile.⁵¹ It was an opposite approach to the previous wars where reliance had been on mobilization potential. Instead it was hoped to maintain a force in being, ready to be brought to bear immediately when necessary (the militia was still intended to give some limited mobilization potential in the case of a long drawn out war). This policy was rooted in Hellyer's concept of "range of conflict": the notion that conflicts could occur on a spectrum, from thermonuclear war on one end, to insurrections and guerrilla warfare on the other. The argument was that the spectrum varies, and thus so should the methods of counteraction. Flexibility and mobility were needed to meet

⁵⁰ Honourable Paul Hellyer, Minister of National Defence and Honourable Lucien Cardin, Associate Minister of National Defence, "*White Paper on Defence*," in *Canada's National Defence, Vol I: Defence Policy*, ed., Douglas Bland (Kingston, ON: School of Policy Studies, 1998).

⁵¹ It should be noted that the viability of this mobile concept for the army was questioned based on cost and viability with the composition of Canada's NATO commitments. See Peter Kasurak, *A National Force: the Evolution of Canada's Army, 1950-2000* (Vancouver: UBC Press, 2013), p. 87.

the possibilities that existed on this spectrum. Specialization of the services was pushing them in different directions, making them less flexible and more segmented.

The entire reorganization plan flowed from Hellyer's reading of the defence environment—advances in military technology, budgetary limits, and the changing international situation all contributed towards the decision that a unified force would be more flexible and better able to meet these challenges. This was to be accomplished through a single unified force that “works and thinks together” in unison as the situation demanded.⁵² While the policy of creating a defensive force useful to prevent small confrontations from escalating into major wars was articulated in the *White Paper*, two other objectives indicated were the modernization of management methods and integration/unification. These latter two objectives were the means of achieving the first. Modern management principles and integration/unification would achieve the aims of reducing overhead costs for non-operational activities, ensuring compatible resources between services, increasing flexibility of the forces, and ultimately, increasing operational effectiveness.⁵³ These aims were about rationalization for the purpose of efficient use of scarce resources. Reducing overhead was intended to allow the department to devote more funds to equipment while it was hoped that changing the decision-making process would provide for a more compatible planning process. For example, Sharp stated that it would make little sense for the Army to buy air-transportable equipment if there was no means to transport that equipment by air. Moreover, flexibility would be achieved by an integrated command structure that could react quickly to crises and through the mobilization of operational forces equipped with compatible equipment.⁵⁴ This flexibility was supported by functional commands—a framework for decision-making where policies and plans could be based off of the total needs of the Canadian military

⁵² Canada, House of Commons Standing Committee on National Defence, *Minutes of Proceedings and Evidence: “Bill C243, An Act To Amend the National Defence Act and Other Acts In Consequence Thereof,”* No. 14 (Ottawa: 1967), p. 449.

⁵³ Ibid., p. 443.

⁵⁴ Ibid., p. 444.

rather than the needs of the individuals services. All of this combined to create a military that could more quickly and easily react to any crisis along with spectrum of conflict that Hellyer articulated.

A key consideration within the document was technology, which was loaded with implications for defence, from planning to organization. Changes in strategic concepts in the post-war world were mainly due to technological advancement, rendering old concepts and equipment obsolete. It was observed that major equipment programs initiated in the mid-1960s would have to meet the requirements for defence and security in the 1970s and 1980s. R&D would have important effects on defence as the need to attempt to “estimate the future evolution of world power relationships” was seen as an essential feature of defence planning, and military technology was not expected to slow down in terms of the speed of change in which it occurred at the time. The technological factor also affected the perspective on integration and unification, for in “a modern world, technology had wiped out distinctions between land, sea, and air war.”⁵⁵ Similarly, the *White Paper* stated: “Doubts...have been raised in all countries in recent years about the traditional pattern of organization by individual services. Combined operations have become commonplace, and the services have found a growing area of overlap in the tasks in which they are charged.”⁵⁶ Doubts can certainly be raised regarding the idea that greater degrees of integration and unification can effectively function in service environments which are highly specialized—a point frequently made during the implementation debates—but the link between cooperation/combined operations between services, integration of effort, and greater rationalization and efficiency made for a neat and tidy argument. Hellyer seized on the implication that certain amounts of rationalization could be a valuable tool in solving some of the issues facing defence and implemented the idea to a controversial degree with the complete reorganization of the Armed Forces.

⁵⁵ Desmond Morton, *A Military History of Canada* (McClelland and Stewart, 2007), p. 251

⁵⁶ Hellyer and Cardin, “*White Paper on Defence*,” p. 89.

For some, integration/unification was an inevitable outcome of modern technology. Citing the Glassco Commission, the *White Paper* pointed directly to the development of defence technology as a key component in the diminishing value of individual services as separate and distinct. This was commonly stated but rarely articulated more fully, although the combined efforts of sea and air technology in anti-submarine warfare are the most salient example. In any event, it was argued that commonalities of duties and functions in administration and activities was making the traditional organization unsuited to modern defence, according to the 1964 policy, and that maintaining the separate services was increasingly uneconomic. The *White Paper* relied heavily on the Glassco Commission for its assessment of the weakness of coordination by committee and the poor control of the services, although Hellyer and his advisors decided to take reorganization further than the Glassco Commissioners had intended. The “Fourth Service” concept put forth by the Commission was examined by Hellyer but was rejected as too cumbersome and expensive. Where Glassco recommended gradual transfer of executive control of common requirements to the Chairman, Chiefs of Staff, the *White Paper* stated:

...this solution does not adequately resolve the basic issues. If a single command structure is not established, co-ordination by the committee system will remain with all of its inevitable delays and frustrations...The fundamental considerations are operational control and effectiveness, the streamlining of procedures and, in particular, the decision-making process, and the reduction of overhead...Following the most careful and thoughtful consideration, the government has decided that there is only one adequate solution. It is the integration of the Armed Forces of Canada under a single Chief of Defence Staff and a single Defence Staff. This will be the first step toward a single unified defence force for Canada. The integrated control of all aspects of planning and operations should not only produce a more effective and co-ordinated defence posture for Canada, but should also result in considerable savings.⁵⁷

In the name of efficiency Hellyer was making a great leap in the organization of defence. Where the department had been experimenting with different forms of integrated military decision-making, from the Chief of Staff of the Department of National Defence in the inter-war period to the Chairman, Chiefs

⁵⁷ Ibid., pp. 91–92.

of Staff Committee, the new plan sought to establish a Chief of Defence Staff representing a true single military voice as the first step of a process ending with complete unification. It was a bold and contentious plan in the name of administrative efficiency. It was of course, also about control. The savings achieved were argued to make crucial funds available for capital equipment purchases and improve the equity between the distribution of the defence dollar between equipment and administrative costs. The goal was to reallocate a hefty 25% of the budget to procurement. Further referencing the Glassco report, the *White Paper* also endorsed the need for a “strong civilian group which is essentially civilian in character,” as well as the call for giving the Deputy Minister greater responsibility for reviewing organizational and administrative methods of defence and in relieving the minister of the burden of responsibility for the control and management of the Armed Forces.

Hellyer’s advisor Bill Lee recounts that when he came to office he did not have integration on the mind. It was being confronted with the state of defence that led him to decide that integration was the best solution. This had already been advocated by such personalities as General Dwight Eisenhower, Sir Arthur Travers Harris, Lord Louis Mountbatten, General Douglas MacArthur, and Canada’s General Charles Foulkes.⁵⁸ Indeed Lord Mountbatten and Eisenhower, began developing these ideas based on their experiences in the Second World War. Lee referenced Field Marshal Bernard Law Montgomery, the 1st Viscount of Alamein and a veteran of both world wars:

It is a grave question whether any large military organization which is not closely integrated and gripped tightly at the top can adapt itself successfully to the required speed of modern life. If this is not done, the lack of adaptability of the organization as a whole will tend continuously to promote individual Service interests over those of the nation concerned. Under such conditions, politicians have to step in to keep things going; they do this in the only way they know, i.e., by the creation of more committees and by additional bureaucracies for coordination and arbitration above those already existing.⁵⁹

⁵⁸ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 84, file 84-16, William Lee, “Background to the *White Paper* on Defence,” 1966, p. 8.

⁵⁹ *Ibid.*, pp. 8–9.

Air Marshall F.R. Sharp explained that the vision of a reorganized Canadian defence was not change for change sake—instead it was born of “economic and organizational necessity.”⁶⁰ The government faced the choice of increasing the budget or reducing operating and maintenance costs. As there was no guarantee that a larger budget would solve the problems of defence, but the operating and maintenance costs would continue to rise, as would the need to take advantage of advances in science and technology, which were costly. The solution to this problem was a single top management for all services. The *White Paper* was vague, however, about exactly how these reforms would take shape and be implemented. Hellyer left it to the men in uniform to work out in practice how to bring about change. This was the case with the development of the mobile force Hellyer envisioned. He tasked others to work out the plan which had an inherent contradiction between mechanization and high firepower on the one hand, and air transportability on the other. Hellyer would have made a heavily equipped mobile force the centerpiece of the *White Paper on Defence* but a Cabinet committee composed of Pearson, Walter Gordon, Paul Martin, and Michell Sharp re-worked Hellyer’s original draft, weakening his original vision and bringing unification to the forefront as the most prominent component of the new policy.⁶¹ What is more, the feedback from those tasked to examine the mobile concept was that while viable, the creation of such a force would only be possible if Canada abandoned NATO’s Central Front, although the NATO role was committed to by Hellyer. Moreover, advisors indicated to Hellyer that the mobile force would be large and costly and there was even evidence that it would be militarily ineffective.⁶² In an address to the Defence Committee in February of 1967, former VCDS Robert Moncel stated that “to translate the White Paper into the force that it called for, required, by all my calculations, a force of

⁶⁰ The Directorate of History and Heritage, Department of National Defence (DHH), 80-225 (Fonds of the Task Force Review of Unification of the Canadian Armed Forces), vol. 4, file 50, Air Marshall F.R. Sharp, RCAF, “Reorganization of the Canadian Armed Forces,” n.d., p. 18.

⁶¹ See Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 67, Tom Axworthy, ““Soldiers Without Enemies: A Political Analysis of Canadian Defence Policy 1945-1975”, (PhD Dissertation, Kingston: Queen’s University, 1978); and Peter Kasurak, *A National Force: the Evolution of Canada’s Army, 1950-2000* (Vancouver: UBC Press, 2013), p. 89.

⁶² Kasurak, p. 87.

150,000 and a budget of \$2 billion accruing at 5 percent. Secondly, it grossly overestimates the amount of fat that allegedly was there to be trimmed.”⁶³ Thus, while the mobile force provided the tri-service framework within which the integrated command could operate and which provided the operational environment for a unified force, the concept at the heart of that arrangement was flawed. While it had logic at its conceptual level, Hellyer’s vision for defence was problematic in terms of its potential implementation.

Hellyer was a manager with big ideas but his style of management was less than impressive, leaving it up to staff to work out the details of how to make his vision a reality and to muddle through the implementation. Integration would be carried out pragmatically, not based on a master plan. This was the fundamental source of much of the criticism levelled against the project—the vagueness left open how far the program would go (although Hellyer had always been clear that full unification was the end goal), and those in uniform felt uninformed of the program, leading to uncertainty and low morale. In fact, ambiguity was a charge that Admiral Jeffery Brock levelled against the policy paper in general, calling the objectives stated in the document “woolly,” “ambiguous,” and “indecisive.”⁶⁴ It is interesting to note, however, that there was little mention of economic and financial variables in the *White Paper*, despite this being a major consideration and justification for the reorganizations. This is particularly interesting because although Hellyer at times stressed the effectiveness of the forces as a fundamental consideration, his archival records are more weighted towards the economic and financial argument. Later Hellyer said that he does not necessarily separate the operational and economic motivations for reorganization, seeing them as existing in tandem. Although, he does admit that operational

⁶³ The Directorate of History and Heritage, Department of National Defence (DHH), 73-1223 (Fonds of Robert L. Raymont), vol. 124, file 3106, Charles Foulkes, “Formulating an Integrated Policy for National Security,” 26 June 1964, p. 77.

⁶⁴ Library and Archives Canada (LAC), MG30 E522 (Fonds of Admiral Jeffery Brock), vol. 3, file *Unification. "Policy" Paper on 1964 Defence White Paper*, Admiral Jeffery Brock, “Policy,” 18 October 1966, p. 1.

effectiveness was the first concern and economics second, merely because the latter flowed from the former. He explains his motivation in this way:

The number one overriding objective was to eliminate the nonsense of three fiefdoms squabbling over who would get the biggest share of the pie and to provide the public with the greatest possible bang for the buck. That would have been impossible without a streamlined command structure. It was inevitable that eliminating duplication and triplication would save money. But that was a by-product of the reorganization and not the reason for it, at least as far as I was concerned.⁶⁵

Much of these were empty words however, as no major financial appreciations or audits were made regarding exactly where savings would be found during the reorganization, how they would be reallocated, or how the savings would not be offset by the cost of the change. Like the Glassco report, the rising operations and maintenance costs versus the declining equipment purchases were referenced, but little financial appreciation was done beyond this lip-service. Although the financial difficulties in defence were real—budgets and resources were limited but the services each had long lists of equipment needs—and this featured a central justification for change, detailed analysis of financial implications related to the massive organizational undertaking were conspicuously absent. Therefore while the reorganizations had some conceptual validity, their true validity from financial perspectives was never fully proven. This was Hellyer's weakness as a manager—he had the big ideas and vision but little understanding of how to get there. One can point to his reliance on Glassco as part of the problem. Glassco had given the impression of great savings to be found in defence if only one could rationalize the headquarters, but gave little indication of exactly where the savings would come from or how. While Hellyer reviewed defence policy in 1963, he never conducted his own administrative/organizational appreciation of defence, trusting that the ideas contained in the Glassco report and the leg-work upon which they were based, were sound. But Glassco had no meticulous blueprint for change. When he first became aware of Hellyer's intention, General Jean Victor Allard

⁶⁵ Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

(future CDS) was apprehensive about engaging in disruptive change without serious examination. He questioned whether the members of the Glassco Commission had the expertise to fully appreciate the complexities of administering peacetime forces, as well as whether being surrounded by mostly ex-airmen as advisors limited Hellyer's knowledge and understanding of the other two services. Regardless, he felt a duty as a francophone to remain loyal to Hellyer and support the scheme in hopes of carrying the torch for francophone servicemen and would eventually come to defend Hellyer and the reorganization plan.⁶⁶ After Hellyer decided to institute reform that blueprint was developed on the go. This increased the difficulty of implementation and raised concerns over the lack of details.⁶⁷

INTEGRATION

Despite the lack of detailed plan before setting off on the reorganization, Hellyer and his supporters pressed forward based on the belief that the logic of their grand vision was correct. Hellyer's reorganizations were done in stages, divided between integration and unification. The integration phase consisted of the establishment of a single Chief of Defence Staff along with an integrated defence staff and integrated headquarters. The period of integration also included the establishment of field commands based on functional lines as well as the development of a new management system of planning and programming. Unification represented the abolishment of the three separate services—Navy, Army, and Air Force—and the establishment of a single unified force, the Canadian Armed Forces, in their place.

Although Glassco had provided a foundation/blueprint for Hellyer, he decided that instead of attempting to integrate from the bottom up—which had proven to be a difficult task—he would take the opposite approach and make changes from the top down. The cornerstone of this was the creation

⁶⁶ J.V. Allard, *Memoires du General Jean V. Allard* (Boucherville: Editions de Mortagne, 1985), pp. 218-220

⁶⁷ Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 15, file 4, "A Summary of Comments and Recommendations pertaining to the Planning and Implementation of Department of National Defence Policies concerning Integration and Unification of the Canadian Armed Forces," 20 September 1966.

of a single Chief of Defence Staff (CDS) and four functional branches to replace the three separate service institutions. Combined operations, such as naval aviation, created overlapping functions and tasks and the increased technical content resulted in a concomitant increase in common functions, leading to the need to integrate. The objective of integration was to streamline and improve the effectiveness of the system, reduce manpower and duplications, increase efficiency in command, training, logistics, and support. The ultimate goal was stated as increased proportion funds available for new equipment, as well as a more effective force. This was to be achieved through reorganization which would achieve better balance between combat forces and supporting elements and streamline and modernize the management system.⁶⁸

Integration was represented by Bill C-90, which was intended to replace the Service Chiefs with a single CDS and permit the reorganization of defence organization on functional lines. It would also simplify administration, improve the efficiency of defence, and help to facilitate policy planning on a longer range basis. Integration was characterized by three main concepts. The first was economic: the belief that the reorganized bureaucracy would free up resources which could be applied to capital equipment purchases. Second was the continued control and centralization of defence management and administration. Eliminating the Chairman Chiefs of Staff Committee and the service heads, the new Chief of Defence Staff would take over as the responsibilities of the separate Chiefs as a single entity. Consensus through committee was replaced by a single authoritative voice. Finally, the centralization of the command structure was linked to concepts of civilian control of the military, as the Minister would play an active role in administration of policy and whose job was made easier by eliminating the numerous actors who had access to him, making exercise of control difficult.⁶⁹ This was an effort at simplification of the policy procedure. Overall, it was another step in a process of continual change in

⁶⁸ See *House of Commons Debates*, 2nd Session, 26th Parliament, Vol. III, (8 May 1964), pp. 3065-94.

⁶⁹ Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987), p. 41.

defence in the post-war period and an important step in the process of evolving centralization and control of defence policy; R.B. Byers argues writes that it was “change to rationalize the policy process within the department.”⁷⁰

Civilian Control as a Justification for Reorganization

It was stated repeatedly that economics and the nature of modern security issues were prime movers in effecting the change, yet the aspect of civilian control was also a major contributing factor, receiving considerable emphasis in Parliamentary justifications in 1964. It was argued that the responsibility of the Minister to maintain civilian control raised the need for a strong civilian staff group, supplied through the Deputy Minister’s office which would help improve problems of control. A single Chief of Defence Staff would also help to simplify this control, as the MND and DM would be dealing with one defence staff. It was stated in Parliament that civilian control as exercised by the civilians staffs under the Deputy Minister or through the Ministers must not exist in vacuum; matters of a nature pertaining to advice or control with respect to civilian staff must come before them, and three organizations, it was argued, made this more difficult than one. The DM was to ensure the efficient and economic running of the department, and non-military civilian staff was to analyze and review military requirements and the use of resources. Advising on defence programs and estimates was seen as necessary. This was to be done without assuming functions necessary to military staffs or which impeded military control over forces and responsibilities. Even though there was a call for strengthening the civilian side of defence in managing the department, the roles and responsibilities between civilian and military staffs were meant to remain clear and defined.

Hellyer stated in the House of Commons in May of 1964 that there would be better civilian control over defence than had existed in the past as a single defence staff would present its findings to

⁷⁰ R.B. Byers, “Structural Change and the Policy Process in the Department of National Defence: Military Perceptions,” *Canadian Public Administration* 16, 2 (Summer 1973), p. 222.

the Minister through the Defence Council. Moreover, before they were considered by the Council, findings would be analyzed fully by the DM Staff—that is, all proposals involving policy or expenditure of public funds would be analyzed by civilian staffs before being considered by the Council and before decisions were made. More thorough examination of policy, complete, full opinions from civilian and military advisors, and more available information would be the defining characteristics of the Defence Council. Better civilian direction would be achieved as it would be possible to implement more closely defence policy as laid down by the government.⁷¹ Much of the support for the notion of increased civilian control was framed within the context of financial savings. The Honourable Marcel Lessard (Member of Parliament for Lac St-Jean) called integration essential “to prevent military leaders from exerting too great an influence on the minister who must answer to the country for the phenomenal amounts voted each year...It would seem that, left to themselves, the military have or at least had, with the best intentions in the world, the tendency to impose their views on the various government which follow each other at the head of the country.” He claimed it was urgent that civilian authorities “regain control” of the expenses the government has to justify to the people.⁷² Similarly, others pointed to the lack of (or at least, late intervention of) civilians in decision-making, hampering efficient administration. One member of the House pointed to the Avro Arrow as an example of the poor administration and purchasing and uncontrolled costs in Canada. It was implied that politicians make uninformed decisions as non-experts, based on the advice of the military, on acquisition issues which might have been different had there been a non-military expert viewpoint that had been included.⁷³ Hellyer himself stated that when it comes to accepting the military versus civilian side of things, the point is that the government had the right and responsibility to exercise its independent judgement after reviewing all

⁷¹ *House of Commons Debates*, 2nd Session, 26th Parliament, Vol. III, (12 May 1964), pp. 3187-89 (Paul Hellyer).

⁷² *House of Commons Debates*, 2nd Session, 26th Parliament, Vol. III, (11 May 1964), p. 3142 (Marcel Lessard).

⁷³ *House of Commons Debates*, 2nd Session, 26th Parliament, Vol. V, (6 July 1964), p. 5095 (Smith).

proposals and hearing all the evidence and points of view. It had the responsibility to investigate issues until satisfied, and no one has the right to have proposals accepted without proper scrutiny.⁷⁴

Hellyer's reactivation of the Defence Council made it the "nerve centre" for the whole system. No longer simply an administrative body, it acted as the departmental policy and decision-making body. Expert Douglas Bland discusses the Council in a different tone, referring to what he deems "restricted membership" of the Council. Bland states that Hellyer was not against specialized input into decision-making but that specialist viewpoints were not to reach the Minister before their coordination by the CDS into a coherent military view. Bland writes: "The assumption that a single military viewpoint could be logically and rationally arrived at was the essential act of implicit faith in Hellyer's concept of defence administration."⁷⁵ For him, the Council acted like a Cabinet, where the Chairman made the final decision once everyone had a chance to state their views. From Hellyer's perspective the composition of the Council allowed for a more complete expression of opinions from both military and senior civil advisors. The stated purpose was to get the best opinions, advice, and information available when considering decisions. This would in turn allow for more thorough examination of policy and projects.⁷⁶ Ironically, in attempting to improve the scope of advice for the MND to consider, the CDS served as a barrier to the range of service advice that was possible. This did not negate military advice but created a single voice for such advice. Hellyer recalls that this was successful at ending the "private end runs" to the Minister by the separate services.⁷⁷ The structure certainly streamlined the official process and fit nicely with the overall rational framework, although the work of R.B. Byers points to deficiencies in practice. For example, the best military arguments could get buried within the minutes and were often attributed to the Minister, damaging personal relations. Moreover, the CDS would, by the authority of his position, make decisions regarding the advice to take to the MND, but in the Council dissenting viewpoints would

⁷⁴ *House of Commons Debates*, 1st Session, 27th Parliament, Vol. XIV, (11 April 1967), p. 14790 (Paul Hellyer).

⁷⁵ Bland, *Administration of Defence*, p. 42.

⁷⁶ *House of Commons Debates*, 2nd Session, 26th Parliament, Vol. III, (12 May 1964), pp. 3187-89 (Paul Hellyer).

⁷⁷ *Ibid.*, p. 42.

be allowed, essentially negating the stated purpose of the system and putting the CDS in a difficult position with his subordinates.⁷⁸

Development of the Integrated Structure, 1964-1966

Bill C-90, the bill to amend the National Defence Act, was introduced in April of 1964 while the amendments to the National Defence Act consequent to the *White Paper* received Royal Assent on 16 July 1964, providing the go-ahead for the reorganization of the defence headquarters. A special committee was established in order to recommend to the Chairman, Chiefs of Staff Committee a new HQ organization. It was directed to limit its studies to the military component of an integrated service headquarters which would operate under a single CDS. The planning group interpreted the term integration as “eliminating any concept but a functional organization for the military component of the defence establishment.”⁷⁹ The grouping of responsibilities under all the proposals submitted by the committee was functional. It was stated that one of “the characteristics of a new organization for the Canadian Forces Headquarters would be that it be receptive to management and control by a single authority...”⁸⁰ Clarity—of role, function, and duty—was to be a cornerstone of the new approach. The criteria used in the study of proposals which needed to be satisfied were indicative of the increased attention to clarity: a) responsibility would attach and authority be given to those charged with the performing of each specific function in the organization; b) the organization for command within the integrated staff must be capable of being clearly and unequivocally defined; c) respective responsibilities of the military staff and that of the Deputy Minister within NDHQ must not only be clearly established, but as well as the channels of coordination; d) there would be provision for consultant services and

⁷⁸ R.B. Byers, “Structural Change and the Policy Process in the Department of National Defence: Military Perceptions,” *Canadian Public Administration* 16, 2 (Summer 1973), pp. 233-234.

⁷⁹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-15, “Report to Chiefs of Staff Committee on Organization for Canadian Forces HQ,” 10 April 1964, p. 1.

⁸⁰ *Ibid.*, p. 1.

special advice within the organization for defence available to the staff at all levels.⁸¹ This last element is also indicative of the push to ensure broad and thorough decision-making. Decision-making, in fact, was the measure of workability for the establishment. That is, the measure of the proposed organization was the extent to which the establishment provided the means by which decisions were reached and directions given. Moreover, the establishment was to ensure “a high degree of responsiveness to management by those charged with acting upon the direction given and it will provide, within the organization, for the function of surveillance through audit and analysis in order that the faithfulness of the organization to its leadership can be maintained.”⁸² Embodied within the terms of reference for the investigation of the new structure were the major themes of rational management at work—clarity and simplicity, the goal of rational decision-making and analysis, and most importantly, control.

From the start, the organizers made sure to keep the division of responsibilities between the Chief of Defence Staff and the Deputy Minister separate. The DM was to be the financial advisor to the Minister and being responsible for financial control of the department, to provide an audit function with respect to military activities, and to be the senior departmental authority with regard to civilian personnel. The Deputy Minister’s office was arranged so that it could be constituted on a functional line, parallel to the military organization. One report put the DM’s role this way: “In general, the Staff group under the Deputy Minister is responsible for ensuring that resources, manpower, materiel and money available for military purposes are used to the best advantage. In this manner, greater civilian control will be exercised over the defence function.”⁸³ On 1 August 1964, *An Act to Amend the National Defence Act* came into force, formally integrating the Canadian Forces Headquarters. With the establishment of an integrated headquarters and single chain of command, the three heads of the services were

⁸¹ Ibid., p. 2.

⁸² Ibid., p. 2.

⁸³ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 16, file 16-1, “Report on Defence,” 1966, p. 2.

eliminated and their authority was vested in a single officer, the Chief of the Defence Staff (See Fig 3 & 4).

In addition, the Naval Board, the General Staff, and the Air Staff were all replaced with a single Defence Staff, organized on functional lines. Air Chief Marshal, Frank Miller, was selected as the first CDS. (He had formerly been Deputy Minister as well as Chairman, Chiefs of Defence Staff). A Vice Chief of Defence Staff and a number of functional chiefs—Operational Readiness, Personnel, Logistics and Engineering, Comptroller General—all aided the new Chief of the Defence Staff (this arrangement would undergo some changes in the coming years). An Assistant Chief of the Defence Staff for Plans, Intelligence, Requirements and Program Planning, was also established. Hellyer was pleased that the new organization had 11 men doing the work previously done by 16. For Hellyer, the scale-down was consistent with his call for a 30% reduction in HQ personnel (an arbitrary number, by his own admission).⁸⁴ However, many service specific specialized functions/roles were lost with this structure. The new Canadian Forces Headquarters system was created to support four basic functions: Operations, Finance, Personnel, and Technical Services. While it was agreed that the traditional tasks of military headquarters (plans and operations, personnel and administration, and logistics) remained valid, it was believed that the development in technology and weapons necessitated additional functions within the HQ, namely R&D, programming, inspection and evaluation, and safety. Special emphasis was given to the selection of weapons, the time and cost involved in procurement, and the importance of the provision of scientific advice. The major services which the staff were required to perform their principle functions were identified as operations research and analysis, data processing, and management engineering. The Deputy Minister was given greater responsibility for keeping both organizational and administrative methods of defence under review and the branch was reorganized into three major

⁸⁴ Hellyer, *Damn the Torpedoes*, p. 88. For a more detailed look at the evolution of the Office of the CDS, including his functional chiefs and support staff, see V.J. Kronenberg, *All Together Now: The Organization of the Department of National Defence in Canada, 1964-1972* (Toronto: Canadian Institute of International Affairs, 1973).

Figure 3: DND, Pre-1964

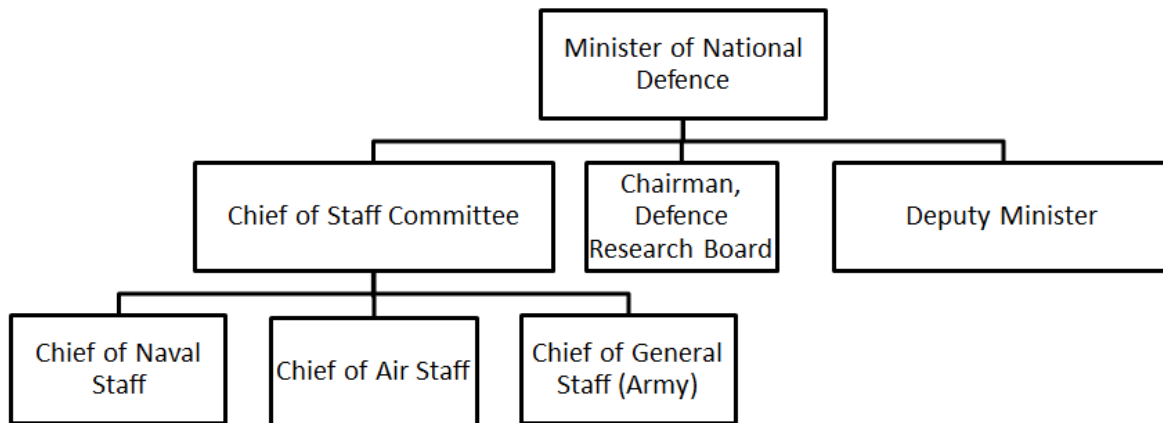
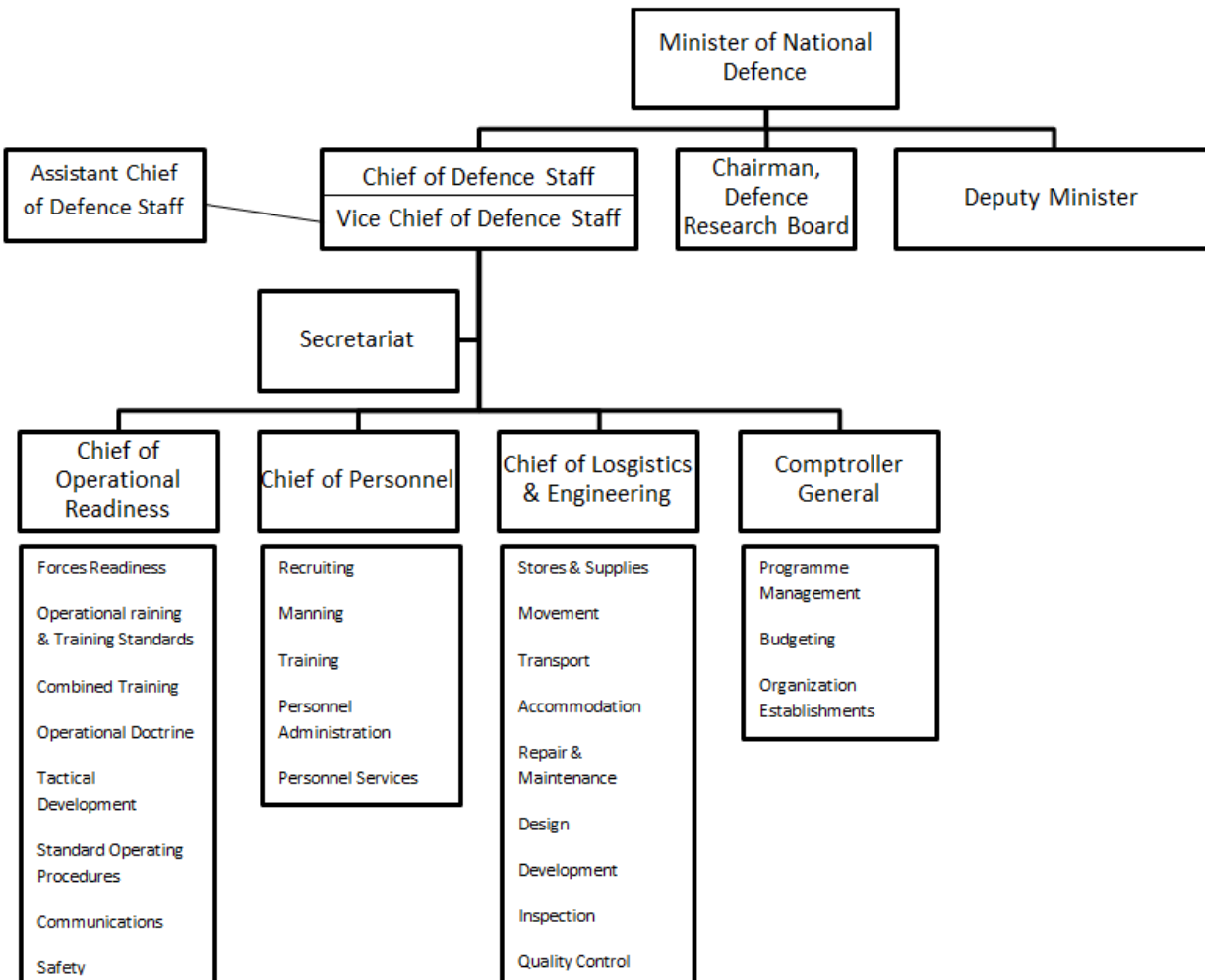
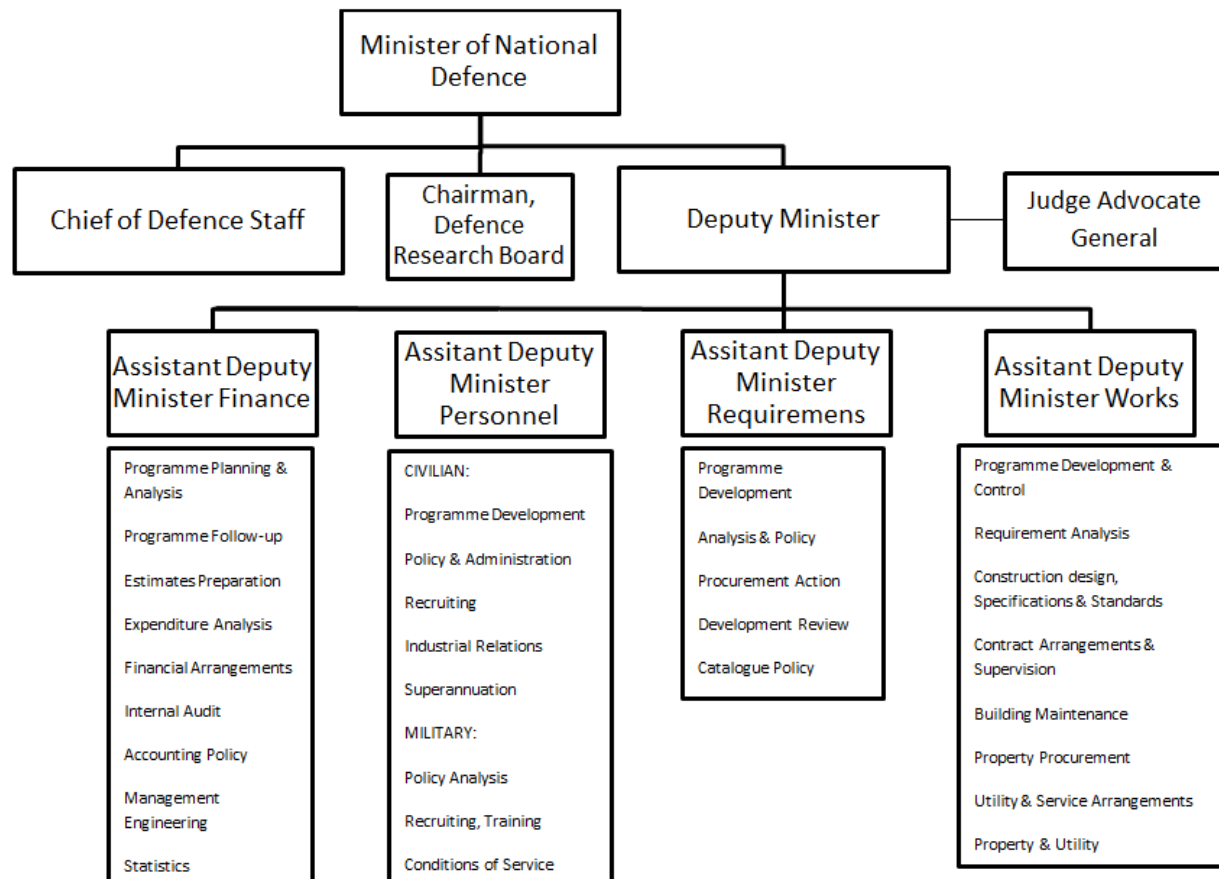


Figure 4: The Integrated Defence Structure, 1964 (Office of the Chief of Defence Staff)



areas: Personnel, Finance, and Logistics. The DM branch changed very little during the integration process (See Fig 5), mainly as it had already been reorganized on a functional basis years earlier.

Figure 5: The Integrated Defence Structure, 1964 (Office of the Deputy Minister)



Kronenberg argues that most of the reorganization in the mid-1960s was essentially about bringing the rest of the structure in line with the functional form the DM branch already expressed. The CDS, on the other hand, was to be responsible for military operations, planning, programming, allocation of resources, the provision and operation of supporting services (logistics, supply, transport, engineering and communications), and administrative functions (medical, dental, pay, and security). Moreover, the maximum degree of responsibility and authority possible was to be delegated to field Commanders. While centralization was clearly a goal of the new programme, a degree of decentralization within the integrated staff was equally a goal in order to ensure that the centralization

of authority at the top of the structure did not create a bottleneck.⁸⁵ The amalgamation of the three service HQs into a single unit allowed the Chief of the Defence Staff to have a greater degree of command and control over the direction of the armed forces.

Overall, the integration process was not without growing pains. A reality of the reorganizations was, however, redundancy. According to Hellyer, it was necessary in order to streamline and integrate defence. Attrition could not be waited for and so anachronisms were identified and redundancies were made. Although the defence establishment had been a constantly evolving structure for years, the scale and scope of changes after 1964 was great. A full account of the minutia of the evolution of the different branches of the department is not needed here. Vernon Kronenberg's MA thesis provides a good account of the details of the implementation of the program. What needs to be emphasized is that the period was one of difficult management change. The three different services, each with their own form of management and administration, were thrust together in a short period of time. This required adaptation, compromise, and a great deal of trial and error, and it took roughly two years from its initial implementation before integration settled into a truly workable solution. The implementation process was thus a difficult transition stage, as relationships, duties, functions, and responsibilities were worked out. Despite the positive evolution, difficulties remained. Many of the difficulties faced during this management evolution were themselves management problems—the continuing management dialogue, the debates regarding definition and semantics, and the sorting out of functions and duties into common patterns all took a period of 'settling in'—perhaps more than had been envisioned.⁸⁶ Despite this, the speed and efficiency to which the changes were implemented, despite the scope of their disruption, is a testament to those in charge of Hellyer's reorganization. It would be wrong to suggest that it was an easy task, but even Rear Admiral Landymore, one of Hellyer's most vocal

⁸⁵ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-15, "A Proposal for an Integrated Defence Headquarters," April 1964, p. 1.

⁸⁶ V.J. Kronenberg, *All Together Now: The Organization of the Department of National Defence in Canada, 1964-1972* (Toronto: Canadian Institute of International Affairs, 1973), p. 67.

opponents during the unification phase, was proud of the integration accomplishment. In a brief to the Standing Committee on National Defence in 1966, Landymore spoke about the degree to which the implementation of integration was a smooth transition, stating that it did not reduce operational effectiveness.⁸⁷

The Functional Commands

The second important phase to integration was the formation of the functional commands from 1965–1966. During this phase the eleven geographically organized field commands were replaced by six functional commands—Mobile, Maritime, Air Defence, Materiel, Transport, and Training—each under the command of a single officer who had at his disposal all the resources needed for a given function. Mobile, Maritime, and Air Defence were developed as operational commands, while the other three were support commands. Mobile Command was established to provide tactical air and land forces for fast deployment anywhere in the world. Maritime Command was charged with the command of all maritime forces, sea and air. Air Defence Command contributed defence forces to the protection of the North American continent. Air Transport Command was developed to be responsible for air transport operations of all three environments (services). Training Command was given responsibility for all individual training for the Army, Navy, and Air Force. Materiel Command was established in order to provide logistical support for the Canadian Forces and was charged with the responsibility for procurement, warehousing, and repair. The system would also include a regional component to ensure that adequate forces would be available throughout the country.

The intention was to bring the commands in line with the functional philosophy being applied at headquarters and the concept of flexibility envisioned by Hellyer. The ability to move quickly to meet the demands of the spectrum of defence was thought to be improved with the new command system,

⁸⁷ Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 15, file 4, “A Brief by Rear Admiral W.M. Landymore Prepared for the Standing Committee on National Defence, 1966,” n.d., p. 25.

especially Mobile Command, the largest of the six. It was argued that functionality, with direct lines of communication, made the responsiveness of the military more efficient. Canadian Forces Bases, Recruiting Centres, and Training Establishments replaced separate Army, Air Force and Navy bases. Although the command structure and integration essentially eliminated the three separate services which lost control over aspects of training, logistics, and personnel, the Navy, Army, and Air Force—now referred to as “elements”—continued under the guise of the Commands, keeping service loyalties intact.⁸⁸

From the time Hellyer released his *White Paper* until the creation of the Commands, Canadian defence underwent an incredible amount of change. What is more, despite the huge task of integration and establishing the Commands, as well as the disruption this caused, it was accomplished with a commendable amount of effort and efficiency. The services had shown themselves willing and able to undertake the rationalization efforts and the quest to improve the efficiency of defence management. The change was, however, not to end there. Hellyer had one more act of organizational overhaul in mind—unification. While the creation of the CDS and an integrated command structure was generally accepted, it was unification that was hotly contested and proved to be Hellyer’s most controversial and divisive idea. Despite never fully convincing onlookers of the intent and strategic purpose of unification, Hellyer was able to make his vision a reality.

⁸⁸ See Major-General Daniel Gosselin, “Hellyer’s Ghosts: Unification of the Canadian Forces is 40 Years Old – Part Two,” *Canadian Military Journal* 9, 3 (2008), pp. 6-16

CHAPTER 5

UNIFICATION

Hellyer did not arrive at defence with the intention to unify the forces. But once he had made the decision to reorganize, it was intended all along that this would include unification. This was made clear in the 1964 *White Paper*. Integration was only to be the first step towards a unified Canadian Armed Forces, intended to help infuse defence with a greater responsiveness to political direction and policy with a greater attention to national needs. Prior to the reorganizations, the three services were seen as too dominant and they had strong service-oriented commitments that competed with each other, impeded coordination of effort, drained resources, and required much attention from the MND. As Hellyer saw individual service capability and planning as running counter to efficient efforts and he sought to end policy dictated by rivalry: "With three separate Services the type of decision requiring resolution tended to be military in nature, decisions requiring military expertise. It was basically a question of deciding on the relative merits of the conflicting claims of the three separate Services. With a unified service, however, the broad policy decisions are of a nature not requiring military expertise, in fact, the kind that should be made by elected representatives of the people and not be military officers."¹ Instead of approaching problems from service-perspectives, he sought a single unified command structure represented by integration, as well as a single unified effort represented by unification. A single strategy with a single planning process was the means to achieving a nationally-oriented defence program. And, a unified force was seen as the way to get the armed forces to think and act in this single, national perspective. Ultimately, unification was about ensuring the loyalty of military personnel to a single force instead of a particular environment.

¹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-21, Paul Hellyer, n.d., p. 3.

The Reasoning behind Unification

Integration created a functional command structure cutting across service lines. Missions at the time were intended to combine roles and functions of more than one service. The servicemen, however, working together within the integrated organization, were restricted by legal and traditional barriers of the three individual services. According to the top policy-makers, the “artificial” barriers were no longer compatible with the operational demands of the Canadian military or the career profession and opportunities within the new organization.² Combined operations and flexibility made a single unified service the most efficient and effective way to organize the forces in the eyes of the top decision-makers. VCDS Sharp attempted to bring the Committee to a clear understanding of how three separate Services negated effectiveness with a few examples: the retention of separate personnel staffs would be a waste in manpower; although those within purely fighting trades will always be unique to an environment, servicemen in other trades possess commonality in qualifications between services which raises questions of who will manage them; lack of clarity of who manages careers in certain situations, such as high ranking officers who demonstrated potential for advancement and show themselves capable for experience outside his speciality; and how to manage recruits entering non-combat trades, such as construction engineering, who might be employed in any service. Unification was not intended to require combat personnel to repair equipment, or pilots to command ships. Personnel would be employed in jobs to which they were trained and suited. Unification was not to destroy traditional combat components of the services, but sought to group servicemen by combat and occupational skill into a single personnel management structure, intended to support functional command. It simply sought to remove barriers between the traditional Services, allow for interchange of personnel between commands, permit a common trade structure and career progression.³

² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 83, file 83-1, Air Marshal F.R. Sharp, DFC, CD, VCDS, “Rationale for the Unification of the Canadian Forces,” 1967, p. 9.

³ *Ibid.*, p. 10.

It is worth remembering that the idea of unification was not entirely new. The idea had been espoused by a number of military personnel: Lieutenant-General Sir Ronald W. Weeks delivered a series of lectures at Cambridge University in 1948 which argued that tactics of air, sea, and land warfare were closely related and required greater unified efforts. In 1957 Major W.H. Maurice Pope wrote in an article that the history of combined operations led logically to a single service. Similarly, Captain J.G. Forth wrote in the *Canadian Army Staff College Journal* in the late 1950s on the topic of unification arguing that “The existence of three or more separate services in modern national defence forces is an illogical relic of the past perpetuated by inflexible thinking, vested interests and individual service fear of extinction.”⁴ Forth argued that a single commander meant that more efficiency and economic advantages were possible in a time of soaring costs. Importantly, technology no longer fit old concepts of service functions. Only emotional feelings of loss of identity stood in the way of achieving unification. Additionally, Major General W.H. Macklin wrote about unification in the mid-1950s and former CCSC General Foulkes concluded in an article in 1961 that Canada needed a single service in one uniform, and under one supreme Chief of Staff.⁵ Foulkes began his article by outlining the history of integration and unification attempts in Canada, touching on the creation of the position of the Canadian Chief of Staff, which was only ever filled by James MacBrien. Foulkes argued that the position, the first effort at service integration/coordination, was a failure due to persistent service self-interest—a perspective shared by James Eayrs.⁶ Foulkes then pointed to the troubled attempts to integrate the research efforts of the three services after the Second World War as further evidence of the degree to which service interest prevented coordination as the Air Force opposed the plan and insisted on service control of all air research. Of the situation, he wrote: “there clearly existed conflict of interest between what was in the

⁴ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 82, file 82-7, Captain J.G. Forth, RCE, “Unification - Why, How, When,” 1959-1961, p. 1.

⁵ See Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-2, “Argument for Unification,” 1966, pp. 23-29.

⁶ See James Eayrs, *In Defence of Canada: From the Great War to the Great Depression* (Toronto: University of Toronto Press, 1965).

best interest of the defence effort as a whole and what was most advantageous to the individual service.”⁷ Moreover, under Claxton, attempts to move towards integrated service concepts were replaced with an emphasis on inter-service committees “on every conceivable subject” to solve service conflicts, but which did little to achieve this goal. Instead, delays and compromises diminished the creation of unified programs.⁸ Even the effort to mitigate against rivalry between service Chiefs through the creation of a Chairman, Chief of Staff, was a half-measure due to the fact that this position was restricted to coordination and lacked authority or responsibility to arbitrate disputes. Foulkes cited examples he saw as weakness of the management system, including the fact that the Korean brigade—created for the purpose of fighting that war—was not disbanded upon returning to Canada and competition between services for control over training and procurement of its own aviation needs.⁹ In talking points strikingly similar to those employed by Hellyer, he mentioned the need for flexibility of personnel to be unrestricted by service where common skills existed, hinted at potential economic efficiencies of rationalization, and articulated the goal of reducing supposed inefficient inter-service rivalry. Whether one debates the merits of the concept or disagrees with the opinions of those who argued in favour of unification, the point to be made is that when faced with the problems of defence and the possibility of reorganization, Hellyer and his supporters had a background of expert opinion on the subject, reinforcing the conviction that unification could and should be implemented in Canadian defence. When charged with the claim that he ignored expert military advice with respect to unification, the opinions of those outlined above were examples to the contrary.

In February of 1967, while the Forces were in the midst of implementing the integration phase, the government presented its case for unification to the Standing Committee on National Defence. Vice Chief of the defence Staff, Air Marshall F.R. Sharp outlined the intent and purpose of unification. Where

⁷ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 82, file 82-8, General Charles Foulkes, “The Case For One Service,” July 1961, pp. 2-4.

⁸ Ibid., pp. 5-6.

⁹ Ibid., pp. 13-14.

the rationale for integration had been articulated as creating a single planning and decision-making framework which could more easily adjust to the needs of rapidly responding to the range of conflicts anticipated in the Cold War, the question remained how full unification would contribute to this—that is, how would a fully unified force achieve the stated aims of reducing overhead and increasing flexibility and operational effectiveness? Sharp expressed to the Committee that the difference between integration and unification was merely legislative—integration abolished the single service Chiefs, while unification was about amending the NDA to legally create one service. This was needed to remove the barriers between services that prevented a unified personnel management system. This was the essential intention of unification—to create a modern flexible personnel management system which would make use of the skills and talents of tradesmen throughout the Armed Forces where needed and where possible.¹⁰ It was felt that maintaining three personnel staffs within the framework of a force structure based on integrated functional commands created new difficulties. Three separate staffs did not fit within the perspective of a rationalized, efficient management style which was seeking to reduce duplication and cost. Sharp was sure to recognize the uniqueness of fighting trades but pointed to trades within common qualifications, such as clerks, which would be better managed by a single system. Integration of recruitment and training and a single automated pay system were attractive during the period of intense rationalization. According to Hellyer, integration showed the differences between the services in terms of trade structure, promotion opportunities, and retirement ages and full unification would allow for a system to correct these problems.¹¹ It was expected that morale would be strengthened under this system, without any loss of operational effectiveness.

¹⁰ Canada, House of Commons Standing Committee on National Defence, *Minutes of Proceedings and Evidence: “Bill C243, An Act To Amend the National Defence Act and Other Acts In Consequence Thereof,”* No. 14 (Ottawa: 1967), p. 461.

¹¹ Canada, House of Commons Standing Committee on National Defence, *Minutes of Proceedings and Evidence” Main Estimates 1966-1967 of the Department of National Defence* (Ottawa, 1966), p. 21-22.

In an address by Hellyer to the Canadian Construction Association, he stated: "Although the principal reason for unification is increased military effectiveness, an important by-product is the substantial savings which are made available for capital expenditures including new equipment and new construction"¹²—although the majority of the debates indicated it was the other way around. A draft statement by R.J. Sutherland (of the Defence Research Board and Secretary of the Defence Council) on unification assessed the policy from the point of view of budget management, as well as the effects on personnel and servicemen and the effective administration of resources.¹³ It was argued that savings that had then been achieved through integration were assumed to continue, as unification was simply a further extension of that policy. A divided budget between three separate services was financially inefficient compared to a single service. Declining budgets and increased competition was a problem, the solution to which was seen as a unified force. For the proponents of unification it was argued that unification would not affect NATO, NORAD, or other commitments, except for the fact that a greater percentage of the budget could be directed towards expenditures, making Canada better able to fulfill international defence and security obligations. The economies of scale achieved by reducing three services to one were seen as a key factor in the decision to unify. In hindsight, the true savings associated with unification that was actually redirected to capital purchases, is in doubt. But when faced with the challenges at the time, and the alternative options such as reducing commitments, unification was chosen as the solution.

¹² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 2, file 2-43, Paul Hellyer, "An Address by the Honourable Paul T. Hellyer Minister of National Defence to the Canadian Construction Association," 3 January 1967.

¹³ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 84, file 84-2, R.J. Sutherland, November 1966.

The Unification Debates

The implementation of Hellyer's scheme was not without controversy. All aspects of the unification plan were questioned in the House of Commons, standing committees, and in the public arena. Criticisms ranged from issues over timing and the pace of change, to lack of communication, to the idea that unification would make the Canadian military jacks of all trades but masters of none.¹⁴ The concern over speed and lack of communication were similar fears expressed decades earlier by critics when the planning for the creation of a single DND was commenced in the 1920s. Beyond this, critics of that early effort at integration were also concerned over the possible loss of service identities.¹⁵ In the mid-1960s, the similar fear over weakening service identity due to the elimination of distinct uniforms was the source of the greatest resistance, even though the government maintained the view that a common uniform and rank would accelerate adjustment to total unification. Critics felt that morale, which was often rooted in the loyalty to one's particular service, would weaken under unification, despite Hellyer's insistence that it would create a common identity and strengthen loyalty and cohesion towards the single force. It was stated: "To best meet the needs of the country a serviceman's loyalty should be first to his country and to the Canadian Forces as a total, then to his discipline or environment...To continue to foster other loyalties will result in less than optimum effectiveness."¹⁶ High-ranking officers questioned the idea that there could be morale that rose above the services and towards an overriding loyalty to a single force. Loyalty, it was argued, is to the soldier's professional association, and this combined among all servicemen to form a cumulative loyalty to the country.¹⁷

¹⁴ Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 154, file 4, "A Summary of Comments and Recommendations Pertaining to The Planning and Implementation of Department of National defence Policies concerning Integration and Unification of the Canadian Armed Forces," 20 September 1966.

¹⁵ See James Eayrs, *In Defence of Canada: From the Great War to the Great Depression* (Toronto: University of Toronto Press, 1965), pp. 229-230.

¹⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 83, file 83-1, Air Marshall F.R. Sharp, VCDS, RCN (Retired), "Rationale for the Unification of the Canadian Forces," 7 February 1967, p. 14

¹⁷ Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review of Unification), vol. 18,189, file Category VI, pt. 2, D.J. Beattie, "Perceptions of Unification – 1966-1967," 15 December 1988, p. 39.

The majority of the debates centred on what R.B. Byers calls “intangibles”—that is the visible signs of identity that is needed for esprit de corps, traditions, rank structure, uniforms, and service designators. These were cultural aspects unique to each service and were important for professional identity, morale, and effectiveness. Byers argues that while the structural change to DND and the rationalization of management as represented by integration was supported, the idea of unifying the military into a single force was rejected.¹⁸ In a brief to the Standing Committee on National Defence by the Navy league of Canada, the Naval Associations of Canada, and the Royal Canadian Naval Association, they indicated that integration was not anathema to the Navy—in fact the Maritime Command had already been an integrated operational command for years before official integration was implemented, with a naval officer in command and an air force officer as deputy commander.¹⁹ Further, the Special Committee on Defence in 1963 heard testimony from the services that outlined how the use of modern management principles was already a goal of service management. The RACAF spoke of how economic management of resources was a priority and tools such as PERT (Program Evaluation and Review Technique) was used. Similarly, the Navy expressed the goal of using civilians to the greatest extent possible in support activities.²⁰ Rear Admiral William Landymore, one of Hellyer’s fiercest unification opponents, supported integration and the quest for efficiency and economy.²¹ Therefore, there was much about Hellyer’s plans that were compatible with service attitudes and approaches. It was the idea of pushing change and reorganization down past headquarters to the level of the services that met with so much resistance. The general feeling of those opposed was that unification at the lowest levels could

¹⁸ See R.B. Byers, “Structural Change and the Policy Process in the Department of National Defence: Military Perceptions,” *Canadian Public Administration* 16, 2 (1973).

¹⁹ Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 154, file 4, “Brief to the Standing Committee on National Defence House of Commons by the Committee on the Maritime Component of the Canadian Armed Forces formed by the Navy League of Canada, the Naval Officers Associations of Canada, the Royal Canadian Naval Association,” September 1966, p. 15.

²⁰ Canada, House of Commons Standing Committee on National Defence, *Minutes of Proceedings and Evidence: “Regulations and Orders-in-Council relating to the Unification of the Canadian Armed Forces,”* No. 2 (Ottawa: 1968), pp. 109, 183.

²¹ Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 154, file 4, “A Brief by Rear Admiral W.M. Landymore prepared for the Standing Committee on national Defence, 1966.

destroy the morale, pride, and familial spirit that were needed for operational effectiveness at the front line.²² Hellyer downplayed the fears by opposition critics that unification would have a serious impact on traditions, hamper morale, or threaten operational effectiveness. Despite early apprehensions over the reorganizations CDS Allard (1966-1969) supported the attempted reforms and in his memoirs defends Hellyer and what he was trying to achieve. Allard writes that he was disappointed with the opposition that focused their objections on traditions and esprit de corps. He agreed these were important but felt that they would not be significantly altered. Instead, he felt that more constructive discussions would have focused on issues related to roles and responsibilities of the MND and PM with regards to security as well as the role Armed Forces were to play. Moreover, discussions of basic doctrine and the policy that dictated the size, form, and quantity of Forces would have been more productive, according to Allard.²³ To be sure, opposition touched on these kinds of concerns, particularly questioning the logic of unifying Forces which were becoming more specialized with the increase in technological complexity. Yet, it was the threat of unification to identity that caused the greatest controversy—particularly as there were no reliable studies done on how the program would affect combat strength, effectiveness, or readiness, which could be used to show that there was a real potential upside to the plan.

It must be noted that while Allard passionately supported what the reforms were attempting to do, he too was not without some reservations. While he writes that there was no doubt in his mind that reform was necessary, unification made little sense to him from an operational need. This was rooted in the fact that there were inconsistencies in the force arrangements. Within NATO the Air Force was integrated with the U.S., while the Army was in the British Sector. At the same time, the Navy—while backed by the RCAF in Canada—had a fair amount of independence and no solid link to the Army or means of helping it reinforce its brigade in Europe. The Forces were disjointed and shared objectives

²² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-8, Vice-Admiral H.S. Rayner, RCN (Retired), "Integration Perhaps - Unification Never," March 1967, pp. 3-8; ²² Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 154, file 4, "The Navy's Place in Unification," February 1966.

²³ J.V. Allard, *Memoires du General Jean V. Allard* (Boucherville: Editions de Mortagne, 1985), p. 250.

were not readily apparent.²⁴ The new policy directions, including reorganization, were intended to fix this disjointed nature and create an operational environment consistent with unification, but the vision of a mobile flexible force was never fully accepted or realizable. Bland argues that Hellyer started with the intention of unification and sought to reshape the strategic environment to fit the plan, and not the other way around. However that is difficult to argue with certainty. To be sure, contradiction and confusion was not totally unheard of in defence in the 1960s. The mobile force faced contradictions in its goal to be highly mobile yet also mechanized. Similarly, Canada sought a non-nuclear role while also emphasizing its intention to accept the nuclear responsibility to which it had committed. Inconsistencies were built into the overall Force itself, as the Army stood between a decidedly British Navy on one side and a U.S. looking Air Force on the other. Still, while Allard felt that political powers did not fully appreciate the independent nature of the three elements that made up Canada's Armed Forces, unification made sense to him from an administrative and management standpoint. In these respects, Allard argues in his memoirs that it was justifiable and necessary. Moreover, the unification legislature was sound and consistent with the stated goals that the reorganizations and new policy directions were meant to achieve, which included attempts at breaking inter-service loyalties.²⁵

As the leader of the reorganizations and the face of the plan, Hellyer received his fair share of criticisms. The opposition saw him as single minded and arrogant and he is not remembered fondly, especially in context of his removal of those within the military who opposed his plan—particularly Rear-Admiral William Landymore, whom Hellyer fired for “disloyalty.”²⁶ Hellyer was not swayed by critics, dismissing opposition as purely emotional and with no valid objection to unification. Much of the problem was rooted in the fact that it was all speculative. The potential savings, for example, could not be proven except with time. Likewise, the argument that operational effectiveness or morale would be

²⁴ Ibid., pp. 252-253.

²⁵ Ibid., pp. 253, 262.

²⁶ It was the dismissal of Landymore that kicked the debates into high gear and sparked a wave of comment and criticisms.

strengthened was speculation until the scheme was tried. The biggest weakness of the implementation of the reorganization was that no studies were conducted—either to outline the economic dimension and provide a forecast of savings or to examine the potential effect on of full unification on morale and military ethos. An effort to understand the full ramifications were never made and this was the core of much of the opposition. Until it could be shown that there was valid optimism for the positive effects Hellyer promised, many felt it needed further review.²⁷

One commentary stated that “Traditions, pride of service, and unit identification cannot be purchased with dollars.... Mr. Hellyer will find support for a high degree of integration...but not to the point where identification of combat units is sacrificed.”²⁸ One opposition member stated: “Traditions are not tangible; yet they build something known as morale...Without morale you can have all the ships, aircraft and tanks in the world and they will not be worth their metal. If the people in the forces have no will to fight or have no fighting spirit, they may as well have no weapons.”²⁹ For opponents, these issues were of the utmost importance, but they faced the difficulty of arguing that these things should be of primary concern ahead of economy and efficiency in tough economic times.³⁰

Despite the opposition, Hellyer believed that there was enough support among the officers at CFHQ after the integration phase. He concluded that if unification was to be achieved, he would have to press forward quickly as integration showed the differences in pay and career treatment between the forces, which could harm morale. He therefore decided to remove those opposing to his scheme and to replace them with like-minded thinkers who could support and implement his plan. The Canadian Forces Reorganization Act, given first reading in early November of 1966 and second reading the following

²⁷ Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 154, file 4, “A Summary of Comments and Recommendations Pertaining to The Planning and Implementation of Department of National defence Policies concerning Integration and Unification of the Canadian Armed Forces,” 20 September 1966; Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 154, file 4, “A Brief by Rear Admiral W.M. Landymore prepared for the Standing Committee on national Defence, 1966.

²⁸ Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review of Unification), vol. 18,189, file Category VI, pt. 2, D.J. Beattie, “Perceptions of Unification – 1966-1967,” 15 December 1988, p. 25.

²⁹ Ibid., p. 56.

³⁰ Ibid., p. 25.

month, provided the statutory foundation for the establishment of a single unified service in place of the three separate ones. Bill C-243, the unification bill, was passed by Parliament on 25 April 1967, and given Royal Assent on May 8. A new promotion policy for officers was announced in September, with standardized rank levels and promotion prerequisites. Unification came into law on February 1, 1968. The Royal Canadian Navy, the Canadian Army, and the Royal Canadian Air Force each ceased to exist, and in their place was born the Canadian Armed Forces (CAF).³¹

MILITARY CULTURE, ETHOS, & THE HUMAN ELEMENT OF DEFENCE ORGANIZATION

There were indeed very real human problems involved in the unification changes, such as the elimination of bands, the uneasiness about common ranks designations, and the concerns over the loss of badges and insignias. People and culture are essential components of an organization. Senior military officer and member of the Defence Renewal Team at DND, Tim Young, explains that there is a vital personal dimension to organizational change and the more profound that change the greater the impact on those within the organization. Those in positions to effect great change must manage and lead people within the organization, guiding them through the process. This involves considerations of purpose and identity within the organization, as change initiatives that “strike at the core of a person’s sense of who they are will activate powerful motivations to return to the status quo.”³² This gets to the heart of the need for strategic guidance, the ability to justify change, and the need to gain consensus. Leaders must not only be concerned with guiding the changing identity of those within evolving organizations but must pay considerable attention to how the organization itself, its structure and processes, affect the identity and culture of its workers

³¹ Later, in the 1980s, the term ‘Canadian Armed Forces’ would be replaced by ‘Canadian Forces’ (CF).

³² Tim Young, "Change Management and Defence Administration: Models for Implementing Change" (MBA applied research paper, Athabasca University, 2013), p. 8.

Understanding organizations as highly cultural institutions is well established in organization theory, representing one of two perspectives of organizations—the other being an instrumental perspective. An instrumental perspective is one that sees organizations as tool, or instruments, for achieving certain institutional goals. At the centre of this perspective is the idea that rational calculation guides decision-making. Within this perspective the organizational structure determines behaviour through hierarchies, rules, and relationships, and processes designed in relation to means-ends assessments. On the other hand, cultural perspectives highlight the constraints and possibilities that lie within the culture or tradition of an organization.³³ The culture of an organization represents informal norms, as opposed to the formal norms which are represented by the structure/hierarchy. This culture develops slowly over the history of an organization/institution and becomes an important component of activities and how members behave. Organizations are made up of formal/structural norms as well as cultural ones, and although rational decision-making is often felt to be the motivating factor amongst members' decisions they can nonetheless be motivated by cultural and traditional standards.

At the time of unification, it was becoming increasingly common to investigate organizations as cultural institutions. However, the rational, instrumental perspective had been around the longest and was the one most ingrained in the consciousness of the manager—even Hellyer. Returning to Quinn and Rohrbaugh's framework of management, it will be remembered that the job of the manager of organizations is to decide how to best integrate the models and theories and how to use them in combination. This was Hellyer's task. The problem with unification was that the focus on the need for urgent structural overhauls rooted in the need to rationalize defence management through the development of new decision-making and planning processes and the streamlining of committees and institutional frameworks left the human relations side of the organization under-appreciated, especially in terms of the impact changes had on morale at the field level.

³³ Tom Christensen, et al., *Organization Theory and the Public Sector: Instrument, Culture and Myth* (Routledge, New York: 2007), p. 13.

It is important for managers of change and those in charge of organizational design to be cognisant of the needs and goals of the institution itself, but also the people who make it run. The ethos—or character—of an organization is a real and a fundamental component of an institution; it develops the cultural perspective of that organization. This dimension of organizations emerged as an area of study unto itself in the 1980s. Organizational culture theories developed the argument that the performance of institutions is influenced by the cultural and often unstated vision and values of the institution, in addition to the ability of managers to encourage and promote workers to adopt those values. This in turn helps to foster a strong culture within the organization which is based on shared beliefs and which might or might not tie workers to each other in the achievement of common institutional goals.³⁴ In terms of the military, is it easy to conjure imagery of long, deep-seated traditions, customs, and rituals. Allan English describes the importance of culture to militaries as the “bedrock of effectiveness” —it explains motivations, aspirations, norms and rules of conduct. In other words, it is the “essence” of the military.³⁵ The ethos/ethic of the military organization is closely linked to the culture. Whether culture defines ethos, or the other way around, is not fully agreed upon, but what can be said is that the ethos is the “characteristic spirit and beliefs” of an organization—it is the overall philosophy of the military and its moral culture. In the Canadian context it is seen as critical to military effectiveness and is derived from the imperatives of the profession and requirements of war; in part, it is a warrior’s code, but it is also based on the precepts of duty, integrity, discipline, and honour.³⁶ Together, military culture and ethos involve discipline, esprit de corps, ceremonial displays and etiquette, and a complex relationship with civil society. Human Relations Theories of organization look at the motivation of workers, job design, morale, and leadership as key fundamental components to effective management.

³⁴ Jonathan R. Tompkins, *Organization Theory and Public Management* (Belmont, CA: Thomson Wadsworth, 2005), p. 7.

³⁵ Allan Douglas English, *Understanding Military Culture: A Canadian Perspective* (Montreal & Kingston: McGill-Queen’s University Press, 2004), p. 5.

³⁶ *Ibid.*, p. 61. See also: “Statement of Defence Ethics,” last modified, 11 August 2014, <http://www.forces.gc.ca/en/about/statement-of-defence-ethics.page>.

Theories developed in the 1950s and 1960s, around the same time as the integration and unification scheme argued that efficiency can be increased through attention to social and psychological satisfaction of workers, not simply assigning tasks and financially incentivizing workers to complete them.

Understanding military culture helps us to understand the difference between services/environments as many aspects of culture are rooted in the roles the services play and in their histories. English elucidates on some of this history in *Understanding Military Culture* (2004), which sheds some light on the resistance to unification, particularly from the Navy. The Royal Canadian Navy had not participated in major nation-building historical acts prior to the Second World War. After its involvement in the Battle of the Atlantic, however, a “self-defining mythology” emerged and the service came of age. A new, strong esprit de corps emerged with entrenched traditions and values and a new operational ethic came to define the service. A hard-fought culture had been won and this continued to evolve in the Cold War when it began to take on its distinctive anti-submarine role. A new Canadian ethos emerged with this role along with plans for Canadian warships, North American standards on board, the use of the maple leaf on ships’ funnels and uniforms, and the use of Battle of the Atlantic Sunday as the RCN “feast day.”³⁷ English explains that “more so than armies or air forces, navies have clung to tradition, and this propensity, combined with the ‘decades-long’ lives of ships, has made their organizational cultures more resistant to change than the other services.”³⁸ The other services and their cultures also grew as a result of the Second World War experience and were witnessing their own developments in the Cold War. Cultures and traditions justified and formed the basis upon which extreme sacrifices were offered, accepted and tolerated – sacrifices most non- military organizations never had to make (first responders being an obvious exception). It was felt that unification threatened

³⁷ Ibid., pp. 91-92.

³⁸ Ibid., p. 913

these cultures and traditions, dishonouring the sacrifices and courage they were founded upon and perhaps eroding the reliability of those sacrifices and that courage being there in the future.

ASSESSING HELLYER'S LEADERSHIP THROUGH THE RESISTANCE

Despite his efforts, the cultural change Hellyer hoped for as a result of unification largely did not occur.³⁹ What the integration/unification program really represented was an attempt to change the organizational *climate*, which represents how members feel about an organization. The goal was a unified structure which would create a climate that would lead to a change of culture. This was a failure because Hellyer did not go deeper in attempting to change attitudes. Hellyer certainly had the conviction that his vision was right, but he struggled to fully convince those around him. As already explained, many agreed where integration was concerned, but it was the idea that military identity and loyalty could be strengthened by unification that received the most skepticism. In "Managing Change within DND," Rostek is critical of Hellyer's ability to win over stakeholders.⁴⁰ But this is a crucial part of leadership and change management—the ability to convince people to do what they may not like to do at first. Hellyer was more willing to remove the naysayers and push forward in spite of those who opposed him. Ultimately he felt that in time the rightness of the vision would be shown.

Leaders must pay close attention to employee emotions and strike a good balance between optimism and realism.⁴¹ Changing attitudes is an important, yet difficult aspect to change management. Although Garvin and Roberto outline the importance of a campaign of persuasion in their 2005 work, "Change through Persuasion," persuasion by itself is not enough. Instead, behavior must also be targeted. The goal is to change behaviour, not just ways of thinking. Wayne H. Bovey suggests that intervention strategies are needed, including information-based efforts and counselling to help

³⁹ David Bercuson argues that unification failed at creating a single military culture. David Bercuson, *Significant Incident: Canada's Army, the Airborne, and the Murder in Somalia* (Toronto: M&S, 1996), p. 72.

⁴⁰ Rostek, "Managing Change within DND," pp. 221.

⁴¹ Garvin and Roberto, pp. 107-108.

individuals understand and overcome their resistance.⁴² New ways of thinking need to be taught. Such a carefully planned, in-tune approach to managing change was not part of the unification process. Hellyer did not make sure “the cultural soil had been ready before planting the seeds of change.”⁴³ Ultimately, he never fully grasped the importance of resistance to change that can be encountered within an organization, for “if the behavioral forces driving people to accept change are unable to overcome the behavioral forces resisting change then the programme will fail.”⁴⁴ As Bovey points out, managers have a tendency to neglect or ignore the important human dimension.⁴⁵ For the history of unification, this was one of its greatest problems. The organization design neglected the human element, as did the management of the change process. An overemphasis on structural values associated with internal control, efficiency and effectiveness, flexibility, and planning in the face of harsh external realities came at the expense of important human and cultural values that required balance within the overall scheme.

Organizations with strong cultures, like the military, see major change as a threat not just to the organization, but the very sense of self-worth of its members.⁴⁶ Militaries can have particularly strong and embedded cultures and sub-cultures. As a result, this component of change must be well understood by those in charge. In Canada, the service cultures that many felt were under threat in the 1960s because of unification were proud legacies of Canada’s involvement in international conflict, including two world wars. Operational effectiveness was the cornerstone of the successful Canadian military and this was rooted in the service cultures and identities, itself founded in sacrifice. As Allan English explains, the Canadian military had “a long tradition of an organizational culture oriented

⁴² Wayne H. Bovey, “Resistance to Organizational Change: The Role of Defence Mechanisms,” *Journal of Managerial Psychology* 16, 7 (2001), p. 545.

⁴³ Garvin and Roberto, p. 111.

⁴⁴ Young, p. 42.

⁴⁵ Ibid., p. 535.

⁴⁶ Michael K. Jeffrey, *Inside Canadian Forces Transformation: Institutional Leadership as a Catalyst for Change* (Kingston, ON: Canadian Defence Academy Press, 2009), p. 89.

towards combat effectiveness.”⁴⁷ As a result, a highly emotional connection was developed between men and their services. Uniforms, badges, and bands might seem trivial to outsiders like Hellyer, more concerned with the realities of costs, budgets, and administrative efficiency—but their role in shaping the organization cannot be understated. Although improved operational effectiveness was in fact to be expected from unification according to Hellyer, there were skeptics who felt that the opposite would be the case. Thus, the perceived threat to operational effectiveness represented a threat to their culture and professional ethos, and vice versa. It therefore became something to be resisted.

It should be noted that Hellyer was not totally unconcerned with the morale of the military, he simply felt differently than the critics. For him there was little to be concerned about and he felt that unification would create a new, stronger loyalty and morale. If identity was tied to uniforms, he clarified that the intention was to only create a common walking out dress and he planned to keep the ceremonial dress of the services. Moreover, he assured critics that traditional roles for each service would continue and each had a distinct part to play. Indeed, soldiers would always be soldiers, sailors always sailors, and airmen always airmen.⁴⁸ As far as morale was concerned, he knew uncertainty and worry would be likely, but felt that the new equal pay raises and better career opportunities offered by the scheme would in fact boost morale, not diminish it. Similarly, Allard argues in his memoirs that unification did not change the essential of the Armed Forces—airmen still flew planes and were not asked to take over platoons or infantrymen. Instead, major changes had taken place in management, administration, logistics, and budgetary cycles⁴⁹—all to be taken up in the next chapter.

It therefore appears that the human element and morale were non-issues and received little direct attention compared to technical changes occurring elsewhere. It also appears that Hellyer assumed that the changes to the structure of defence, with the integration and unification of the forces

⁴⁷ English, *Understanding Military Culture*, p. 104.

⁴⁸ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-21, “Statements and Answers,” n.d.

⁴⁹ Allard, p. 270.

into a single CAF, would be enough to bring about the unified culture he envisioned, and that morale, loyalty, and culture would follow suit as a consequence of the structural overhauls. Despite the debates centering on the issues of morale and ethos, Hellyer was more concerned with the structural overhaul of defence and the creation of new, integrated, and more efficient administrative processes. The impression left is that there was a general disregard for the anxiety over the loss of cultural traditions of the forces that his opposition so hotly debated. It is also possible that Hellyer was fully aware of the true importance of military identity and tradition and the potential effect of unification upon it. He was a first and foremost a politician and his treatment of this component of the reorganization could just as easily have been a political decision to avoid and downplay the cultural component, as it was based on his ignorance of its importance. Either way, his leadership and management of this part of the reorganizations created many enemies.

One of the major deficiencies to Hellyer's management of the reorganization was the speed to which he moved from the integration phase to the unification phase. He did express that it was necessary to ensure establish the unified personnel management system after integration exposed the differences between services. Moreover, as a politician, Hellyer would certainly have been cognisant of the speed to which the winds of change can occur. After winning a June election in 1962, the Diefenbaker government was defeated less than a year later in April of 1963 by the Liberals. Neither governments nor ministers necessarily last long enough to effect the change they desire and therefore speed is key, and political timetables are not always appreciated by non-bureaucrats and non-politicians. Urgency is an accepted component of change-management initiatives. So is removing resistance. Hellyer's aggressive push for unification can therefore be situated within commonly accepted norms of change management. He did not, however, fully appreciate the toll that this was going to take on the services who were already implementing the massive integration reorganization. Sensitivity to organizational culture is equally stressed in change management literature. Despite the challenge, the

services and implementers of the program did so with a commendable degree of efficiency, swiftness, and acceptance. It was asking them to then take the painful step towards unification on top of this effort that became a tough pill to swallow.

THE SUPPORT FOR UNIFICATION

Deciding that enough time had been given to allow for debate and with no intention of backing down, Hellyer unflinchingly pushed forward the programme, and not without his fair share of supporters. With all the criticisms, Hellyer had his own evidence to support the unification scheme. RCAF Group Captain K.R. Patrick, (retired) argued that support for unification was the norm, and that opposition was coming from a small vocal group who were motivated by emotion. The Liberals had testimony from officers, such as Air Marshal E.M. Reyno who dispelled the suspicion that the changes would weaken morale and courage on the front line. In 1966 Air Chief Marshall and Former CDS, F.R. Miller, argued that throughout the reorganization, operational capabilities, efficiency, and commitments had all been well maintained. As far as the Liberals were concerned, there was no valid argument against unification. As R.J. Sutherland of the Defence Research Board stated in 1966: “...Canada can no longer indulge in the luxury of allowing emotion to play even a modest role in structuring the defence budget when we consider the costs of modern equipment as they are today.”⁵⁰ This sentiment was shared by K.R. Patrick, president of Canadian Marigot Limited in Montreal, who wrote in 1967:

To stop, or even slow down the process of this essential re-organization for “emotional reasons” would be tragic and expensive, a dreadful disservice to Canada...Almost all of the jobs in the armed forces call for technical expertise, in addition to technical qualities...The management techniques must change and are changing. It is a vastly different world in which we live and while there must be a hard core of discipline, morale can be enormously strengthened if the concept and the organization are based on logic....It is a glorious opportunity for military

⁵⁰ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 84, file 84-2, R.J. Sutherland, November 1966, p. 8.

management and the key people in today's defence forces are leaping to it. It is an age of computers in management with amazingly rapid communications devices and techniques. The results are elimination of an enormous waste of manpower....Defence is big business and a big piece of the taxpayer's dollar, yet for the first time the application of modern management techniques is being applied to the management of this "business." It offers an unparalleled opportunity for the military to conduct their business in a business-like manner.⁵¹

Much of the criticism was speculation about fears over what might come of unification. As there were also those who argued that such fears were unfounded, the perspective of Hellyer's camp was that there were very few substantial criticisms, if any at all, worth stopping the reorganization. The irony is that their projected benefits were speculative as well. But for them, there was more cause for optimism in the program being successful than cause for skepticism and doubt. On the unification program, Hellyer stated: "when one is considering major change which runs against entrenched tradition it is bound to stir emotions."⁵²

The question remains, if unification became such a political controversy, why did Pearson support it? It is a difficult question to answer as there is little documentary evidence to shed light on the issue. The most likely answer is that he simply deferred to Hellyer's judgement as the Minister for the defence portfolio. John English writes in his biography of Pearson that he gave direction but little advice in important areas to which he lacked expertise, such as social and economic policy.⁵³ His involvement in major issues tended to be peripheral, preferring to delegate responsibility. Despite the major importance of unification at the time, there is no discussion of unification in his memoirs and little documentation in his archives other than a few folders of letters from citizens and servicemen providing their opinions. Although Pearson clearly had intense interest in foreign affairs and international relations—which is closely related to defence—it is conceivable that he left the complex administration

⁵¹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-19, K.R. Patrick, O.B.E., C.D., D.ENG., "Integration - A Living Tradition; An Address on Canada's Emerging Defence Policy," 25 January 1965, pp. 5-8.

⁵² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-21, Paul Hellyer, n.d., p. 4.

⁵³ John English, *The Worldly Years: The Life of Lester Pearson, Volume II: 1949-1972* (Toronto: Vintage Books, 1990), p. 284.

of defence to Hellyer, trusting his opinion on how to run the department. Pearson certainly was aware of the difficulties of the Armed Forces in the 1960s, having been briefed by Hellyer on the “hopeless” situation of the Forces overseas. Before becoming Prime Minister he was made aware of low morale resulting from the lack of weapons needed to do their job (i.e. nuclear weapons). It was the feeling of poor efficiency and the inability to carry out their commitments that helped turn Pearson’s opinion towards the acquisition of nuclear weapons. He also saw the troubled relationship between Diefenbaker and his Minister of National Defence, Douglas Harkness, who resigned over differences in policy. Moreover, when he formed a new Liberal government he heard accounts of the economic implications of budget limitations on the Armed Forces. He was therefore aware of the problems in defence and the impact that dissent within the party on the matter could have. It is also important to note that Hellyer’s initial days as MND were not as controversial as they were at the end. Although not everyone agreed with all of the details of his policy, the concept of integration and the desire to eliminate waste and duplication was widely accepted. When the integration and unification concepts were introduced to Cabinet in February of 1964, Pearson called the proposal “imaginative” and “constructive” while also recognizing the potential controversy.⁵⁴

In those early days of his government Pearson had other things on his mind. When he came to office he set about strengthening relations with the U.S. and U.K.; his initial budget was met with great controversy and almost led to the resignation of Walter Gordon; and 1964 was filled with political scandals for the Liberals. English states that in order to pull parliament out of the “morass” into which it had fallen, Pearson looked to the creation of a new Canadian flag as an “elixir that might transform his followers, wearied of the parliamentary battles...”⁵⁵ The flag debate was not a smooth ride and Pearson’s workload included issues of federal-provincial relations. While Hellyer was setting his

⁵⁴ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6264, “Amendment to the National Defence Act,” 27 February 1964, p. 6.

⁵⁵ English, pp. 288-289.

reorganization plans in motion, Pearson's attention was elsewhere. By the time unification started to become truly controversial, the momentum of change was already on Hellyer's side. Cabinet conclusions reveal that Pearson was content to side with Hellyer's judgement when unification came up (which was only on a couple of times). The few letters between Hellyer and Pearson in Pearson archives reinforce the Prime Minister's support for Hellyer and his policy.

Pearson's impression of Hellyer was mixed. He referred to him as "honest and straightforward," albeit sometimes "out of touch."⁵⁶ English writes of Hellyer that "he was fully responsible" for the unification plan, almost as an attempt to distance Pearson from the policy. It is hard to say why Hellyer got the support he needed from Cabinet. It speaks to Hellyer's ability to frame his reorganization in a reasonable and urgent way, although Paul Martin's memoir does provide a hint that Hellyer's dominant personality might have played a leading role. He states: "By sheer force of personality, Hellyer prevailed on Pearson to give him the strongest support in cabinet and parliament."⁵⁷ Of course, to create the change that Hellyer did, a dominant personality would be necessary. But one also must remember that Pearson's Liberals came to power amidst the Diefenbaker's defence controversies which included Harkness's resignation. Moreover the budget controversy threatened the position of Walter Gordon, and although Pearson felt Gordon probably should have left the position, a sense of loyalty to Gordon and the apprehension over the possible political fallout led him to decide not to ask for his resignation.⁵⁸ There is little evidence to suggest Pearson felt the same loyalty towards Hellyer but his continued support seems to indicate that he felt political unity and support of his Minister was the best course of action. Pearson also had little fear over controversy. On leadership Pearson wrote: "Political leadership is to be steady, not stuck...It is getting the right things done, even at the price of conflict and controversy."⁵⁹

⁵⁶ Lester B. Pearson, *Mike: The Memoirs of the Right Honourable Lester B. Pearson, Volume III: 1957-1968*, John A. Munro and Alex Inglis, eds. (Toronto: University of Toronto Press, 1975), p. 324.

⁵⁷ Paul Martin, *A Very Public Life, Volume II: So Many Worlds* (Markham, ON: Deneau Publishers, 1985), p. 499.

⁵⁸ English, *The Worldly Years*, p. 274-276.

⁵⁹ Pearson, *Mike*, p. 109.

It is important to also note the potential nationalist undertone to the unification process. Pearson, by his own admission, had national unity as a chief concern during his time as Prime Minister.⁶⁰ The new national flag, the Royal Commission on Bilingualism and Biculturalism, the attention to federal-provincial relations all point to the new national identity that was developing in Canada in the mid-1960s. Unification, with its distinct organization and common uniform fit within this trend of Canadian reinvention and drift from its British past. The “Royal” was removed from Army branch titles and the regimental system of managing promotions was replaced with the new unified personnel management system.⁶¹ Therefore, unification fell in line, conceptually, with the wider nationalist trend that appeared to be occurring under Pearson, and was therefore easily supportable. This interpretation, however, is tempered when one takes into account the fact that despite Pearson’s support for unification, the one area in which he expressed reservation was with respect to the loss of identity and tradition from the creation of a single uniform—the most visible symbolic representation of a uniquely Canadian military. Pearson felt that the preservation of names and uniforms could reduce the controversy of the program, remove anxiety, and help build and maintain support. He did not directly ask Hellyer to preserve these things, instead reinforcing his support for Hellyer’s final decision on the matter as long as that decision was made with good reason.⁶² Therefore, while nationalism might add a layer of understanding to the intentions of unification it was by no means to driving force.

There is equal uncertainty over Hellyer’s political ambitions as a driving force. Although that political ambition was very real, and he did run for the Liberal leadership nomination in hopes of succeeding Pearson, there is very little evidence to suggest that the reorganizations were undertaken to serve an ultimate goal of becoming Prime Minister—in fact during the period of unification debates he

⁶⁰ Ibid, p. 236.

⁶¹ Peter Kasurak outlines the effect of the 1960s on the traditional British regimental mentality in his work “Concepts of Professionalism in the Canadian Army, 1946–2000: Regimentalism, Reaction, and Reform,” *Armed Forces and Society* 37, 1 (211), pp. 95-118

⁶² Library and Archives Canada (LAC), MG26 N4 (Fonds of Lester B. Pearson), vol. 37, file 100.82, Lester Pearson, “Personal letter to Paul Hellyer,” 16 July 1966.

directly refuted this claim.⁶³ To be sure, no politician would lose favour with constituents by undertaking a massive program to eliminate waste and find economies and efficiencies within the government, but the controversial nature of the program stood to create as many enemies as allies. The unification plan was controversial not only within the military sphere, but the public as well. Hellyer was inundated with letters from citizens expressing concern and distrust in the whole process. As a political manoeuvre it was risky, even foolish. Hellyer has stated that had personal interest been a strong motivator he would have stopped with integration and not continued on with the unification phase.⁶⁴ This does seem a reasonable position for a politician who was both intelligent and calculating. It is not possible to disprove that there was some political motivation to rationalizing defence at a time when more people were concerned with social welfare than military matters, but like nationalism, it cannot be said that it was a prime motivating factor.

In a complex headquarters such as CFHQ, where every activity is dependent on other activities, it is a wonder that there was not a collapse or disastrous breakdown during the integration years. There were obviously a host of difficulties faced by those implementing the reorganizations and those who had to work through it. Defence at this time faced a number of burdens, such as the complicated development of the integrated systems, pressure of inflation and fixed budgets, and the questioning of absolutes in military policy (i.e. traditional policy perspectives).⁶⁵ Importantly, the Task Force Review of Unification (established in 1979) pointed out that integration and unification were initially concerned mainly with NDHQ as well as senior officers and commands but that the pressures mentioned above inhibited operations and increased the difficulties in successfully achieving equipment programs,

⁶³ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 15, file 15-1, Paul Hellyer, "Canada's Defence Programme - A Sign of the Times," p. 10.

⁶⁴ Ibid., p. 10.

⁶⁵ Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review on Unification), vol. 18,188, "T-F Working Paper - DRAFT," 5 February 1980, pp. 7-8.

organizational plans, etc. Other factors included changing government priorities and defence and strategic situations abroad. This caused further confusion and it became difficult, according to the task force, to measure with any sort of assurance the appropriateness of internal policies. A consequence of this disruption was a loss of chain of command for the organizations outside of CFHQ as direction came from 10 or more agencies, instead of one. Additionally, there was no single contact except for the Chief of the Defence Staff at the top of the structure. Where CFHQ was concerned with external and internal policies, the Commands were to implement them with more autonomy and independence, while also operating in an environment of increased centralization (of training, financial management, procurement, etc.). This was an unworkable situation.

From a management perspective, however, integration was the more important of the two phases of the reorganizations. It was during that phase that the policy-making and decision-process was altered and new positions and relationships were established. The importance of unification was in its effect on morale and the profession of the CF. The loss of traditions, such as a single uniform, for example, was a tough pill for the service environments to swallow. However, the prevailing notion among Hellyer and his supporters was that the days of military policy being dominated by a single service or by the competition between services was over. The perspective was that military operations had become tri-service operations. Reyno stated that the rationale for unification lay at the heart of that fact. Emotional problems would persist and that could only be overcome by proper management. Although some observers might criticize Hellyer for lacking managerial tact necessary to overcome that emotion, it was intended that the management/organizational scheme itself would eventually overcome that emotion through the fostering of a new single service loyalty. Hellyer's archives do show that there were those within and without the military who supported his plans and encouraged him through the difficult reorganization. Interestingly, this support was often framed in business terms. Air Vice Marshal J.A. Sully—Commanding Officer of Trenton Air Station and Air Member for Personnel in Ottawa during

the Second World War before resurrecting a moribund company into a successful organization after the war—wrote in a letter to the press in 1966:

As an experienced senior officer and as a business man, I find it difficult to understand how any rationally-minded man could oppose this excellent move to unification of our defence services....How can anyone who is interested in efficient operations countenance a defence organization that has three pay services, three supply services, three accounting services, three maintenance services, etc., etc.?...No business would operate on this basis. It could not afford to and we in Canada cannot afford to continue on this wasteful procedure.⁶⁶

He continued: "I have met Mr. Hellyer only once but I have a great regard for his courage. He is the first Minister who had the guts to tackle the unification of our Services though everyone must have known something had to be done."⁶⁷ In a letter to Hellyer from Ross C. Brownridge—an industrial expert of 15 years associated with aircraft industry in the fields of program planning and control industrial engineering and accounting, with exposure to defence policies and management organization—Hellyer was praised for taking a difficult position on defence. Brownridge stated that the philosophy within the *White Paper* was a basic necessity to efficient and coordinated operations of the military, and dismissed most arguments as emotional and without specific points of logic.⁶⁸ Thus, Hellyer had sources of support and encouragement. According to an article in *Armed Forces Management*, McNamara praised Hellyer to Pearson for his "perception" and "vision," stating that the complexity of organizations makes them difficult to run, not their size.⁶⁹ Part of running such complex organizations is in searching for new approaches. Sources such as the ones above not only helped to reinforce that he was doing what was right for defence, despite the opposition, but also reinforced the perspective that defence could be approached from the perspective of a business, and that principles common to those in running private

⁶⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-20, Air Vice Marshal J.A. Sully, 9 November 1966, p. 1.

⁶⁷ Ibid., p. 2.

⁶⁸ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 81, file 81-6, Ross C. Brownridge, 25 January 1965, p. 1.

⁶⁹ The Directorate of History and Heritage, Department of National Defence (DHH), 85-225 (Fonds of the Task Force Review of Unification), vol. 1, file 6, "Paul Hellyer: Security's Leading Statesman?" June 1965.

sector organizations were applicable and valuable for defence. For all the criticism, there indeed existed positive reaction to Hellyer's plan, seen as progressive and innovative as well as a rational and logical management approach to the defence portfolio.

CHAPTER 6

THE NEW APPROACH TO DEFENCE MANAGEMENT & ADMINISTRATION

It was Hellyer's arrival at defence, his integration and unification scheme, and the reorganization of defence administration that signalled a shift in philosophy for defence management. Defence management and administration during the Cold War was a complex process which had come to be seen as inefficient—an inefficiency that needed to be, and could be, fixed. This was a key underlying assumption to the entire reorganization period: defence could be rearranged based on concepts, both new and old (but all ground-breaking in the degree of their implementation), so that savings could be achieved, planning could be more proficiently conducted, and the Canadian Armed Forces could more effectively conduct operations. New management techniques and concepts came to be embodied within defence in order to instil a greater degree of control, rationalization, and efficiency—the same themes that had been sought by managers within and without the public sector for decades.

The philosophy that developed in defence was that without the funding to provide the Forces with what they needed and without a decision-making process to decide the best course of action and to keep things on that course, the military would be toothless and directionless. Thus, sound planning, administration, and management came to be seen as the key axis around which the entire system needed to operate. Canadian defence began to incorporate management techniques such as operations research, systems evaluation, and PPBS to improve control over Canada's future defence planning in the face of the little control it had over the external defence and security environment. Political and technological security threats had to be contended with by defence and security planners, while at home there was an acute need to ensure that future planning and procurement was highly efficient. Poor integrated planning between the services lacked rational good sense and long procurement timelines meant that future planning had to be focused on the perceived threats but also able to cope with changes in the nature of threats and the roles that Canadian Forces were to play. Thus,

management and administration showed a general attention to the external environment and the duality of ensuring firm control, as seen in the Rational Goal Model (focus on planning, productivity, and efficiency), as well as flexibility represented by the open system approach (with a focus on adaptation, growth, and readiness). At the same time, however, an internal focus was also maintained as the financial side of the equation was important. Rising costs of technology, the capital intensive nature of procurement, and the strict budgets and limited resources placed huge financial constraints on the operation of defence. Streamlined and efficient management which focused on control over policy-making, planning, and budgeting was vital to get value for each dollar spent. As a result, management became an important act of balancing the various needs and characteristics of the defence institution in order for its effective operation. While unification was controversial and the criticisms of that part of the reorganization raises doubts about the validity of it, the management side—the unstated philosophy and tools to achieve it—were more justified. They served a more clear purpose and need and were not incompatible with defence. What is more, where Hellyer’s big ideas on unification and force structures (i.e. the mobile force) lacked consultation, the technical management aspects of reorganization were more clearly thought out and included a greater use of advice and investigation in their application.

This chapter examines managerial and administrative approach to defence that was developed within DND. The first part examines Hellyer’s business approach and attempts to shed some light on his managerial frame of mind during his time as Minister. He consciously brought a business approach to defence, not necessarily based on profit and loss, but on the idea that inefficiencies could be eliminated and that economies and finances should be the major focus of management. Although Hellyer did not apply specific types of management theories or frameworks, he has stated simply that his philosophy of defence administration was “good management,”¹ management and decision-making that was sound and logical for the particular context and difficulties of Canadian defence. The second part of the

¹ Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

chapter looks at the new planning process that was developed, which made use of tools such as systems analysis and PPBS, which in Canada took the form of the Integrated Defence Program (IDP). Planning became more integrated than had been the case in the past and the new system was projected further into the future, allowing for a better sense of scale and cost of programs. The third section looks at defence management and the way that roles and responsibilities had come to be defined in the new scheme. It also compares the policy process pre- and post-1964 before the final section examines the period in relation to management theory in the 1960s.

HELLYER'S BUSINESS APPROACH TO DEFENCE

Considering it imperative that a long and hard look be given to all aspects of defence, Hellyer decided to introduce, "wherever possible, more up to date methods of management" within DND. He stated that underlying all of the major changes to defence occurring at the time was the concept that "any organization, military or civilian, which does not adapt to changing environments, will decline."² This was an articulation of the need for institutional flexibility and adaptability, much like Claxton and in line with open systems theories of management. At DND it was felt that adaptation was needed because of two major problems which exerted pressure on defence: poor management and control, and rising costs. In Parliament, Leonard Hopkins (of Renfrew North) stated that any industry running a large operation must review such operations every now and then in order to make adjustments in order to maintain efficient and economic operations, and so that it can best serve its purpose. This was the same for DND which faced more technical and complex international problems than before.³ There was a growing complexity of choice facing decisions-makers—political, economic, scientific, and of course, military. Consequently, it was decided that modern management tools would be introduced as part of the solution and as part of the department's effort at adaptation. While these tools served the intention

² *House of Commons Debates*, 1st Session, 27th Parliament, Vol. X, (7 December 1966), p. 10817 (Paul Hellyer).

³ *House of Commons Debates*, 1st Session, 27th Parliament, Vol. XII, (2 February 1967), p. 12597 (Leonard Hopkins).

of creating a defence management system more responsive to the changing environment, they also served to increase control over defence planning, in line with internal processes, and efficiency, in line with rational goal models. The tools of defence management were therefore means for defence managers to achieve the balance between organizational values they deemed most appropriate. Indeed, this balancing act ran throughout the reforms—efforts at balancing private versus public management ideas (such as the use of profit and loss as a benchmark of defence management efficiency) as well as the appropriate balance of civil-military relations, albeit within the parameters deemed appropriate by those in charge, such as Hellyer.

In January of 1965, Hellyer discussed his new philosophy to defence management in a paper entitled “The Business Approach to Defence.” As many critics have argued against the applicability of business concepts to public institutions, especially defence, Hellyer began by recognizing the difficulties in this, as well as the key distinction between the operations of the department versus civilian business management: “Applying business principles to defence management is no easy task. For instance, there are no profit-and-loss statements and the shareholders (taxpayer) receive no dividends other than the somewhat abstract sense of participation in the prevention of all-out war.”⁴ He made it clear that even within the government as a whole, defence was not easily compared to other departments and agencies, such as Public Works, which can clearly list at the end of the year the achievements in new buildings across the country. But while government was not run like a business, and profit and loss does not apply in the same way in the public sphere, “...other yardsticks are available however. A very concrete one is the balance between expenditures on ‘overhead’ items (personnel, operating and maintenance costs) and money allocated to ‘hardware’—the equipment (tanks, planes and ships) needed to allow the forces to carry out their assigned roles properly. Another is the cost-effectiveness of

⁴ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 1, file 1-88, Paul Hellyer, “The Business Approach to Defence,” 16 January 1965, p. 1.

that equipment; for the dollars invested, is it the best possible way to achieve the aim?"⁵ For Hellyer, the previous decade had been one of an ever-declining balance of defence expenditures. In 1954, roughly 43% of the defence budget was allocated to equipment compared to just 13% in 1965—among the lowest in the Western world. This decline, and its effect on the military, was unacceptable to him. Although one option was simply to pour more money into defence, deficits and rising national debt precluded it. A similarly unpalatable option was the reduction of international commitments with NATO, NORAD, or the U.N. Thus, organization was targeted as the best source for effecting change by way of integration and unification. In addition to elimination of duplication, he wrote that "By establishing priorities and coordinated planning we...intend to even out the peaks and valleys of equipment purchases...we should [also] be able to establish quite clearly when and in what quantity we have to add or replace hardware."⁶ He continued: "Efficiency and dollar-value are not the only goals, however. We fully expect that integration will result in a closer-knit, more responsive defence force which will allow Canada to make a broader, more effective contribution to the peace of the world."⁷

It would not be wrong to view Hellyer's approach to defence as "entrepreneurial," even if that might seem anathema to some critics. In talking about the increasing entrepreneurial trend that was occurring in U.S. government management in the 1990s, Gaebler and Osborne point out that while most associate the term with business and private sector perspectives, the term was originated by French economist J.B. Say in the 19th century, defined as someone who moves economic resources out from an area of low productivity and into an area of higher greater yield. Thus "an entrepreneur uses resources in new ways to maximize productivity and effectiveness."⁸ Hellyer's efforts can be understood in a similar way and as a result a nuanced understanding of his management of defence is needed. An

⁵ Ibid., p. 1.

⁶ Ibid., p. 4

⁷ Ibid., p. 4.

⁸ David Osborn and Ted Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* (New York: Penguin, 1993), p. xix.

entrepreneur defined above is equally applicable to the public sphere. While it is not uncommon to point to Hellyer's reforms as being 'business minded,' this is not necessarily mutually exclusive with running public organizations.

Although Hellyer agreed that the worlds of public and private sectors differed, he still argued that there was some merit in approaching defence with a business frame of mind. First, in considering business principles in relation to defence, Hellyer maintained that the size and diversity of the department created management difficulties which were characteristic of any large-scale enterprise.⁹ In an address to the Canadian Industrial Preparedness Association in Montréal in 1966, Chief of Defence Staff Frank Miller pointed to the magnitude of resource management in defence. The department had a large peacetime establishment where pay alone constituted half of the \$1.6 billion budget. Drawing from almost every segment of the economy and interested in nearly every field of scientific and technological knowledge, with a huge dollar value attached to its inventory and fixed installations valued at \$2.5 billion, it was a monumental task to manage defence. He reiterated the philosophy of integration/unification underlying the 1964 *White Paper* as the key: "Clearly, modern business principles would lead us to believe that the control of so vast a concern can only be successfully accomplished under a unified management."¹⁰ The immense cost of defence, coupled with growing technological needs and a fixed budget at that crucial time, led the Liberal government to see the reorganizations as "an opportunity to conduct [the defence] business in a business-like manner."¹¹ Speaking before the Association of Canadian Schools of Business in 1969, after he had left defence, Hellyer elaborated on this view. He recognized that Cabinet was not simply a boardroom and that politicians must act in a very different way than a businessman, but at the same time "objective analysis might show that it would be

⁹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-6, Paul Hellyer, "The Business Approach to Defence," 1965, p. 6.

¹⁰ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-6, Frank Robert Miller, "Speech by CDS to the Canadian Industrial Preparedness Association, Montreal," 20 October 1966, p. 7.

¹¹ *Ibid.*, p. 8.

in the public interest if business principles were observed to a much greater extent than [was] presently the case.”¹² He contended that there was an inadequate side to the public sphere. Government policy often does not come from a single source, but many, and the most “haphazard” is the political platform. Collections of hastily adopted resolutions established at the most recent political conventions, or idealistic opinions of one man are too often “impractical, and nearly always there have been insufficient research to give any indication of costs, side effects, and the interrelationship with existing or proposed related policies.”¹³ Moreover, in terms of Ministerial policy-making, profound change is rare, mainly because Ministers are busy and overburdened; so much so that they are unable to familiarize themselves to a sufficient extent in order to understand and take responsibility for needed major change. And finally, the civil-service reflects the ideas of senior officials “based on their own experience and comprehension of the subject at hand.”¹⁴

For Hellyer, the most frightening trend was the policy-making process as “most policy is a reaction to historical events, rather than a carefully determined plan based on the logic of relating specific means to the accomplishment of specific ends...[and]...One of the most obvious roadblocks to the development and implementation of sound policy is the lack of program budgeting.”¹⁵ In a critical tone, he commented on the delay in instituting this in defence as a useful tool and its potential to solve administrative problems: “For years it has been suggested that this was an essential tool of management. Only now, for the first time, is something being done...Lack of this obvious tool of management is largely responsible for much of the mess we know today.”¹⁶ He lamented that programs for years had been introduced without long-range forecasting of their impact and the numerous

¹² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 4, file 4-8, Paul Hellyer, “Notes for an Address by the Honourable Paul T. Hellyer, P.C., M.P. to Association of Canadian Schools of Business,” 10 June 1969, p. 1.

¹³ Ibid., p. 2.

¹⁴ Ibid., p.2.

¹⁵ Ibid., p. 3.

¹⁶ Ibid., p. 4.

instances of programs being undertaken with only the first one or two years costs being known. The consequence of this was high future costs of programs, which were left largely unknown because of the relatively low costs in the early years which were not investigated in any great detail. This had led to a financial system largely “out of control,” where unanticipated increased costs put great pressure on the total system each year. To cope, he pointed to short term restrictive policies as reactive and temporary solutions. As Hellyer wrote:

One could document the postponement of normal maintenance and the consequent increase by a factor of two or three in the ultimate cost to the Canadian taxpayer and owners, and all because the tools for proper decision making were not available or that the politicians failed to insist on them being available before new programmes were begun...Without wishing to point a finger at any person or group, the point I wish to make is merely that there is a tremendous need for fresh experienced people and new ideas in the government apparatus.¹⁷

One solution identified was greater cross-fertilization of ideas: the world of academia and business, according to Hellyer, have something to offer career civil servants who understood little about the difficulties of working in the marketplace, and it was likewise argued that too few businessmen had spent time working in government. Ultimately, more people who could understand both sides of the equation were needed. One must of course take into account the audience of Hellyer’s remarks, to whom he would surely tailor his discussion, but it seems clear that his approach to defence management included some consideration to business/private sector principles, at least in part. This included a careful appreciation of financial considerations and an eye for efficient and effective management operations.

In a speech to the Québec and Montréal Chambers of Commerce in 1966, Hellyer described defence as a business and the unification/integration plan as the largest “merger” that had ever taken place in Canada—a merger undertaken, as in private business, for profit.¹⁸ By profit, he meant not just

¹⁷ Ibid., pp 5-6.

¹⁸ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-6, Paul Hellyer, “Speech by The Honourable Paul T. Hellyer Minister of National Defence to the Quebec and Montreal Chambers of Commerce,” 26 October 1966, p. 1.

improved financial situation, but profit for the nation—the best possible defence force for a country the size of Canada (at a reasonable cost, of course). It might be correct to question the idea of ‘reasonable cost’ in defence, arguing that when it comes to defence and security and the lives of those soldiers who put themselves at risk, the only reasonable cost is the one that ensures success. Nevertheless, cost certainly was a feature of Hellyer’s consideration. As indicated, Hellyer did not see a total compatibility in applying the notion of profit and loss to defence, but his benchmark of “cost-effectiveness” as a measure of success in management does include dollars and cents as a factor. It might not have been about simply looking at the bottom line, and whether spending is in the red or black, but it was about getting value on every dollar spent. A memorandum to Prime Minister Pearson by Hellyer in September of 1965 stated: “...by introducing modern business principles into defence management, a more responsive and effective defence has effected large staff reductions with great savings in attendant costs," which, along with the new planning policies, would give Canada the maximum amount of defence for every dollar spent, keep spending under control, and allow for a trained Canadian Armed Forces, equipped for the most likely conflicts of the future.¹⁹

A NEW APPROACH TO PLANNING

In the House of Commons in 1966, Hellyer outlined the department’s new management approach, designed to solve two problems: first, the reconciliation of the distinct programs of the three separate environments/services; and second, the gauging of the effects of programs—not only in terms of capital cost, but also in terms of support requirements, personnel and annual recurring costs.²⁰ Integration helped solve the first problem, and a new planning process, the second. The salient features of the new management approach were the defence programming and budgeting system, in addition to

¹⁹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-15, Paul Hellyer, “Memorandum to the Prime Minister: Canada's Defence Policy,” 14 September 1965, pp. 2-3.

²⁰ *House of Commons Debates*, 1st Session, 27th Parliament, Vol. II, (17 February 1966), p. 1420 (Paul Hellyer).

the introduction of responsibility accounting and a redesigned supply. Both of these technical facets of defence management represented a host of characteristics common to the managerial style that was being applied. They were both integrated, seeking to make better use of common effort, and thus fit within conceptualizations of rationality and efficiency. Further, both were concerned with cost effectiveness. For example, the IDP sought to match policy, to military objectives, to available resources—a logical and streamlined method to planning which also aimed at ensuring Canadians got bang for their defence bucks. Moreover, the new integrated programming system displayed approved activities and spending over a five year period, provided data on military functions and missions and their relationship to resource requirements, and allowed for the determination of the whole defence program or particular missions. It helped solve the two problems identified in the House of Commons by including all missions and mission elements and displaying them in a way that allowed for consideration of priorities. Secondly, the data produced included capital costs, personnel and support requirements, as well as operating costs, making known the whole total effect of each program change, which was reviewable at any time. It thus managed and made available all the important information necessary for decision-making.

Decision-making was at the heart of the process and the new program was designed to allow for more complete, rational decisions, and tried to overcome inertia by incentivizing decisions. More control for managers was also built into the system through, for example, a Development and Associated Research Policy Group under the Chairman of the Chief of Technical Services. This group was responsible for initiating and reviewing projects and recommending on their termination. This allowed for improved accountability, control over dollars spent, and a degree of adaptability. Of the IDP, CDS Miller stated that defence was provided with the opportunity to be efficient, avoid waste, and to see

programmes through to the end.²¹ As a decision-making tool, it allowed the implications of proposed programmes to be assessed, upon which decisions could be made, and represented a rational process through which policy guidance was translated into operational plans. At the core of the new planning approach was the issue of control, both over internal and external components of the planning process. Internally, administration of defence was disciplined through greater information management and communication, facilitating control over the running of the defence organization which could be conducted in a more predictable and stable way. Externally, the uncertain defence environment could be better coped with through more rational planning where goals of both the government and department could be better articulated and the effective achievement of those goals met through more efficient use of defence resources.

The Policy Planning Process: The Integrated Defence Program (IDP)

The purpose of the new Canadian Forces Headquarters was to provide the CDS with a staff and process which would allow him to control and administer the Armed Forces. It was also to enable the CDS to provide coordinated military advice and opinions on policies, defence needs, operations, etc. to the Minister. It retained the characteristics of a service headquarters, but also existed as an operational HQ, assisting the development of defence policies as well as interpreting policies in order to achieve military objectives. A policy development process and a programming and budgeting process was developed within CFHQ, coordinated by the Minister and Deputy Minister of National Defence but whose command rested with the Chief of Defence Staff. Within DND a new formal planning, programming and budgeting system was developed in order to satisfy the needs of defence management as well as the requirements of the overall governmental system. Underlying the modern management techniques was a single departmental budget, a single unified defence program for future

²¹ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-6, Frank Robert Miler, "Speech by CDS to the Canadian Industrial Preparedness Association, Montreal," 20 October 1966, p. 10.

projects, the elimination of inter-service negotiations, and a program that was said to be both responsible and realistic.

The new programming system, known as the Integrated Defence Program (IDP), included a five year re-equipment program that produced more efficient procurement and better industrial production planning. It also included a defence plan projected ten years into the future which allowed for assessment of proposals and which looked beyond initial costs. In keeping with the overall theme of the reorganization, planning became integrated, permitting a combined defence program. The integrated/unified nature of the management process was in line with the defining feature of defence at the time—the elimination of duplication and increased rationalization of processes and organizations. Hellyer stated that he was upset by the “the realization that the three services were planning for different kinds of war without any consultation between them, and consequently with no common philosophy or approach. This I found intolerable, and if there had been any doubt about unification, that would have been more than reason enough to proceed with it.”²²

The program worked in this way: First, defence policy would be issued, including a statement of military objectives and force goals, which was established by the Government. The Minister of National Defence would provide guidance on priorities and financial parameters for the CDS to develop the Defence Plan. The proposed plan would be prepared by the Planning Staff to fulfill the force goals indicated in the proposed defence policy for a 10 year period. This plan would indicate costs and time-frames, leaving the details of individual programs aside. Alternatives could be suggested and from these, selection made by the Minister for the approved plan. Third, the Programming Staff would define and price the details necessary for the plan’s implementation, including operational and maintenance costs of R&D as well as existing forces. Adjustments could be made based on alternative proposals to bring the plan in line with financial guidance and constraints. A recommended Integrated Defence Program,

²² Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

which included alternatives, would be presented to the Minister by the CDS, who would in turn seek Cabinet Defence Committee or Cabinet approval. Procurement would begin after Parliamentary approval. The first year of the IDP would be the budgetary document from which Estimates would be prepared for the Treasury Board. Overall, the programming sequence would go through three phases: conceptual (preparation and approval of a plan and the formulation of detailed programmes), acquisition (directives and schedules, monitoring, revisions, and summary reports for senior management), and operational (specific programme becomes operational and assessed for operational effectiveness).²³ During the integration reorganizations of defence, this new programming system was developed to be the principal instrument for carrying out defence policy.

Glassco provided the first real stimulus for changing the Canadian approach to defence planning and set the stage for a PPBS/IDP process. By the time of integration, it had become commonly accepted that Annual Estimates should flow directly from a five year program rather than be based on a decision-making activity of its own.²⁴ Moreover, a key issue was that the separate services undertook their own planning, programming and budgeting activities, which were largely unrelated to each other. The creation of separate plans in isolation from each other was identified as an inefficient process which suffered from a lack of control. However, J.C. Arnell, who was ADM(Finance) from 1966–1972, also identified a lack of adequate policy guidance as a major impediment to effective planning as without proper guidance there could be no proper management of the budgetary process, only control over funds. Policy guidance and control over planning were aspects of decision-making that were seen as needing to be re-introduced. A Programs Division was thus established in order to develop the IDP, reflecting the integrated philosophy that had been applied to the headquarters. A new centralized

²³ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-15, Paul Hellyer, "A Proposed Defence Programming System," 16 April 1964, pp. 3-4.

²⁴ The Directorate of History and Heritage, Department of National Defence (DHH), 85-333 (Fonds of J.C. Arnell), vol. 4, file 261, J.C. Arnell, "The Management Philosophy and the Canadian Governmental Organization for Defence," 8 September 1967, p. 2.

system was developed, embodying the concepts of control and rationalization. The IDP was to be “meaningful” and “orderly,” based on clear policy guidance.²⁵

In terms of defence equipment, the percentage of the budget allocated to it had been shrinking for many years. Selecting the right equipment is always an important aspect of defence management, and selecting and then funding its acquisition is always done within financial limits. Although it is politically tempting to postpone purchases in the hopes of finding more money down the road, for Hellyer this was unrealistic. He developed a 5-Year Equipment Program to improve the long-term process of equipment procurement. In a 1964 statement, Hellyer explained that the goal was to enhance the Forces’ ability to play its part in alliance operations as well as in meeting needs at home.²⁶ The intent of the program was to be a key tool in the implementation of policies, as laid out in the 1964 *White Paper*. The list of equipment needs was long (it included, among other things, new armoured personnel carriers, improved field communication equipment, anti-tank weapons, cargo trucks, air-droppable engineering equipment, tactical aircraft, and new naval ships), and the 5 Year Program was seen as a key factor in achieving that list.

The technological factor was a major one in the decision to develop a new programming system. Complexity of weapons systems caused long development timelines while the rate of technological change meant the obsolescence occurred much faster than had been the case in the past. When coupled with cost, these factors put pressure on the need to make the right decision from the start. In fact, decision-making was at the heart of the matter. Hellyer stated that “a programming system [was] required which [would] allow more precise definition of alternative proposed programmes in terms of

²⁵ Ibid., p.5.

²⁶ See Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 83, file 83-4, “Statement by the Honourable Paul Hellyer, Minister of National Defence, and the Honourable Lucien Cardin, Associate Minister of National Defence,” 22 December 1965.

operational effectiveness, cost, and the time to acquire them, so that choices [could] be made.”²⁷ As a result, the detailed objectives of the system were identified as: a) developing specific programmes in terms of time, cost, and operational effectiveness, so that selections could be made; b) maintaining an up-to-date five-year programme, in terms of time, cost, and operational effectiveness, the first year of which would serve as a basis for estimates; c) implementation based on clear definitions of responsibilities, realistic schedules, expenditures measured against planned expenditures, recording of technical progress, and reporting of programme status; d) and monitoring of operating and maintenance costs. The purpose of the system was “to provide a management tool for planning and controlling major defence programs at the departmental level. It will provide data to the Minister of National Defence, to his senior officials and to the central management staffs for use in analyzing and assessing the short and long term costs, manpower, physical requirements and priorities of various military activities.”²⁸ From this data, cost-effectiveness studies could be conducted. Whereas the old budgeting system was analyzed on a functional basis, the new system allowed for the total Canadian defence structure to be grouped in a number of major programs, reflecting the major activities and missions of the Canadian Forces. Detailed analysis was made possible, allowing for clarity in terms of manpower, equipment, and associated costs of a multi-year time-period. The system was also beneficial because it allowed for detailed analysis of comparing and costing alternatives. When deciding on weapons systems, it is not only important to understand initial costs also but the operating cost over multiple years is crucial information for decision-makers. In this respect, the new system was seen as adding to the overall analysis and control of planning. Ultimately, the goal of developing the Integrated Defence Program was to ensure that the “most appropriate course of action will be adopted in meeting Canada’s national

²⁷ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-15, Paul Hellyer, “A Proposed Defence Programming System,” 16 April 1964, p. 1.

²⁸ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-6, Paul Hellyer, “The Business Approach to Defence,” 1965, p. 7.

security requirements and the objectives of defence policy...and that defence resources are used to the best possible effect in carrying out whatever course of action is adopted.”²⁹

Accounting & Supply

In addition to the Integrated Defence Program, a new accounting system and a new internal audit procedure was designed. Furthermore, use of electronic data processing was committed to by the senior departmental decision-makers at the helm of the reorganizations. In his address to the Standing Committee on National Defence in 1967, VCDS Sharp explained that the “modern management” methods to be introduced was largely rooted in making greater use of computers for administrative processes. Program control, pay, logistics, management information, and personnel records were all to be computerized—a costly undertaking that was only possible through integration, as economies of scale would not have permitted the computerization of these processes within each service.³⁰ In addition, responsibility accounting, program budgeting, and management engineering were cited as components to the new modern management of the department. These aspects of the system represented the *implementation* of decisions. Two of Glassco’s fundamental recommendations that affected the new system were that departments and agencies needed financial authority and accountability for the management of the financial resources at their disposal, as well as that departments should be responsible for the design and maintenance of the accounting systems. Glassco emphasized the need to delegate (i.e. decentralize) financial authority to operating levels. However, an accounting system of internal control of resources is needed before financial delegation, thus a system of dual centralization and decentralization. Part of the philosophy developed by Glassco was that a

²⁹ J.D. Anderson and J.C. Arnell, “Program Management in the Department of National Defence,” *Canadian Defence Quarterly* 1, 2 (1971), p. 31.

³⁰ Canada, House of Commons Standing Committee on National Defence, *Minutes of Proceedings and Evidence: “Bill C243, An Act To Amend the National Defence Act and Other Acts In Consequence Thereof,”* No. 14 (Ottawa: 1967), p. 453

department should know its roles and objectives and that it was in the best position to decide what methods of financial control should be implemented.

In preparation of a new accounting system, DND turned to the firm Simpson, Riddell, Stead and Partners to conduct a management pilot study within Air Transport Command that would assess “financial control accounting systems, management control and reporting within the command.”³¹ The conclusion was that Glassco’s concepts of management were deemed feasible for the military. Consequently, the new accounting and management system was established, stressing resource consumption, as opposed to acquisition, as a new approach for defence. Materials and supplies on hand for use were to be deemed assets until they were actually withdrawn and consumed. This different approach required new accounting techniques and the acceptance of new accounting definitions. The system of accounting delegated more to operating managers, giving them not only more responsibility but also participation in their work as it was intended that military field Commanders would gain increased degrees of responsibility, like their civilian counterparts. It was therefore a combined system of tightening and loosening/centralization and decentralization. Centralized management was to concentrate on policy and operational management was delegated to the field, and the system was designed to embody a logical pattern of planning from policy creation to control over finance and operations.

It was also decided that a new supply service was needed in order to meet the challenges of the day, such as the increased technological change in equipment and the need for flexibility in support of any component of the CF. Both economic and efficiency needs demanded a new supply process and the time had come in the mid-1960s that computer technology provided the ability to establish one—“a supply system which provides managers with an accurate up-to-date knowledge of the total material

³¹ Ibid., p. 12.

assets of DND in terms of item, quantity, condition, and location.”³² The goal was a system that efficiently responded to the needs of the Forces while also maintaining inventory in an economical way and represented a concerted effort to improve the management of information. The program that was developed in 1967 was known as the DEVIL Program, an integrated logistics program that merged the inventory of the three services, utilized a central computer in Ottawa, and, in keeping with the dominant theme of the time, sought to reduce duplication and triplication. Like elsewhere, a combined centralized/decentralized system was developed. As part of the program development, operations research officers were commissioned to conduct cost-effectiveness and scientific management studies. Additionally, two consultants were used to conduct an inventory management study. Finally, as used in other defence programs, the DEVIL program made use of the Program Evaluation Reporting Technique (PERT) for co-ordination and control, using a computerized system for tabulation and updating. It was expressed as a chart which reduced 520 separate events within the program to 16 critical events providing a quick look at major work phases and sequences.

What is interesting about the DEVIL program is how it embodied so many of the management concepts that were being instituted in defence. First, and most obviously, in conjunction with the overall trend in the 1960s, it was an integrated program, combining the logistics systems of the three services into one, consolidating and rationalizing the system by reducing overlap and duplication. It made use of some of the modern management tools such as operations research and computer technology. It also represented an effort at improved information management and control, and sought to provide managers with the right amount of information they required, as the Program Evaluation and Review Technique allowed for the distillation of a great deal of data. Finally, embodied within the program was a centralized/decentralized philosophy and Glassco’s conception of responsibility accounting. And like

³² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-4, “Presentation on the Devil Program (Development of Integrated Logistics) to the Standing Committee on National Defence by Chief of Technical Services, Deputy Chief Logistics, Director General Supply, Director of Supply Plans and Officers of the Program Management Team,” 1 March 1967, p. 1.

the IDP, the DEVIL program was championed, first and foremost, for the combination of economy and efficiency it achieved. In total, the administrative and management system that was developed showed a concerted effort at achieving the decades old quest of managers to achieve order, predictability, measurement, and control in bureaucratic organizations. Both the IDP and the new accounting procedures sought to ensure strict information management and ensure a greater degree of clarity within planning; information was more thoroughly controlled allowing for clarity of communication and information dissemination, better evaluation, and better decision-making. Although delegation was a feature, so too was centralized control, particularly through renewed attention to policy guidance.

Policy Guidance

At the centre of the management philosophy was policy—the government’s job in setting it, the planning process’s job in analyzing it, and the military’s job in meeting it. Policy guidance had a close relationship with management. In the late 1960s and early 1970s, the principal threat to Canada was that of nuclear war between the superpowers. Defence experts J.D. Anderson and J.C. Arnell, writing in *Canadian Defence Quarterly*, explained that Canada was both powerless to escape the consequence of an attack by the Soviet Union on the U.S. and Canada able to prevent it. They argued that “Canada is incapable of establishing its security requirements in terms of a direct defence of its national territory....The consequence of that there is really no way for the Canadian defence analyst to define objectively either an upper or a lower limit of the amount of resources which Canada should expend on its own defence.”³³ Thus, the constraints on defence programming and planning were policy constraints. The choices of what to do and how to do it were policy choices. Herein lay the need for close policy guidance within the process of developing a defence program. Importantly, policy decisions in defence cannot be made in isolation—they require consideration of the work being done in other departments

³³ Anderson and Arnell, p. 31.

and ministries, such as External Affairs. One of the fundamental goals of the planning process that evolved over the course of the 1960s was to ensure that planning was relevant to defence policy, related to other aspects of foreign and domestic policies—particularly so after 1969 when Prime Minister Pierre Trudeau released a new defence policy which sought to rearrange the focus of defence efforts and objectives, placing Canada and North American objectives above those of international alliances and obligations—and to resource constraints.

In discussing the new defence programming and budgeting system, J.C. Arnell, stated that lack of policy guidance had been a deficiency in past planning which affected the whole system. He made a distinction between policy guidance—which emanates from the Minister and Cabinet in the form of *White Papers* and stated defence policy—and planning guidance which outlines how to achieve policy, and must originate within the Canadian Forces. Arnell indicated that there had existed a poor link between political and military components; that is the political-military interface was wanting. As policy starts with political decisions that are the foundation for military operations, this interface, and the links therein, are crucial. Policies are essentially political decisions about tasks to be performed, which must be tempered by military realities in the development of operational plans and concepts. Moreover, that policy, against which military planning is done, must be clearly identified so that the gap between political and military judgments can be closed. Part of an effective system is ensuring that the method of developing guidance is meaningful to both politicians and the military. Policy planning is therefore a complex process of weighing political (policy) and military (planning) judgements, and developing a system to adequately allow for their interplay was a difficult task.³⁴ Policy guidance included military objectives, such as defence of North America or meeting international commitments, followed by tasks such as surveillance of coastal waters or mobile ground support for the UN.

³⁴ The Directorate of History and Heritage, Department of National Defence (DHH), 85-333 (Fonds of J.C. Arnell), vol. 4, file 261, J.C. Arnell, "The Management Philosophy and the Canadian Governmental Organization for Defence," 8 September 1967, pp. 5-8.

In “Information Requirements of Various Levels of Management,” Arnell further outlined the underlying management philosophy of defence which sought to delineate the roles between higher and lower level managers. For him, the Deputy Minister was representative of an executive manager—that is the manager at the top of an organization, concerned with decision-making—in contrast to the line managers who carried out most management tasks concerned with implementation of policy and keeping an operation going. In defence, this kind of manager was represented by the Chief of the Defence Staff.³⁵ Furthermore, the distinction between the two kinds of managers was important for understanding the functioning of defence and the way the new defence program and planning process occurred. The policy process was to be aided by more sufficient policy guidance than had been the case in the past, allowing for proper management of the budgetary process, instead of just “control of the money.” Thus, the integrated defence program was developed in part to provide clearer guidelines as represented by ministerial and departmental policy direction within which constraints and limits could be established for programming. Policy guidance was to be provided against which “realistic” military planning could occur. This was identified as one of the most important facets of management, and a key component of this was seen as considering outside influences along with a continual need for re-examination of plans and policies at the higher levels of policy-making, not only in defence, but with other relevant departments such External Affairs.

Arnell placed great responsibility on the “executive manager”—the DM. The Deputy Minister was seen as operating in terms of *policy* guidance whereas the military operated based on *planning* guidance—a subtle, but telling difference in language. In providing policy guidance, military objectives, roles, and tasks, were identified. These became the benchmark against which force structures were to be developed. This guidance emerged from defence white papers. It was then the military’s job to develop the force structures. This development occurred through the planning process, eventually

³⁵ The Directorate of History and Heritage, Department of National Defence (DHH), 85-333 (Fonds of J.C. Arnell), vol. 4, file 261, J.C. Arnell, “Information Requirements of Various Levels of Management,” 25 February 1969, p. 1.

emerging as the Integrated Defence Program, the annual Program Review document, and the establishment of the future year's estimates. The implementation of policy was done by line managers who assessed policy against roles and program objectives in order to ensure effectiveness and efficiency. According to Arnell, an appropriate (although admittedly simplistic) view was in seeing the DM as the executive manager, concerned with policy decision-making, and the CDS as a line manager, concerned with implementation of policy and operations. Consequently, the underlying philosophy negated the role of CDS in policy decision-making. But at the same time, it was acknowledged that no policy-decision affecting the CF could be made by the Minister without advice of the Chief of the Defence Staff, the principal military adviser. Therefore, the CDS did at times also act as a type of executive manager, although Arnell saw the Deputy Minister as having a more important role at this stage of management.³⁶

Embedded within Arnell's view was a distinction between two kinds of managers, how they represent both the work of the DM and the CDS, and the function they played. It is here, that the role of the DM (at least in the eyes of ADM Arnell as represented by his paper on the subject) is truly elucidated. For Arnell the underlying philosophy of defence was the executive versus line manager; the "leader" versus "functionaries," making use of "philosophical analysis" versus "systematized information." The DM was the philosopher and the CDS the functionary. Although the whole decision-making/decision-implementing process existed within, and was controlled by, military staffs at CFHQ, the impression he left from his paper was that the role of CFHQ was in implementation—the turning of policy into operations—in contrast to the DM who played a key role in setting policy. He stated:

...guidance is drawn from existing defence policy and is developed within the Department of National Defence, in consultation with the Department of External Affairs, and this is one of the areas that is receiving special attention from the point of view of the new management techniques. I want you to note that this is the key step in the whole process and requires the personal attention of the executive manager; it simply cannot be left to staff action.³⁷

³⁶ Ibid.

³⁷ Ibid., p. 7.

He continued: “the Deputy Minister must function as an executive manager, concerned mainly with decisions of policy.”³⁸

It is important to note that when asked to comment on Arnell’s conception of Deputy Minister and Chief of the Defence Staff, Paul Hellyer disagreed with the view. For Hellyer, the DM’s was to hire civilian employees and be responsible for tasks assigned to them, such as property management. Hellyer recalls that from his perspective when he was Minister, the DM had no direct role in the formulation of policy and certainly did not provide “direction to military planners.”³⁹ Although, Hellyer does in fact agree with the notion that roles and objectives for the Armed Force are determined by the Department of External Affairs and by the content of the nation’s foreign policy. The best way to account for the discrepancy of views between Minister Hellyer and ADM Arnell is simply in the interpretative nature of roles and responsibilities, despite their articulation in law (and convention). It has been shown already how despite the National Defence Act, which outlines roles and responsibilities of defence actors, there has always been a degree of interpretation in how they play out in reality. This was the case during the Glassco investigations, and as will be seen, during the the early 1970s. What is important to note is that different actors with different degrees of power and authority advocated different philosophies of management, contributing to conceptualizations of defence management which were ever-shifting and evolving. Whereas in the years after the Second World, when the power and influence of the Chiefs grew and surpassed that of the DM, in the mid-late 1960s there began a reversal of that trend if in no other way than the philosophical articulation of roles. The Chief of the Defence Staff came to be seen as a “junior partner” (to use Bland’s term) to the Deputy Minister. It would be later, during the reorganizations brought on by the Management Review Group, that the downgrading of the CDS’s role as a policy actor would be further established within the structure of defence itself. This was essentially

³⁸ Ibid., p. 25.

³⁹ Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

about the struggle over control of ideas that was happening throughout the post-war period. Defence in the 1960s was a period of changing ideas of how the military should be management and organized and there was not always agreement on the matter. As will be seen in the next chapter, completely new concepts were advanced and implemented by successive Ministers and observers. Thus, while the theme of control played out within the actual management/administration of defence resources, it was also a feature of the philosophical and conceptual nature of defence management.

Systems Analysis and Operational Analysis

A good example of the ever-evolving conceptualization of management was in the growing advancement of systems analysts as a component to decision-making. Hellyer has stated that the lack of an analytical staff to review military submissions was one handicap of his office, and a factor he had wished to eliminate when he took office. He wanted a source of daily expertise available to him, a group of men to “give the facts.” Hellyer admitted that Ministers do not know much, and thus need help. He referenced the RCAF submission to purchase more CF-104 Starfighters as an example of the difficulty for him as Minister. In his memoirs he explains that he ended up doing much of the work on his own with respect to the purchase request. Although he has said that he took nothing consciously from the private sector or management theories in his reorganization of Canadian defence in the early 1960s, he was in fact inspired by Robert McNamara’s Whiz Kids in the U.S. Department of Defense. He wanted a staff to do work for the Minister, not to run the department, but to give advice on technical matters as he felt a small group of experts would be valuable to him. In January of 1965 he submitted a request for 5-10 positions to do staff work, where responsibility would be to examine the premises upon which submission were based, to consider cost effectiveness, and suggest alternatives.⁴⁰ Although nothing came of his request and he never got an analytical staff of his own (the request either fell on deaf ears,

⁴⁰ Interview with Paul Hellyer, Toronto, ON, January 30, 2012.

or as, Hellyer has speculated, some were apprehensive about the idea and thus were not keen to follow it up), as part of the reorganizations within the Deputy Minister's Office, systems analysis did become an established component of management.⁴¹ In July 1965 a Policy Analysis Branch was created along with a Director of Systems Analysis in February 1966, and then a Director General of Policy Programming within the ADM(Finance) office in 1967.

A memorandum to the Defence Council explained that the purpose of the Policy Analysis Branch was to "provide a small staff of analysts to formulate and define problems, clarify objectives and determine relevant assumptions to be considered in making decision on defence policy."⁴² This staff would have the freedom to investigate any problem of interest or problems directed to them by the MND and DM, and would be responsible for producing analytical studies to determine the best courses of action with respect to those problems. Any relevant data would be assembled, whether economic, military, political, industrial, or scientific—anything that had bearing on reaching sound conclusions. The DM's Office recognized that there already existed and OR and SA staff within the department, but justified the request for a Policy Analysis Branch based on the need "to provide an independent approach both to ensure, within reason, that all relevant data is taken into account in reaching a decision, and as a means of counteracting the tendency in a monolithic organization of an ingrown approach to solutions of a problem."⁴³ Such a statement was indicative of the kind of thinking that was going on during this period of change: the traditional forms of defence management and decision-making were to be replaced by fresh, new concepts, particularly coming from non-military personnel.

In addition to Systems Analysis, Operational Research/Analysis—whose greater utilization in defence management was called for in the early 1960s—also gained new prominence in Canadian defence. During the Cold War, OR was used to understand the complex relationships of weapons

⁴¹ Ibid.

⁴² Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 76, file 76-11, Deputy Minister's Office, "Memorandum to Defence Council," n.d., p. 1.

⁴³ Ibid., pp. 1-2.

systems. (Technological systems included not only the whole complex of men, machines, skills, and organizational patterns of particular military functions, but at a larger level were connected to a system of defence, economics, science, and politics.) In a study for Special Committee on Defence in 1965 the variety of weapons systems employed by Canada was outlined, which included everything from intelligence gathering to anti-bomber and anti-ballistic missile systems, to interdiction, reconnaissance, and anti-tank, anti-missile, and anti-submarine efforts.⁴⁴ Operational Research helped to understand the complex relationship of factors that must be known in the functioning of such systems as well as their maintenance and logistics. For example, OR helped in understanding how the number of aircraft and crew within a squadron, the number of maintenance personnel, and scheduling of flying all affect the number of serviceable aircraft. While technological systems were common in the military, such as the system of radars, fighters and flack artillery in air warfare, weapons systems became increasingly computerized. Moreover, whereas in the early Cold War some systems such as radars went through periods of successive changes, replacements, and improvements in short timespans, as the Cold War dragged on the systems used were increasingly costly and took longer to put into—and keep—in service.⁴⁵ It became important to comprehend, before proposed systems were approved, if the system filled an important strategic need, if it was worth the cost, and whether it was technically possible.⁴⁶ In fact, economics became a driving force in this aspect of defence planning. George Lindsey, a Second World War veteran and Chief of DND's Operational Research and Analysis Establishment from 1967 to 1987, explained in that in the mid-1960s rising procurement, operations, and maintenance costs became a crucial factor. Earlier in the Cold War studies of OR were relegated to design and choice of weapons systems. But as investment in equipment waned and forces were reduced and length of equipment

⁴⁴ Canada, House of Commons Special Committee on Defence, *Special Studies for the Special Committee of the House of Commons: "Armament and Modern Weapons"* (Ottawa, 1965).

⁴⁵ Laurier Military History Archive (LMH) , Fonds of George Lindsey, series 15, vol. 1, file 3, George Lindsey, "Strategic Implications of Advancing Science and Technology," 3 May 1979, p. 13.

⁴⁶ Ibid., p. 14.

procurement and lifespans grew, defence became “prisoner of its past” choices.⁴⁷ In an effort to address this, OR gained a new importance, no longer relegated to analysis of systems, tactics, and logistics, but seeking new ways in which research could be brought to bear of difficulties rooted in economics and evaluations of alternative roles.⁴⁸

OR and SA was moving towards what George Lindsey described more generally as “defence analysis.” This prominence began in the mid-1960s, and by the mid-1970s Lindsey wrote that OR’s job was increasingly becoming about helping armed forces to ascertain what their jobs should be and helping them do it more economically.⁴⁹ OR and SA were seen by Lindsey as holding great value in determining resource allocation. He wrote that in designing forces the objectives needed to be about getting the best possible effectiveness for a given cost. However, determining this was filled with complications, such as how to treat overheads, or which personnel costs should be added. In the 1960s, where Hellyer was seeking a more flexible role for the CF which was to respond to a range of conflicts, such assessments became even more difficult. The flexibility Hellyer sought placed a greater need on civilian experts as Lindsey explained that measuring the effectiveness of one weapons system with one role was hard enough but is made even more difficult with many roles are being considered.⁵⁰ Thus, OR and SA were aids to decision-making. United States Assistant Secretary of Defense, Charles J. Hitch, made similar statements in 1963 arguing that the aim of scientific analytical techniques was to assist decision-makers by furnishing them with quantitative estimations of cost and effectiveness of alternative courses of action. Modern science had complicated the problem of choice in the 1960s and analytical techniques, although not a panacea, were useful. While this certainly helped raise the

⁴⁷ George Lindsey, “Operational Research and Systems Analysis in the Department of National Defence,” *Optimum* 3, 2 (1972), p. 35.

⁴⁸ *Ibid.*, p. 36

⁴⁹ *Ibid.*, p. 37. See also

⁵⁰ Laurier Military History Archive (LMH), Fonds of George Lindsey, series 13, vol. 3, file 1, George Lindsey, “Defence Analysis and Operational Research: lecture to second annual Canadian Armed Force Communications and Electronics Conference,” 1 December 1969, p. 4.

standing of civilian analysts in defence planning, as evidenced by their increase use by senior decision-makers like McNamara and Hellyer, they were not intended to usurp service functions⁵¹—selection of weapons systems and design of forces remained as much an art as a science, but more science within the process was valuable.

The Policy Process Compared: Pre- and Post-Integration

The term “policy” can refer either to *overall direction* of policy or *policy implementation*, and both aspects came under review in the mid-1960s. The overall direction of policy emanates from political control and this was seen as one of the weak links of the previous system. It is important, however, as it represents the foundation upon which directions are given for the execution of policy concepts. As Arnell indicated, the DM’s role in the new policy process was seen as having a greater responsibility in the overall direction of policy as an inter-departmental coordinator. Policy implementation, on the other hand, represents departmental policy. Much of what occurs at the departmental level is based on pragmatism, precedent, and experience. This type of policy-making involves compromise between facts that exist within defence and without defence. This “art of the possible” remained a feature of defence in the 1960s, as did the need for compromise between policy desires and their constraints. However, analytics became much more involved in determining the “possible” and less emphasis was placed on the precedent and experience that guided it in the past. Moreover, the two levels of policy—overall direction from elected officials and departmental—still required constant interaction. This was the goal of the decision-making-decision-implementing system of the IDP; it sought a clearer connection between the two types of policy and part of this was in moving away from the committee system that dominated the old policy-making environment through a plethora of committees to coordinate inter-service issues. The integrated nature of the new policy-

⁵¹ Laurier Military History Archive (LMH) , Fonds of George Lindsey, series 13, vol. 3, file 3, Charles J. Hitch, “Address by the Honourable Charles J. Hitch, Assistant Secretary of Defense (Comptroller),” June 1963, p. 6.

planning system was its most salient defining feature. The move away from the committee system is the most obvious change, indicating the continued quest for rationalization of the organizational and administrative structure.

Committees still existed under the new system although the difference was in the rationalization of committees, and the Defence Council was representative of this shift. As mentioned in the previous chapter, Hellyer reconstituted the Defence Council to be the departmental policy-deciding body where in the past it had acted more exclusively as an administrative body. Before integration there were six avenues open to the Minister of National Defence from military and civilian channels and the new Defence Council reduced it to three: the DM, CDS, and Chairman of the DRB. This improved coordination and control by the Minister, simplified the policy process, and allowed for close coordination and examination of policy in the three principal areas of military affairs, civilian administration, and the scientific and technological environment. It limited and controlled the range of information reaching the Minister and was the cornerstone to the centralized nature of higher decision-making. Previously, military advice to the Minister would travel through the Chiefs of Staff Committee; however by the mid-1960s that advice channelled through the Defence Council. Prior to integration, it was the Chairman, Chiefs of Staff who was to coordinate the views of the three Services in the Chiefs of Staff Committee in order to establish a single perspective to be sent to the Minister. This was not a far cry from the new system. The Chief of the Defence Staff, like his predecessor, was to establish a single military voice for the Minister, now presented to the MND at the reconstituted Defence Council. Of course this process of rationalizing policy-making was not entirely new. It should be remembered that Claxton made efforts at improving coordination and reducing duplication in the late 1940s, and Hellyer's attempts can be placed in the context of such constant efforts and evolving defence policy.

Policy guidance was seen as the weakest part of the whole management scheme, but was also where Arnell saw the most important improvement in the planning process: that guidance was seen as

clearer, and importantly, took into account a broader spectrum of government considerations, namely External Affairs. This policy came as ministerial or governmental guidance; another way to look at it is as political guidance. Providing better political guidance for defence planning embodied one of the key philosophical intentions for the whole reorganization: to establish firmer political control over the whole policy-process. It was Hellyer's view that such political control was too weak upon his arrival, and here it was reinforced.

PERSPECTIVES OF CHANGE & ORGANIZATIONAL DESIGN IN THE 1960s

During the 1930s and 1940s a school of management thought emerged known as natural systems theory which took a micro-analysis approach to understanding organizations. One of its main proponents, Chester Barnard, saw organizations as systems of cooperative activity where survival depends on an organization's effectiveness and efficiency. Effectiveness was defined in the normal way (the ability to achieve goals), but efficiency was seen as the degree to which organizations satisfied the motives of individuals within the organization. Cooperation was based on achieving a balance between goals and satisfying human motives. If this could be accomplished, cooperation between members would sustain the organization. Thus, there was a focus on internal integration.⁵² By the 1950s, however, an alternative approach, known as the open systems approach, came to replace natural systems perspectives and in turn helped develop areas of study including cybernetics and information theory. According to W. Richard Scott, open systems theories helped to stimulate applications such as operations research and systems engineering and proposed closer links among scientific disciplines.⁵³ For general systems theorists such as biologist Ludwig von Bertalanffy, certain general ideas have relevance across a spectrum of disciplines. In particular, most entities studied by scientists fall into a

⁵² See Jonathan R. Tompkins, *Organization Theory and Public Management* (Belmont, CA: Thomson Wadsworth, 2005), pp. 239-240.

⁵³ W. Richard Scott, *Organizations: Rational, Natural, and Open Systems* (Prentice Hall: Upper Saddle River, NJ: 1998), p. 82.

general rubric of systems, as systems are merely the combination of interdependent parts. The open system theory focused on exchange between the organization and the environment and the need to maintain an external equilibrium. Where natural systems viewed organizations a social system of members integrated by common objectives, open systems described them as shifting “coalitions of internal and external participants contending with forces external to the organization.”⁵⁴ In contrast to closed systems that are seen as isolated from their environment, open systems are defined by the exchange between the system and its environment. Open systems view organizations as self-regulating systems; they monitor their environment and make adjustments to their structures or goals in order to adjust for any deviations between them and the environment and management must position the organization for continued success in the environment.⁵⁵

This is very much what was being done with the establishment of the new Integrated Defence Program. A much greater emphasis was being placed on policy guidance, which was to include greater input from other relevant departments and agencies, particularly External Affairs, as it was hoped that defence policy would be more responsive to foreign policy. The Defence Research Board (DRB) was also an important source of advice for the Minister in making decision-making. The DRB advised the Minister on scientific and technological issues and developments and in many ways responded to the external scientific and military environment. It also coordinated scientific and research efforts with allies to limit duplication of effort and ensure Canada could make a relevant contribution with respect to its particular talents and assets, and of course it had to stay responsive to perceived scientific and technological threats of belligerent states. Moreover, a second important difference between theories was that natural systems theorists described passive efforts by the organization to adapt to environmental forces, whereas open systems described aggressive efforts to adjust. Thus, a successful organization is one that

⁵⁴ Jonathan R. Tompkins, *Organization Theory and Public Management* (Belmont, CA: Thomson Wadsworth, 2005), p 239.

⁵⁵ *Ibid.*, p. 250.

best copes with its environment by finding the best fit between organizational characteristics, environment, and goals.⁵⁶ As time passes, the environment within which organizations operates changes. At the same time, organizations need also to change in order to remain stable. Success is therefore dependent on the design of management chosen for the particular environment.

This is a useful way of conceptualizing defence at the time of the reorganizations. During the Cold War period, the environment within which defence operated was rapidly changing. The security threats were constantly evolving as the scale and destructiveness of nuclear weapons increased, and as their delivery evolved from long range bombers to missile technology; conventional warfare was evolving as technological and command and control changes required; the potential regions which could require intervention changed with the expansion of communism and the continued involvement of UN peacekeeping in international hot-spots; the cost and complexity of military technology and hardware created new pressures and gave rise to the military-industrial-complex. At home, budgetary fluctuations for defence, public opinion and support for defence, and the competition for resources during a period of expanding welfare state, all placed new kinds of burdens and uncertainties on defence planners. Success could not be guaranteed by continuing to manage defence in the way that it had always had been managed. Regardless of whether Hellyer's particular scheme for change was the best way, change was required nonetheless.

It is interesting to draw some comparisons between Hellyer and his U.S counterpart, Robert McNamara. Although their trajectories were very different, there is a certain similarity between the two and their approach to management in defence. While both came from humble beginnings, McNamara's journey took him from an Ivy League school to playing a key role in the Pacific theatre of the Second World War, and finally to a job at one of the world's largest companies where he rose to the highest position. This was the precursor to being recruited by President John F. Kennedy for the job of Secretary

⁵⁶ Ibid., p. 240.

of Defense where he could put his mathematical, analytical, and business oriented mind to work in public management. Hellyer, on the other hand, never left Canada during the Second World War and although he was trained in economics and had a mind for business, his private sector ventures were modest. He worked his way up the ladder in government through the traditional channels of elections and appointments and ended up in defence almost by default. Yet, both men had managerial frames of mind and were concerned with efficiency, rationality, and decision-making. Although these qualities are more easily distinguishable in McNamara's analytical approach to defence, Hellyer's early days in defence equally show a concern for these features. In line with the rationalist school of thought, both men rejected tradition and precedent as the foundation for management and decision-making, instituting an approach based on greater civilian control, management of information, and their perception of what was the most sensible basis for organizational design. Moreover, both were also criticized for instituting business principles in the running of defence to an undue degree.

Is it fair to say that the management concepts instituted in defence were representative of scientific management? The answer is a qualified yes. The preeminent form of scientific management, Taylorism, although incredibly popular during the first decade of the 1900s had lost its influence by the 1930s. While the Taylorism-specific form was eclipsed by other management theories, scientific management's central themes remained—efficiency, rationality, empiricism, standardization, and logic—and all investigated through workplace analysis. Elimination of waste and the search for best practices as opposed to blindly following tradition were both components of management and management engineering that progressed beyond Taylorism's decline. Although Hellyer never specifically came to defence with the intention of applying “scientific management” to defence, his reorganizations surely reflect some of the central themes of the concepts. It should also be noted that the only place that scientific management was explicitly mentioned was in the realm of supply and

logistics and inventory management—the section that would expect to be most compatible with “business” thought.

It is also noteworthy that it would be more accurate to call the reorganizations of the 1960s as reorganizations through management engineering rather than scientific management, as the latter term had lost popularity by the 1960s. Management engineering brought the skills of engineering to bear on management institutions and focused on the management of technology, information technology, and operations research and supply chain management. The information technology included understanding how the use of technology could support decision-making, a key component to the re-designed policy process under Hellyer. Operations research was explicitly focused on during the reorganizations in support of decision-making, and supply chain management seeks to manage the flow of goods, as seen in the DEVIL program. Finally, a core component of management engineering seeks to understand the decision-making process. While there is no evidence that senior decision-makers thought specifically in terms of scientific management, the application of engineering management and the tools therein, is more plainly visible. A special unit under Group Captain Hugh McLachlan was established to provide a management engineering service to DND. His staff included a mix of civilian and military personnel and included outside management consultants on contract terms. The team was used to study all different aspects of the system. The general atmosphere of defence during the mid-1960s was an atmosphere of change. Although many questioned the pace, degree, and nature of some of the changes, many others agreed that questioning the ways things had been done could be of value in making improvements where possible. The Management Engineering Branch was there to help. It was, however, to stay away from operational units as it was recognized that fighting units have their own needs and that not all answers can be had by management engineering. It was in the administrative and support field that the new techniques were best applied. The team looked at variety of issues such as dockyard job standards,

improving operations store warehouses, improving methods of aircraft maintenance, and streamlining of units and offices.⁵⁷

The reorganizations, particularly unification, were a tumultuous time for the Canadian Armed Forces and the civilians working at NDHQ. There was criticism with regard to the speed of the changes from both those within defence and observers looking from the outside (criticisms that have at time been echoed in the years since)—feelings that Hellyer was pushing too much change too fast. But while those years could be looked at as a great leap forward in the organization of Canadian defence, it can also be placed in an opposite context. From Hellyer’s perspective and those who backed his changes, those reorganization years were less about jumping ahead as they were about catching up. For him, defence was behind the times with the principles and techniques being used elsewhere, whether public institutions (like defence in the U.S.), or private ones. To be sure, no one else unified their forces to the extent that Canada did, and that aspect of the change was wholly unique. But in other aspects, such as instituting systems analysis, introducing new logistics tools and techniques, and the formation of a PPBS system, it was more about updating and modernizing defence to match the times. In 1966, Chief of Defence Staff Frank Miller stated: “We have been overtaken by industry in all fields of data handling and effective management controls. Had we not awakened to this situation we would have been in danger of becoming a museum piece. Our problem now is to bridge the gap between what was essentially a later Victorian organization and the space age.”⁵⁸ Furthermore, it was not simply the modern nature of the tools, techniques, and ideas that were appealing to the top decision-makers, but it was their ability to improve defence in the complex and uncertain modern age that was their major draw. Operational effectiveness was always a top concern. In *Air University Review*, Air Marshall F.R. Sharp stated that “...the significance of these innovations is not so much that they make use of the latest and most

⁵⁷ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 7/7, “New Weapon: Management Engineering -- And it Pays,” Toronto Financial Post, 3 July 1967.

⁵⁸ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 79, file 79-6, Frank Robert Miler, “Speech by CDS to the Canadian Industrial Preparedness Association, Montreal,” 20 October 1966, p. 7.

modern of management techniques, that they produce substantial increases in effectiveness and efficiency, and that they demonstrate to our servicemen that they belong to a progressive and forward looking organization.”⁵⁹

The implementation the tools of new management in 1960s defence need to be understood with nuance. On the one hand they were referred to as modern techniques, intended to bring defence management up to date in its administration. The degree and scope to which tools—such as computers—were implemented was greater than it had been before and management techniques such as PPBS and management engineering gained new prominence. At the same time, some features such as systems analysis and operational analysis were not entirely new, having been used in defence for decades. Established management tools were to breathe new life in defence management. Their importance for defence in the 1960s was that they represented the themes that were sought after by Hellyer and his supporters—they helped rationalize the workload of administration in the large and complex Cold War defence bureaucracy, they were tools of efficiency, and they were aids in decision-making, increasing political control over the policy-planning process. The IDP, DEVIL program, and new accounting system were tools of information management that sought greater control over planning across all three environments and greater control over the allocation of resources. This was in line with the internal process style of management which corresponds to an organization seeking control and stability over the internal nature of the institution. At the same time, this new planning process sought a better link between political policy guidance and planning and implementation, representing a quest for efficiency and productivity. This was in line with an organization that seeks to ensure a high degree of control over the external environment in which it operates.

⁵⁹ The Directorate of History and Heritage, Department of National Defence (DHH), 80-225 (Fonds of the Task Force Review of Unification of the Canadian Armed Forces), vol. 4, file 50, “Reorganization of the Canadian Armed Forces,” n.d., p. 25.

Hellyer and his supporters did not need to explicitly use or articulate a management style or philosophy for it to be understood. It was visible in the kind of organization they established and the tools they implemented to make it function. Although displaying values pertaining to all four of Quinn and Rohrbaugh's categorization, it was most consistent with the administrative and scientific management theories rooted in rationality. While Hellyer's management of the reorganizations surely had its deficiencies, affecting civil-military relations and threatening the smooth function of defence, his style is consistent with the rationalist tradition. He rejected criticisms that were rooted in tradition and stood firmly behind the stated logic of the program and the expressed reasoning for its value. Although adjusting the decision-making process was controversial, he operated based on the philosophy of alternatives. Alternative perspectives expanded his information base, provided more options on issues and questions, and allowed him to feel that his decisions were better informed. The consequence of this approach was that it diminished the prominence of military advice and opened the door for greater civilian involvement in decision-making. Although decision-making might be bounded by imperfect knowledge and the inability to know all alternatives, Hellyer's approach surely sought to increase those alternatives and help to unbind the constraints on decision-making. This is essentially what he had in mind when he sought a group of civilian analysts to help him in his duties as Minister.

Moreover, the tools and methods of management that Hellyer and his supporters implemented must be placed in its rightful historical place. A close reading of the management changes not only show the unconscious management philosophy used, it also makes apparent their consistency with evolving trends in management and defence. Not only was firm management control in the face of increasing technological and strategic complexity a feature of private sector management and defence management in other countries, such as the U.S., it was an approach that goes back decades. It has already been outlined how tools like OR and SA were rooted in defence and military history, but so too has it been shown that the growing bureaucratization that characterized Canada's Cold War defence was a

trend stretching back to the very to the earliest days of the defence institution. Therefore, while this chapter has explained the nature of the tools and methods used in Canadian defence, as well as the challenges they were intended to respond to and solve, assessing the validity of their application must keep some assessment of the historical record in mind. Their mere presence within the historical record and existence of rationalization trends do not in themselves make them valid, although they do force a more nuanced understanding of the controversial unification period. As it will be shown in the next chapter, these trends and philosophies were further taken up by subsequent defence planners, firmly establishing the momentum of management rationalization and control within the ongoing history of defence evolution.

CHAPTER 7

THE MANAGEMENT REVIEW GROUP & THE INADEQUACIES OF DEPARTMENTAL MANAGEMENT

Despite the major growing pains caused by unification, defence did not settle into any lasting calm through the end of the decade. In 1968–1969, plans developed to further refine the field forces as a result of the difficulty in reconciling the factors of regionalism and the persistence of elemental identity. In August of 1969, signalling a shift away from strict functionalism, a new functional/regional organization for the Canadian Armed Forces was implemented. Other alterations occurred with respect to the Commands, and there was a need to re-examine the offices of the Comptroller General and the Vice Chief of Defence Staff because their increased size and power had made them too large and difficult to control. The biggest change came in the early 1970s on the heels of the report of the Management Review Group (MRG)—an investigation into the overall management of defence which resulted in the integration of the civilian and military side of defence at one, unified National Defence Headquarters. Framed in a similar way to the integration and unification under Paul Hellyer, reformers argued in 1971 that duplication of effort between the civilian and military organizations could be eliminated if their efforts were more fully integrated, which would make defence more economical, allow for more delegation of administrative authority to the Commands (i.e. more efficient), and increase political control over policy.

In the early 1970s there existed increasing pressure for DND to meet planning, programming and budgeting procedures, and the MRG was to address this. The MRG review was commissioned by Minister of National Defence, Donald Macdonald. Hellyer had left the position of Minister in 1967, replaced by Léo Cadieux who held the post until 1970. After Cadieux, the role was filled by Charles Drury for a brief period in September of 1970 before Macdonald was given the job. Although the MRG was formed under Macdonald, decisions on change at DND did not come until Macdonald was replaced by Edgar Benson in January 1972. Defence headquarters were reorganized, creating a single

departmental structure, which was to “improve coordination” and to “delineate authority more clearly than had been in the past.”¹ Under the new organization, the entire military component was responsible to the Vice Chief of Defence Staff through two deputy chiefs, while the Deputy Minister’s Office was rearranged to include five Assistant Deputy Ministers—one each for evaluation, policy, personnel, finance, and matériel. In this reorganization, functions were shuffled in order to come into line with the new Deputy Chiefs and ADMs. Some functions that used to exist on the military side were transferred to the civilian side, such as certain financial responsibilities which moved to ADM(Finance). Moreover, policy and capability planning as well as programme analysis functions—which were the purview of the Chief of the Defence Staff— were partly transferred to ADM(Policy). Thus, a more unified functional approach was taken at headquarters, with integrated military and civilians staffs working together in a single HQ.

This chapter examines these reorganizations in the early 1970s. The first part examines the defence and security environment at the end of the 1960s and how Prime Minister Trudeau assessed Canada’s role and position in that environment, and which was articulated in a new *White Paper*. The importance of civil-military relations, the technological factor, and the influence of procurement on perspectives of defence at the time will also be touched on before the second part looks at the MRG itself—both the investigations into defence management and the observations and recommendations that were made. The final part of the chapter outlines the changes made in the wake of the MRG report, including the radical organizational changes and the continued evolution of policy-making.

DEFENCE POLICY IN TRANSITION

It is hard to assess the economic outcomes of integration and unification during the 1960s. Just as no real financial appreciation was made in preparation for the integration/unification policy, no in

¹ V.J. Kronenberg, *All Together Now: The Organization of the Department of National Defence in Canada, 1964-1972* (Toronto: Canadian Institute of International Affairs, 1973), p. 96.

depth financial appreciation was made after the fact, either. One fact sheet presented by Hellyer indicated that for 1967-1968, the budget available for capital expenditure had risen from 14% in 1965-1966 to 17.5% in 1967-1968.² That was a far cry from the supposed 25% of re-directed funds that unification was promised to achieve for capital expenditure. That same year there was an increase of \$116 million in the defence estimate, but this was composed entirely of increased personnel costs resulting from salary and wage increases. Still, the Minister's Office maintained that integration had led to savings and that although the budget had remained constant over the 1960s, savings from reorganization allowed for the absorption of costs from salary and price increases to a greater extent than would otherwise be possible. In fact, it was claimed that \$90 million was saved through reduction of personnel and that other choices such as some establishment closings and discontinuation of programs saved an additional \$55 million.³ At the same time, spending had increased in other areas. According to the Minister, qualitative improvements were being made despite holding the defence budget constant, pointing to the Bonaventure refit and MHCS Fraser as important to operational effectiveness of the maritime forces, as well the addition of Ojibwa submarines.⁴ Other factors needed to be taken into account, as well, such as the fact that the CF-5 was less costly than the CF-104, which had influenced expenditures in previous years. Thus, according to Hellyer, the overall expenditures did not tell the true story of savings and improvements.

We must, however, be critical of Hellyer's term as defence Minister. It was generally regarded as a period of significant retrenchment for the Armed Forces and even if Hellyer could list additions he provided, one has to balance them against what was lost during the same time. For example, Morton points out that the CF-5 was valueless by the time it came off the assembly line, obsolete Centurion

² Library and Archives Canada (LAC), MG32 B44 (Fonds of Walter Gordon), vol. 15, file 5, "Fact Sheet on the Estimates, Department of National Defence, 1967-1968," n.d.

³ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 78, file 78-17, n.d., p. 4.

⁴ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 2, file 2-21, Paul Hellyer, "Statement by the Honourable Paul Hellyer Minister of National Defence in Presenting the 1966-67 Estimates before the Standing Committee on National Defence," 12 May 1966.

tanks were still used, and air contributions in NATO had decreased.⁵ The Hydrofoil research was costly but kept on the books for political reasons, as it was felt that it would make a good impression on our research allies to keep it going.⁶ Furthermore, Hellyer cut support services by 20%, Army strength was reduced from nearly 50,000 in 1963 to barely 40,000 in 1968, and inflation outpaced the compensation for it. Finally, personnel and operating costs continued to rise.⁷ After Hellyer left defence, capital equipment expenditures never got to the goal of 25% of the defence budget and the full financial savings that were assumed to be hiding within the overgrown administration were never fully discovered.⁸ When Pierre Trudeau replaced Pearson as Prime Minister, however, the military would enter a period of even greater retrenchment and cutback.

Pierre Trudeau replaced Lester Pearson as Prime Minister in April of 1968, just shy of three months after unification became law. Trudeau came to the role of Prime Minister with the intent of re-evaluating foreign policy, having interpreted Pearson's approach to Canadian policy as merely acting as the interpreter of policy emanating from London and Washington.⁹ Trudeau was opposed to nuclear weapons and felt that NATO had dominated Canadian policy abroad. Indeed, the major defence policy issue in the late 1960s and early 1970s surrounded the role of Canadian troops in NATO, which was drawn into question by a number of factors, including the lack of real savings achieved from unification

⁵ Desmond Morton, *A Military History of Canada* (McClelland and Stewart, 2007), pp. 253-254.

⁶ Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 2, file 2-13, Paul Hellyer, "Statement by the Honourable Paul T. Hellyer Minister of National Defence in Presenting the 1965-66 Estimates in the House of Commons," 17 February 1966.

⁷ Peter Kasurak, *A National Force: The Evolution of Canada's Army, 1950-2000* (Vancouver: UBC Press, 2013), p. 109.

⁸ A number of works have argued that the financial savings that Hellyer sold the program on were never realized. See Desmond Morton, *Canada and War: A Military and Political History* (Toronto: Butterworth and Co., 1981); Desmond Morton, *A Military History of Canada*, 5th ed. (Toronto: McClelland & Stewart Inc., 2007); Geoffrey Shaw, "The Canadian Armed Forces and Unification." *Defense & Security Analysis* 17, 2 (August 2001): 159-174; and Dan Middlesmiss and Joel Sokolsky's *Canadian Defence: Decisions and Determinants* (Toronto: Harcourt Brace Jovanovich, 1989).

⁹ John English, *Just Watch Me: The Life of Pierre Elliott Trudeau, Volume II: 1968-2000* (Montreal: Knopf Canada, 2006), p. 57.

and the need to justify armed forces to a society whose view of the military was changing.¹⁰ Some Cabinet members argued in March 1969 that troops should come home from Europe and that the country faced new domestic financial cost. Housing, regional diversity, and economic and social problems were all listed. The Postmaster General argued that during the Pearson years international commitments detracted from domestic responsibilities.¹¹ Trudeau's civil service advisors reasoned that there were inescapable facts of foreign policy—there was a Cold War happening and Canada was part of it and policies flowed from that reality.¹² But Trudeau took a much cooler stance on NATO, questioning Canada's role in the organization and what Canada got in return for its costly contribution to Europe. He insisted on reviewing Canada's foreign policy. However, his advisors firmly held to the conviction that Canada's role in NATO was right as part of Western solidarity during the Cold War. External Affairs and DND both affirmed a policy of commitments. Trudeau, however, hoped for a downgraded role in Europe and felt that the threat in Europe was significantly reduced from what it had been a decade earlier. He was also uneasy about Canada being a nuclear-equipped force in Europe.¹³ In April 1969, Cabinet agreed to a continued Canadian participation in NATO, NORAD, and the UN, however, a re-assessment of foreign and defence policy was committed to.¹⁴ In May it further agreed to fix the defence budget at a ceiling of \$1.8 billion up to 1972-1973, a reduction of Canadian Armed Forces by 81,000 regular forces

¹⁰ Kasurak, *A National Force*, p. 108. In fact, the military's view of itself was also changing, and the early 1970s represented a period of transition for the military profession in Canada characterized by a degree of uncertainty over the nature and future of the military's professional identity. See The Directorate of History and Heritage, Department of National Defence (DHH), 84-32 (Fonds of the Management Review Group), file 10, John Harbron, "Staff Report J: A Study of the Military identity of the Canadian Armed Forces," June 1972.

¹¹ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6340, "The Defence Policy Review and the Report of the Special Task Force on Europe," 29 March 1969, pp. 1- 6.

¹² Robert Bothwell, *Alliance and Illusion: Canada and the World, 1945-1984*, (Vancouver: UBC Press, 2007), p. 281.

¹³ Bothwell, pp. 282-284.

¹⁴ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6340, "The Defence Policy Review and the Report of the Special Task Force on Europe," 1 April 1969.

and 15,000 reserve forces, and the MND was giving authority to begin discussions with NATO regarding a phased reduction of Canadian troops in Europe.¹⁵

Wanting to reorient defence efforts to North America, Trudeau redirected military efforts and in 1970 began significant reductions of strength abroad. More than half of the Canadian Forces in stationed in Europe were withdrawn, the nuclear role was terminated, and the remaining troops were reduced in size and status. The decisions had an impact on defence and policy in the following years as less spending went to the defence portfolio and more emphasis was placed on foreign aid and domestic policy.¹⁶ In April 1969, Trudeau announced a new set of defence priorities for Canada, deciding to remain within alliances while also indicating the intent to focus policy towards a more sovereign approach. According to R.H. Roy, the political issues of peace could not wait for the problems of security in defence to be solved, and as such, the goal became to focus foreign policy on peace and war prevention.¹⁷ As it was his assessment that foreign policy of Canada in the early 1970s was essentially the policy of defence and security as represented by NATO, he sought to reformulate policy—defence and foreign—to be more representative of Canadian national interest. Foreign policy would be a reflection of domestic interests, and the Canadian Forces would become a symbol of independence, not the measure of Canadian contribution to collective defence arrangements.¹⁸

During this period, a series of events regarding the implementation of a Cabinet decision regarding Canadian Forces troops in Europe would indicate to Pearson and the MND, Donald

¹⁵ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6340, "Defence Policy Review—Phase II," 5 May 1969.

¹⁶ Ibid., pp. 290-291, 294. According to Douglas Bland, however, the reductions were not enough to address the resources imbalance in defence. Instead, withdrawals from Europe led to new defence pressures, particularly in terms of the clarity of Canada's role in Europe and Canada's defence policy. The difficulty was that despite the goal of reductions, defence actually required new resources in some cases and tried to do more with less, even accepting a new role in Europe in 1968—the Canadian Air-Sea Transportable Brigade commitment to NATO Northern European Command. This called for more troops, resources, and infrastructure. See Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987), p 163

¹⁷ R.H. Roy, "Canadian Defence Policy, 1945-1976," *Parameters* 6, 1 (1976), p. 67.

¹⁸ Danford William Middlemiss and Joel J. Sokolsky, *Canadian Defence: Decisions and Determinants* (Toronto: Harcourt Brace Jovanovich, 1989), p. 31.

Macdonald, that there was problem of civil-military relations. Such a perception would, like in the early 1960s, contribute to the decision to investigate the management and organization of defence as well as the resulting structure that emerged. The problem started with new thinking on the nature of Canada's defence forces in Europe which was to be a light, mobile force, with the intention of moving Canadian troops from the Central Front to the northern flanks. However, MND Léo Cadieux and CDS Allard never truly considered a role for the Canadians on the flank, and instead committed Canadian troops to the Central Front.¹⁹

Once Donald Macdonald succeeded Cadieux as Minister in September of 1970, he set about implementing the vision for the CF agreed upon in the Cabinet. However, such a concept met with resistance within CFHQ where the VCDS wished to postpone the conversion to such a force structure, and instead wanted a continued mechanized role. Subsequently, the CDS suspended consideration of the issue and went approved a program which would include the acquisition of new tanks—a proposal never considered by Macdonald.²⁰ When he did get a full briefing, the value of the light mobile force was downplayed. What is more, when he conducted further investigation, Macdonald realized that Canada had commitment to the Central Front, not the northern flank as Cabinet had agreed upon. Moreover, this commitment to the Central Front would impede the creation of the intended light force. In a communication to Macdonald in March 1971, Trudeau expressed the difficult dilemma: either commit to a heavy role in Central Europe—which was never the intention—or appear to be backing out of their commitment.²¹ In further correspondence to Macdonald, Trudeau indicated his displeasure with the failure to implement the Cabinet decision and that failing to conform to Cabinet decisions cannot be

¹⁹ Kasurak, pp. 119-124.

²⁰ Ibid., pp. 125-126.

²¹ Library and Archives Canada (LAC), MG26 O-11 (Fonds of Pierre Elliot Trudeau), vol. 2, Pierre Trudeau, "Letter to Donald S. Macdonald," 16 March 1971.

accepted.²² These sentiments were likewise expressed in Cabinet in July where the Prime Minister voiced his concern that a previously agreed upon decision had not been carried out and questioned whether senior military and civilian personnel had fulfilled their responsibilities.²³ As a result of the confusion, Trudeau ordered an investigation as to why the policy of the government had not been fully implemented as intended. Macdonald put the blame on CDS Allard, while Cabinet felt the responsibility rested with MND Cadieux.²⁴ Either way, it appeared to Macdonald that there was a need for greater accountability and this reinforced the idea of tightening political control over defence, a desire that had been shared by Hellyer. This, along with issues surrounding the DDH-280 program (to be discussed later), contributed to the desire to infuse greater control over defence as well as the decision to reorganize management to achieve this.

"Defence in the 1970s": A New White Paper on Defence

Shortly after becoming Minister, Donald Macdonald began working on a new defence policy paper, the result being *Defence in the 70s*, published in August 1971. The *White Paper* began by outlining the basis for defence policy moving forward. It was stated that such policy cannot be developed in isolation from other national interests and must be closely related to foreign policy (as Arnell had argued a couple of years earlier). Accordingly, national aims were identified as part of a review of foreign policy, which included: Canada's political independence, national prosperity, and a Canadian identity and purpose worth preserving.²⁵ The policy themes identified to achieve these aims were: fostering economic growth; safeguarding of sovereignty and independence; working for peace

²² Library and Archives Canada (LAC), MG26 O-11 (Fonds of Pierre Elliot Trudeau), vol. 2, Pierre Trudeau, "Letter to Donald S. Macdonald," 13 May 1971.

²³ Library and Archives Canada (LAC), RG2 A-5-a (Cabinet Conclusions), vol. 6340, "The White Paper on Defence," 22 July 1971.

²⁴ Kasurak, pp. 127-129.

²⁵ Honourable Donald Macdonald, Minister of National Defence, "Defence in the 70s," in *Canada's National Defence, Vol I: Defence Policy*, ed., Douglas Bland (Kingston, ON: School of Policy Studies, 1998), p. 129.

and security; promotion of social justice; enhancement of the quality of life; and ensuring harmonious natural environment. And finally, the defence policy priorities developed within this framework were: surveillance of Canadian territory and coast-lines for the protection of sovereignty; cooperation with the U.S. in the defence of North America; fulfillment of NATO commitments; and international peacekeeping.²⁶ Interestingly, Macdonald and Trudeau flipped defence commitments. In 1964 Hellyer and his Associate Minister of National Defence, Lucien Cardin identified a list of defence policy priorities starting with collective measures for peace and security at the U.N., followed by NATO, partnership with the U.S. in NORAD, before finally coming to national measures for peace and security. The 1971 *White Paper* reversed the list—they attempted to “repatriate” defence. Macdonald wrote that the first concern of defence policy was in ensuring that Canada can “continue as an independent political entity.”²⁷ For him, the armed forces play a major role in the quest for peace and security, but they also share a role in safeguarding sovereignty and independence, and therefore, defence policy must be relevant to other policy themes and contribute to national development. Sovereignty and independence are dependent on security from attack, and thus war prevention is vital. Nonetheless, other non-military challenges also existed, including surveillance and control of Canadian territory (particularly the North), and enforcing conservation of coastal areas. Internal challenges include the ability to cope with “any...resort to disruption, intimidation and violence as weapons of political action.”²⁸ Writing in 1971, Macdonald had in mind the FLQ crisis and the Kingston Penitentiary riots. As a result, the Canadian Forces were expected to be called upon, with other government agencies and departments, to assist the civil sector, especially so in remote areas of the country. They would also support activities, such as exercising pollution control, in addition to helping in economic aid programs such as engineering and construction, advisory services, project analysis, and air transport. Ironically, at a time when reductions

²⁶ Ibid., pp. 129–130, pp. 131–132, 144.

²⁷ Ibid., p. 132.

²⁸ Ibid., p. 139.

were being made in defence, traditional responsibilities were maintained, while new ones were increased.

At the same time, it was indicated in the policy that the budget was to remain the same while manpower would be reduced. The CF had become “overtaxed and undermanned,” according to analyst R.H. Roy. The government soon learned that the financial resources being provided to defence were not enough, and by 1973 the budget for defence was increased. This was, however, after a major overhaul of defence organization in order to further improve what had become labelled a problem of management in defence. This overhaul was not outlined in *Defence in the 70s*. However, the *White Paper* did acknowledge the establishment of the Management Review Group and its goal of examining the entire organization and management of DND. This was in order to help ensure “maximum effectiveness” and to recommend on the best means for “planning and control.” Thus, much like Hellyer had been charged with “squaring the circle” in defence in the early 1960s, Macdonald was tasked with the same thing. Where Hellyer had to contend with increasing commitments and tightening finances, Macdonald likewise faced a defence environment which had many tasks but limited resources. And like Hellyer, Macdonald turned to management to find solutions to defence problems. It was not seen as desirable to reduce the commitments made for the armed forces, nor was it desirable to increasing funding for defence, so what was essentially a political problem became reframed as a management one. It fell to the organization and management to solve these difficulties. Moreover, the ever-changing nature of the defence environment was pointed to as a key feature. The shifting nature of defence in the 1960s, which included not only the strategic environment, but importantly the defence environment within the department, was indicated as an important feature of the need to re-examine defence. The Glassco Commission, integration and unification, the new PPBS system (Integrated Defence Program), the fixed budget, and new defence objectives were all mentioned. These features of defence management in the 1960s contributed to an environment of change. Without gaining much time to

settle in to the defence department that had been created by the turbulent 1960s, more reviews were deemed necessary. The question became for Macdonald whether the department had an effective management system.²⁹

The Influence of Technology and Procurement Management

By the early 1970s, the savings promised by unification had not been realized and the resources imbalance in defence persisted. As when Hellyer first arrived at DND, one of the major factors considered in the management of defence in the early 1970s was the efficient management of procurement and R&D. Of particular concern was the management of the four-ship DDH-280 program. In the early 1960s it was decided that a new ship building program was needed to prepare for the replacement of the aging Canadian fleet. A plan to construct eight new general purpose frigates, armed for anti-aircraft defence and anti-submarine capability was proposed. However, it was cancelled shortly after Hellyer came into office and a new plan was devised which would focus on the anti-submarine role. It was to be the cheapest and quickest option that would also provide the best surveillance and defence capabilities. The result was the DDH-280 program, which consisted of updating existing ships. While thought to be straightforward, the program was anything but.³⁰ The technical nature of the refit—largely a result of the changing technological needs and requirements that were needed to keep pace with the changing environment—made the decision-making and implementation of the refit costly and uncertain. As J.W. Arsenault writes: “In fairness to the bureaucrats in DND and [Treasury Board] their decision was made in a sea of uncertainty. They simply do not possess the technical competence to

²⁹ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/24, September 1971.

³⁰ For an overview of the problems with the program, see J.W. Arsenault, “The DDH 280 Program: A Case Study of Governmental Expenditure Decision-Making,” in Haglund, David G., ed. *Canada’s Defence Industrial Base* (Kingston: Ronald P. Frye & Company, 1988).

judge the ramifications of such a change. Instead, they had to rely on the Naval planners for advice...”³¹

The result was the decision to design a completely new DDH.

Arsenault is critical of the military hierarchy which controlled the technical information that was passed along to the Minister and Cabinet and who decided not to inform the politicians of the change in plan. Moreover, there were no new estimates of cost or scheduling for the new plan of constructing a whole new ship. Arsenault believes that fear over cancellation of the program played a role in the naval bureaucracy’s decision to allow the politicians to believe that the original cost and timeline remained valid for the program. By the early 1970s there were major concerns over the cost-overruns of the program, and Canadian procurement in general. Cancelling was difficult for political reasons—construction was in Quebec, Trudeau’s stronghold, and jobs were on the line. Arsenault concludes that the DDH-280 program was a failure on a number of accounts: there was a lack of definition before the program was approved and implemented which led to design changes throughout the program; DND exercised poor management, including the failure to invest a Program Officer with appropriate authority for control, analytical studies of ship replacement requirements, and costs were not adequately completed before funding approval. Furthermore, no preliminary studies were conducted on the ramifications of applying up to date systems to the existing destroyers.³² Thus, the DDH-280 procurement process was flawed and cannot be viewed as being done with any apparent rational decision-making techniques. Kasurak takes a harsher position, referring to the case as “senior management insubordination.”³³ And so, the next big push towards creating a rational defence establishment was born out of a program that was largely a failure of rational standards. More than this, the DDH case, when taken together with the failure to implement the Cabinet decision regarding

³¹ Arsenault, p. 126.

³² Arsenault, “The DDH 280 Program,” 127. Arsenault points to a host of other factors that led to the poor management of the program, including the slumping shipbuilding industry of the time, the pressure to quickly go ahead with the project so as to meet NATO and UN commitments, and DND personnel policy and the frequent turnover of key positions throughout the life of the program. 127-130.

³³ Kasurak, p. 130.

Canada's NATO commitment, it left an impression that despite the efforts in recent years at strengthening political control over defence, problems persisted. A new look at management and organization and a new structure to defence would help solve this problem. While it might appear that, despite unification, little had been solved in terms of managing defence—and indeed might have even appeared to be worse—it should be remembered the MRG was initiated only a few short years after unification. Not much time had been given for the dust to settle or for the organization to establish a consistent operational framework. The organizational design continued to adjust in an ad hoc way before launching into the next change initiative. It is therefore difficult to fully assess the degree to which Hellyer's organization was working or not, although there is much to suggest that there were indeed long term problems with respect to leadership, training, and support services, to name a few.³⁴

THE MANAGEMENT REVIEW GROUP

Although the Management Review Group was to look at the overall management of defence, it was the poor management of the DDH-280 program that prompted Macdonald to investigate defence. He announced the MRG in the wake of the disclosure that the estimated cost of the new helicopter-carrying destroyers would cost more than the \$25 million that had been estimated when the contracts were awarded in 1968—although it is likely that the original cost had never been a realistic estimate to begin with.³⁵ Still, Macdonald stated that there was a structural problem in the department between those who wanted to build the best ships possible for Canada, but who also wanted to live within the budget constraints.³⁶ To be sure, one could argue that it is false economy not to build the best possible ship, but financial constraints are always very real. The program could not be cancelled, but forging

³⁴ Joseph Bruce Varner, "Unification of the Canadian Armed Forces and the Impact of Inter-Service Rivalry" (MA thesis, Acadia University, 1991), p. 57.

³⁵ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 8, "Group Will Study Warship Acquisition," n.d.

³⁶ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 8, John Burns, "Guarantee is Refused on Limit to Cost Rise of 4-Destroyer Plan," n.d.

ahead meant committing to necessary (and costly) design adjustments in order to ensure maximum capability.

In announcing the MRG, the DDH-280 program and its problems of management were mentioned. It was felt that the ability of Canadian naval yards to handle the design drawings was overestimated, there was confusion and shifting responsibilities and technological change was a constant feature.³⁷ Of course, some were critical of the poor impression of management given at the time—Douglas Rowland of the NDP blamed the Liberals' inability to decide on the role they wanted for the Navy. He argued that it was the Liberals' changing ideas about this role that played a major part in the problems as they changed the design in order to meet their changing vision for the Navy role and felt that the Liberals should have taken the blame, not the management system.³⁸ There is some validity to this perspective. While in the view of Macdonald, DND wanted too much and was poorly managing resources, in reality some of the management problems were the result of too many commitments and a lack of consensus about the nature of defence problems and how they were to be addressed.³⁹

At the centre of the issue was the ever-present management problem of control—control over development programs was seen as essential if a healthy development capability was to be maintained. Moreover, as in all procurement programs, control was needed over staff requirements (which establish purpose), the time element (obsolescence can occur by the time programs are even approved, and definitely by the time of completion), and resources (money and manpower shortages can affect programs). The perceived need to reassess control over these interrelated elements had prompted the review of defence management.⁴⁰ Even though one can place blame on the political direction (direction of policies and budgets) as having a complicating effect on the ability to effectively manage defence, it

³⁷ Ibid.

³⁸ Ibid.

³⁹ Douglas Bland, "Controlling the Defence Policy Process in Canada: *White Papers* on Defence and Bureaucratic Politics in the Department of National Defence," in *Canada's Defence: Perspectives on Policy in the Twentieth Century*, eds. Ronald Haycock and Barry D. Hunt (Mississauga, ON: Copp Clark Pitman, 1993), p.216

⁴⁰ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 8, June 1971.

was finances, procurement, and technology that again played a major part in the justification for management reform. Like the limited scope of the Glassco investigators in the early 1960s that evolved into a look at the entirety of defence due to the complicated and interrelated elements of defence, a decade later a similar process occurred. This procurement problem was the seed of the MRG which would ultimately grow to the point where it affected the DND at the highest level of organization, with equally important implications for civil-military relations and those working within the department.

The Investigation

Due to the mismanagement and cost overruns of the DDH-280 program and the mishandling of the implementation of government policy with respect to NATO, Macdonald commissioned a review of defence management. The group of men established to conduct the review consisted of six members, the majority of whom came from the private sector. The group was chaired by John B. Pennefather, the Chairman of the Executive Committee of the Board for Industrial Acceptance Corporation Limited. Other members included John D. Campbell (Chairman of the Board, Canadian Westinghouse Ltd., retired), Henry de Puyjalon (Department of Supply and Services, ADM Supply and Services), John D. Harbron (Associate Editor, *Toronto Telegram*), Major-General Hugh McLachlan (whose last prior appointment was as Director General Programs, VCDS Branch at CFHQ). The staff advisor was Kenneth A. McLeod of DND (Director General Engineering Construction of the DM staff), with John Killick as the executive secretary (from Treasury Board). The group was assisted by 31 workers, twelve of whom were service officers. The fact that the background of many of the lead investigators was as business leaders was indicative of the underlying philosophy of those in charge of defence. Although Harbron worked as a foreign affairs analyst, the majority of individuals had little relevant experience in defence, and this could be interpreted as indication that Macdonald saw the problem and solution of defence as solely managerial. It also showed faith in the belief that management experts could correct the deficiencies of

defence and improve the Canadian Armed Forces.⁴¹ However, there is some explanation as to why some men were chosen for the group. Puyjalon was specifically selected to look at purchasing procedures, Campbell was chosen because of experience in designing and building heavy equipment, and Harbron because he had written a major study on shipbuilding. These men were thus able to directly address the DDH-280 factor. Harbron stated that the members were all carefully picked in order to meet the complex requirements of the terms of reference for the MRG and that Macdonald was first and foremost fed up with the project management of the DDH-280. These men were not chosen simply because they were business experts in management but because it was felt that their particular skills could be brought to bear on the particular management problems in defence, rooted first and foremost in project and procurement management.⁴²

The objectives of their study were to evaluate the relationships between civil, military and research organizations within the Department; the relationships between CFHQ and its subordinate commands (and this will embrace the relationships between the commands and their bases and units as well as inter-command relationships); the logistics and acquisition policies and associated practices in relation to time, cost, and performance objectives; the proportion of defence resources devoted to support activities; and the contribution DND can make to national development in times of peace. Moreover, they were expected to recommend on practical ways by which the management of DND could be improved and the means to ensuring effective planning and control. The focus of their examination was to be principally on the organization, with particular respect to the degree to which the organization is an effective tool for implementation of government policy. Moreover, efficiency of the internal structures, methods and allocation of responsibility, and the demands which the organization

⁴¹ Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987), p. 154.

⁴² Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/31, John Harbron, 18 June 1991, n.p.

makes on its senior management (most particularly its Ministers) were all to be examined.⁴³ Ultimately, the significance of the review was argued to be that, among other things, it was carried out by both public *and* private sector individuals, it was not limited in scope, and the group was not seeking to “reinvent the wheel,” although this is exactly what the group ended up doing.

In the course of their investigation into defence, the MRG team travelled extensively and met with officials and experts in defence ministries abroad. The summer of 1971 was particularly busy. In June they met with G.W. Fitzhugh, Chairman of the Blue Ribbon Panel in the U.S., commissioned by President Richard Nixon, which studied the management and methods of operations of the U.S. Department of Defense (DoD)⁴⁴—a panel charged with a similar task to the MRG in Canada, in order to discuss the methodology of that study. Macdonald invited Fitzhugh, Chairman of the Board of Metropolitan Life Insurance Company, to speak to the MRG members at the outset of their investigation. The Blue Ribbon Panel itself made 113 recommendations and called for a fundamental reorganization plan in the U.S. From the perspective of good management, the panel found that well-established management principles had been violated in the DoD, mostly as a result of the Department’s uncontrolled growth and an accumulation of change over time. Not unlike the philosophy that appeared to be emerging in Canada, the Chairman felt that the problem of the department was organizational—the organization that had lost its ability to be administered as it was cumbersome, large, and did not lend itself to efficient actions. Also, as in Canadian situation, adversarial relationships had developed within the organization. Fundamental management principles which were felt to be violated were those of clarity of assignment of responsibility and poor coupling of responsibility and authority. Responsibility was seen as diffused and people at lower levels of the operation were bogged down in details of work while lacking responsibility and clarity of authority. Thus, accountability was weakened. Span of control

⁴³ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/24, John Harbron, “Notes from a Management Review Group (MRG) Familiarization Briefing,” June 1971, n.p.

⁴⁴ See Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/28, Colonel John E. Bex, “The Blue Ribbon Defense Panel in Perspective,” n.d.

had also grown too large, resulting in too great a centralization of decision-making because nobody at lower levels had authority to decide. Finally, there was evidence that the civilian and military sides of defence were each in charge of determining requirements as well as satisfying them. This was seen as too much for one person and contributed to problems with respect to independent evaluation. Ultimately, the U.S. defence department was approached with the philosophy that it was like any other large bureaucratic organization and could be treated as such. It was felt that like any organization, it needed to reorganize and reform itself as the need arose, and this adaptability was seen as the test of the health of the organization. The question, not surprisingly, was whether a rational reorganization could be effectively implemented.⁴⁵

The archival material does not allow for a clear and comprehensive assessment of the degree to which the findings of the U.S. report influenced the MRG members, but the members were certainly well aware of the perspective and approach that the U.S. panel took in investigating defence south of the border. It will be made clear that some of the underlying perspectives within the Blue Ribbon panel report were mirrored in the MRG final report. One can reasonably assume that based on the nature of the conditions under which the Management Review Group was established and the fact that they met with Fitzhugh so early on, that there were undoubtedly seeds planted in the minds of the Canadian investigators as to how to approach defence.

Later that summer the MRG travelled to London and Bonn to meet with members of the British and German defence organization and, while Alain Enthoven, former Deputy Secretary of Systems Analysis at the Pentagon, visited Ottawa in early 1972 to hold discussions with the MRG, the new Minister of National Defence Edgar Benson, senior DND officials, as well as members of the Treasury Board and Privy Council Office. The MRG investigators also had contact with the private sector. On 16 July 1971 some members of the group met Air Canada officials to discuss its recent reorganization.

⁴⁵ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/28, Colonel John E. Bex, "The Blue Ribbon Defense Panel in Perspective," n.d.

Members also had briefings on the management by objectives concept by a member of ADM (Manpower).⁴⁶ This concept, popularized by management expert Peter Drucker in the mid-1950s, centred on articulating an organization's goals/objectives in order to help clarify roles, responsibilities, and duties of members in achieving the aims of the institution and helped management direct and evaluate operations. A popular management approach, it came under close consideration in defence in the early 1970s.

The MRG team looked closely into the policy-making environment. In the written notes of John Harbron, it was wondered why defence could not produce a single voice, embodied in a single source—indicating the drift in thinking towards a more complete integrated/unified defence structure. He questioned the duplication of the staffs of the Deputy Minister and Chief of the Defence Staff and mused on the nature of the two arms of defence (the DM and CDS) who were seen as sharing the same aim.⁴⁷ Moreover, duplication was seen as possibly having an important effect of checking and balancing military plans and ideas. The investigators also discussed the office of the Minister, who came to be seen as bogged down by details. It was felt that he was in need of a group to prepare material for him, instead of doing so many things by himself (it will be remembered the Hellyer, himself, wanted a small group of civilian analysts to assist him).⁴⁸ Additionally, they felt that too much was demanded of the Minister. He was not only the head of his department, but had a half dozen departments and organizations that leaned on him heavily.⁴⁹ Harbron's notes also indicate that the investigators believed that there was too much going to the Minister and "nickel and diming," that the DM was not doing his job, and that fundamental decisions were not being made. In language similar to J.C. Arnell, the Deputy

⁴⁶ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/25, "Management Review Group Historical Report," n.d.; Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/26, n.d.

⁴⁷ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 6/1, 16 June 1971.

⁴⁸ Ibid.

⁴⁹ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 7/1, John Harbron, 15 June 1971, p. 1

Minister was described as not functioning in the role of “CEO” because of a lack of power—a structural issue.⁵⁰ Other problems discussed were the apparent lack of forum from which the Minister could get coherent policy advice and create policy. The Defence Council was seen as lacking and it was felt that a mixed team of management—a combination of civilian and military officers—could help. In terms of programming, ailments identified included cost growth related to the time factor, overly optimistic estimates, accelerating technology, budget programming, in addition to over management, over coordination, and over control (the “unholy trinity”). Along with the impetus of the DDH-280 program, it is clear that the procurement and programming aspect of defence was a primary target of defence reformers. Making this system work became the fundamental axis around which the reorganizations would turn. Hence, much of Harbron’s notes relate to management issues, either at the policy-making level or the procurement and implementation level. They indicate that the impression given to the MRG investigators was that in general, management was in a state of disarray in defence, right down to the lowest levels. Efficiency, it appeared, was sorely lacking. The MRG team prescribed alterations to the organizational structure, the sharpening of decision making, and changing management methods.⁵¹

The Changing Context of Defence & the Inadequacies of Organization

The review team finished its work in the summer of 1972 and published its report in July, setting the stage for a shift in power at DND and recommended changes to all aspects of defence management. First and foremost, it contended that as defence ills were essentially managerial ills, reorganization of management plus a re-alignment of management philosophy could solve the problems of defence. The report started by linking the management problems at DND as existing in the philosophy of the Glassco Commission, which set the stage for the paralleled duplication of the organizational structure at NDHQ and the rise of the adversarial relationship between the military and civilians in defence. The Glassco

⁵⁰ Ibid., p. 3.

⁵¹ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 7/2, John Harbron, n.d., n.p.

Commission saw the principal function of DND as that of support and made the case for greater integration of common functions. Glassco also noted, however, that the DM's role within the department was too narrowly circumscribed and the MND was lacking in assistance in discharging his responsibility for the direction of defence—the ultimate authority and responsibility for defence. Civilian control, as will be remembered, was key for the proper functioning of defence and overreliance on the military, it was argued, weakened such control—thus the call for a strong civilian group with knowledge of administration to enable it to assess management and advise the MND. The Deputy Minister was the logical source of such advice as an independent source for the commissioners. Hellyer accepted such findings and led to the integration and unification of the Forces, including a greater role of the DM in reviewing the organizational and administrative methods in the control of defence. However, the MRG made the case that full unification was not the intent of the Glassco Commission. This complicated things according to those reviewing defence in the 1970s because the Deputy Minister's staff, as envisioned by the Glassco Commission, was interpreted by the MRG as applying in the context of a defence establishment with common, integrated functions, but which maintained separate and distinct services—that is, un-unified services. Consequently, the DM's job would be coordination and administration of common services and delivering to the MND the means to assess the management of the separate services. The strong civilian group, to act in a coordinating function in administration, became redundant in an integrated and unified framework. This polarized the relationship between the civilian staff and military staff, according to the MRG, and led to an adversarial relationship. Problems of management were traced to the half-way implementation of the Glassco Commission and the lack of accommodation and adaptation of the role of the civilian staff in the new philosophy.⁵² The MRG can therefore be understood as setting out to correct the problems of defence management and organization rooted in the system which Hellyer implemented, which itself was based on a reading of

⁵² "The Management Review Group," in *Canada's National Defence, Vol II: Defence Organization*, ed., Douglas Bland (Kingston, ON: School of Policy Studies, 1998), pp. 176-180.

the Glassco Commission that was somewhat askew. Interestingly, the final recommendations of the MRG report would also be implemented only in part, contributing to the evolution of defence organization which was largely the product of a game of bureaucratic 'broken telephone.'

For the MRG team, defence administration was not only set off on a path slightly misaligned from what Glassco had intended, but they also argued that the organization had failed to adapt to changing circumstances in recent years. The team identified a lack of adaptation to the new policy priorities, outlined by Trudeau in 1969, and questioned whether the organization for defence management established for the 1960s (which operated in an environment of collective defence emphasis and specialized and complex strategies and roles) was appropriate to management in the 1970s (which was more geared toward independent action and broader range of activities).⁵³ Perhaps most importantly, the Management Review Group identified the apparently slow degree of response and adaptation to changing priorities of the Government. One problem identified was the inefficient and inappropriate uses of resources, as seen in the case of the DDH-280 program. The propensity to develop systems and procedures with an emphasis on conformity, established practices, and the setting of operating norms, was identified. In addition to factors which included ambiguity concerning the position and authority of the DM, and the preservation of service loyalties and traditions, the MRG saw the consequences of all of this as a lack of sensitivity towards political attitudes, social values, business norms, and external environmental influences. Therefore, according to the report, it seemed that not only had the process of change initiated by Hellyer been deficient, but the subsequent process of change in the Trudeau years had not been quick enough. Problems were less about "bureaucratic inertia," as the MRG claimed, but about the rapid pace of management/administrative change that was required in a dynamic defence field where policy actors can swiftly change the strategic direction. The irony was that the MRG team itself was contributing the problem. Unification was still a new concept and the

⁵³ Ibid., pp. 180-184.

organization had not yet fully proven itself to be workable or not. In setting off a new round of management change, the department and those working within it had little time to catch their breath before initiating a new organizational overhaul.

In the second part of its report, the MRG identified what they felt to be the inadequacies of management and organization, the most obvious in the eyes of the investigators being the excessive demands that the system placed on the Minister without due regard to his political responsibilities as a Member in Cabinet and Parliament. Ironically, where Hellyer had sought to end service rivalry and attempted to get them to speak with one voice, Macdonald felt that a single voice forced him to resort to multiple outside sources with which to compare departmental positions.⁵⁴ The system, it was felt, did not allow the Minister to concentrate his attention on fundamental and critical issues of importance in exercising his political responsibilities. Part of the problem was that the Deputy Minister had been unable (or unwilling) to exercise his authority to act on behalf of the MND as a result of the historical background related above, which contributed to ambiguity of the position. A lack of clarity was identified with respect to authority and responsibility of other senior positions. The result was that everything “bubbled up” to the Defence Council, increasing demands on the Minister, and compromising thorough consideration of important issues. The report stated:

Indeed, one participant at Defence Council meetings between December 1970 and June 1971 indicated that it failed to discuss any “real” Departmental problems. And, in practice, there seems to have been no logical and effective forum to guide decision making and to bring forward to the Minister clear alternatives or options with respect to Departmental policies. As a result, the Minister had had, himself, to resort to outside sources when he sought other options to compare with the single choice policy which often emerged as the consensus of his departmental advisors.⁵⁵

Another important deficiency outlined in the report was functional duplication among the allocated responsibilities of the senior staffs in the organization, all of which included personnel, finance, and

⁵⁴ The Directorate of History and Heritage, Department of National Defence (DHH), 92-228 (Fonds of Charles J. Gauthier), series. 6, file 82, Charles J. Gauthier, “Overview of the 1972 Reorganization of National Defence Headquarters,” n.d., p. 3.

⁵⁵ “The Management Review Group,” p. 186.

technical aspects. This resulted in paralleled responsibilities and activities between these different areas and inhibited a clear understanding of authority. The report argued:

All too often, the result has been an organization that is effectively paralyzed by over-management in some areas and lack of any management in others. The existence of this duplication and parallelism with its consequential ambiguity about responsibility and authority for critical aspects of the Department's activities is not a new discovery....it had been a major concern of other Government departments and central agencies dealing with the Department...⁵⁶

As the source of the problem, the MRG pointed to supposed ambiguities in the definitions of the roles of the DM and CDS as laid out in the Interpretation Act and the National Defence Act. In the former, the Deputy Minister is charged with authority to exercise all powers given to the Minister—thus he is DND's senior official, responsible for its administration. Under the NDA, however, the Chief of the Defence Staff is also charged with responsibility for control and administration of the Forces—thus, ambiguity. However, these two offices are in fact separate and distinct as the DM presides over DND while the CDS governs the Canadian Forces. Ambiguity only exists if DND and CF are seen as one. This ambiguity, which largely did not exist at the time, would be entrenched within the organization under the MRG's recommendation to fuse the civilian and military arms of defence into one organization (NDHQ). It was felt that such duplication and parallelism of function and responsibility had proliferated in the Department with the result being an adversarial relationship between the DM staff and the CDS staff. This had in turn led to the development of aggressive and defensive attitudes in terms of promoting and protecting responsibilities and interests.⁵⁷ It also had the effect of forcing issues up to higher levels of the hierarchy, often to the Minister himself. This was not necessary or desirable. Furthermore, it inhibited "single team" feelings between civilian and military personnel and adversely effected cooperation and coordination (further exasperated by the persistence of functional and operational loyalties at the expense of loyalty of the whole organization, as Hellyer had hoped).

⁵⁶ Ibid., p. 194.

⁵⁷ Ibid., p. 194.

The adversarial component to the MRG criticisms focused on the DM and CDS and did not really pertain to the research or construction and procurement components that began the investigation. Above all, the adversarial relationship is perhaps the most significant observation of the MRG. The weakness of the Deputy Minister's office and the effect that this had in terms of forcing the Minister to act as both the operating head of the department—something Hellyer had intended—as well as political head, directly led to some of their most important recommendations. Like the reorganizations initiated by Hellyer in the 1960s, the MRG team's investigation was infused with conceptions of the best organizational design, themselves rooted in their particular reading of the roles of defence actors and civil-military relations. Not only did efficiency of the large and complicated bureaucratic process remain a guiding force, so too did the continued quest to ensure the proper mechanisms for control. The failure to implement stated policy and the out of control DDH-280 program indicated to the investigators that control was lacking despite the continued tightening of political decision-making and the MRG report was a subtle way of arguing the Department was resistant to political direction, necessitating new degrees of political control.⁵⁸ Quoting a 1971 interim report by Pennefather sent to Macdonald, Kasurak writes that the goal of restructuring defence management was meant to restore "the widely accepted philosophy of firm, visible, efficient management and control of the Forces by the Civil Power."⁵⁹ While Hellyer had mistrusted the objectivity of military officers due to the possibility of inter-service rivalry, leading to the creation of the CDS and alternative sources of advice, the MRG team likewise displayed a degree of mistrust over the military's ability to properly manage and implement policy. And like Hellyer before them, the MRG team identified the organizational framework as the means for correcting this, attempting to eliminate duplication of effort and continuing the philosophy of rationalization to degree even Hellyer thought extreme.

⁵⁸ This is an interpretation shared by Kasurak, pp. 159-160.

⁵⁹ Ibid., p.162.

Management Reorganization

In 1972, a briefing on the restructuring of defence by the DM and CDS provided more articulation with respect to the specific problems of defence that the reorganizations were designed to address. They felt that over-centralization of authority on the side of the DM and over-decentralization of responsibility on the side of the CDS was inhibiting defence management and organization which only “got together” at the top, not at the working level. The result was clear deficiencies in acquisition programs and policy and planning, the latter of which had become merely reactionary to Cabinet and Government, with no influence. Thus, there was a need to devise a plan to find a way to organize defence in order to “contribute and influence” Cabinet discussions and decisions respecting defence policy. Goals were: dynamic responsiveness; a single cohesive entity at NDHQ; the assigning of authority and responsibility; a check and balance system; matching tasks to resources; and providing “efficiency and effectiveness.”⁶⁰ For the MRG team, the management problems identified in the course of their investigation were deep-seated, rooted in the organizational structure of the department and from entrenched attitudes about defence management. They determined that ad hoc development and evolution could not be relied upon to solve such issues, and the threat of continued erosion of effectiveness of developing and implementing policy was real. Thus, they concluded:

A fundamental and comprehensive reorientation of the higher management of defence—including, in particular, that now under the separate auspices of the Deputy Minister, the Chief of Defence Staff, and the Chairman of the Defence Research Board—on a rational basis with deliberate organizational objectives in mind, is needed. In addition, management philosophy needs re-orientation and revision, with greater focus on operational aspects, with delegation of more authority, responsibility and accountability and with more emphasis on people.⁶¹

The first step towards a more effective and efficient defence establishment was to restructure defence into a single entity. It was agreed that the management structure would be based in the

⁶⁰ The Directorate of History and Heritage, Department of National Defence (DHH), 97-2 (Fonds of the Restructuring Control Group), vol. 1 “Organization - Restructuring of NDHQ - Plans, Proposals & Programs, Volume 2,” 19 October 1972, p. 3.

⁶¹ “The Management Review Group,” p. 201.

following philosophy: “...the civil authority would equip, manage, control, and maintain the Armed Force. The Force would be given the minimum of administrative apparatus necessary to the performance of its operational responsibilities.”⁶² The purpose of such a management approach was that it embodied a traditional philosophy of firm, visible, efficient management and control by civil authority, while also allowing for delegation of operational readiness and effectiveness to the Armed Forces. Implicit in this approach was that executive responsibilities and authority exercised by, or on behalf of the Minister, must be consolidated and vested into a single operating head. The report also called for the administrative staffs—represented by the DM, CDS, and DRB—be joined into one. Importantly, their vision included a “consolidation and rationalization” of each major functional area of management in order to eliminate parallelism and duplication.

One of the defects of the MRG’s proposed plan was that it removed responsibility for logistical support from the Commanders and passed it to the civil authorities. It also appeared that such civil authorities were confused by civil-control. There is a clear difference between civilian control, i.e. political/Parliamentary control by elected officials who are accountable to the public, and civilian direction, the understanding of which is imperative. The report stated that the management structure should reflect firm management and control of the CAF by civil authority, and it would appear that in placing the office of the Deputy Minister within the Office of the Minister there was a fundamental error in interpretation. Placing the DM within the Office of the MND—the source of civilian control—had the effect of placing civil-servants precariously close to positions of power and authority for which they are not intended. Still, the Deputy Minister was placed at the very top of the organization, above all others, and gained under their proposed organization more authority than had been the case. Such a management structure was seen as the key means to achieving a greater focus on operational aspects, focus on needs and purpose, and an armed force with a sharper end. The report stated that “keeping

⁶² Ibid., p. 202.

the 'sharp end' sharp is the sole reason for the existence of the rest of the Department,"⁶³ although it did not mention war or operations at all. The best means of significantly increasing this focus, according to the MRG, was to remove from direct military management as much of the administrative support apparatus as was possible. All administrative functions would be consolidated under the staff of Assistant Deputy Minister, removing their control from military officers—a blow to the command authority and command and control concepts that had long characterized defence before the reorganization began. Bland writes that such an approach was "retrogression to pre-Crimean support concepts."⁶⁴

Even more interesting, the MRG then went on to call for the delegation of more authority to the lower levels of the Forces, particularly Commanders in the field (but for the purpose of streamlining HQ and making less work for HQ staff). It was stated in April of 1972 that the CDS and Commanders "must and will continue to control the resources required to maintain an effective military force to support our national objectives."⁶⁵ But there is certainly a real contradiction in "recommendations that would effectively strip such authorities of resources commensurate with their responsibilities."⁶⁶ It is interesting to contrast such an approach with the philosophy of the Glassco Commission which saw the primary function of the defence headquarters as that of support and administration. In 1972, however, administrative support aspects were removed from the military, which was at the same time criticized for its lack of contribution to defence policy-making. The MRG interpretation of Glassco again shows the interpretative nature of defence policy and roles, and indicates the importance of the contest over ideas. Observers within defence and outside of it, surely would have found the government's view of

⁶³ Ibid., p. 204.

⁶⁴ Bland, *The Administration of Defence*, p. 73.

⁶⁵ The Directorate of History and Heritage, Department of National Defence (DHH), 97-2 (Fonds of the Restructuring Control Group), vol. 1, file *Organization*, 21 April 1972.

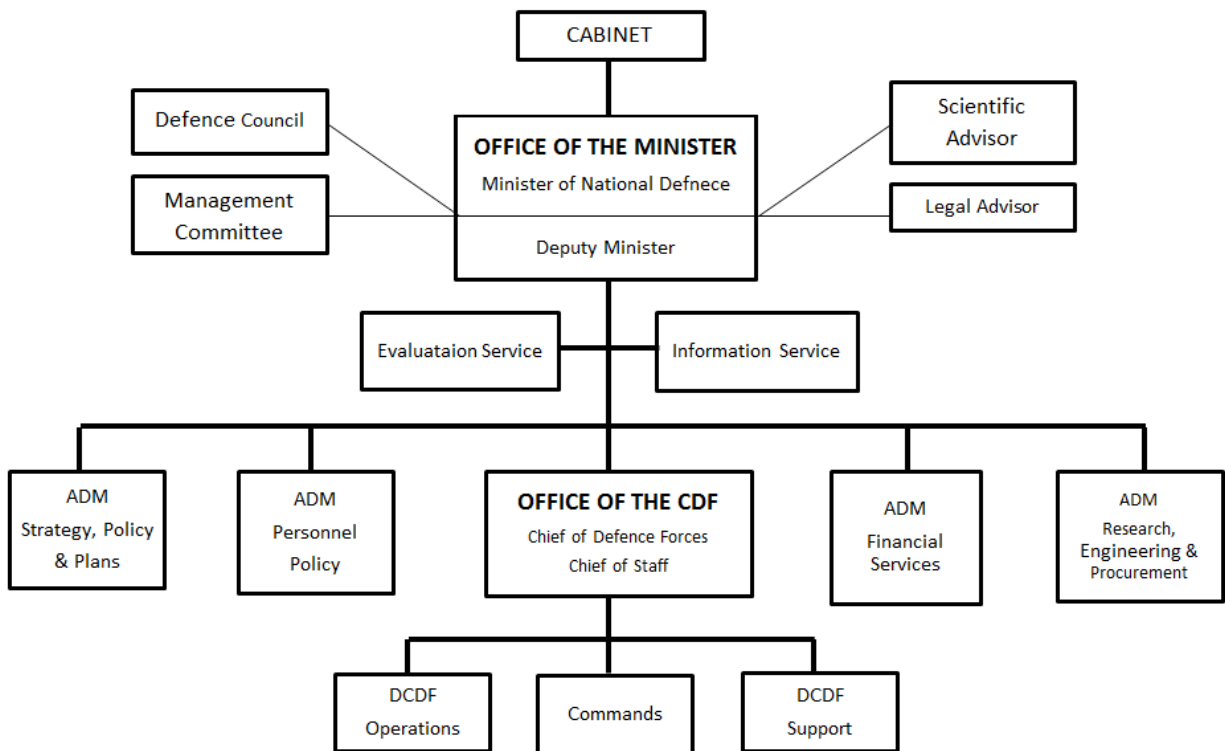
⁶⁶ Bland, *The Administration of Defence*, p. 73.

DND's raison d'être quite confusing and difficult to interpret throughout the almost ad hoc development of defence management during the 1960s.

The Management Review Group argued that a clear definition of the responsibilities and relationships of the actors in defence policy decision-making were needed. The recommendations of the roles and responsibilities of the higher management of defence were based on the following premises: the management structure should reflect firm, visible management and control of the CF by civil authority, while also delegating to the Forces; the CF should exist to perform operational roles and structure to do so with the minimum administrative apparatus; the Department should be a single entity; and the people with highest possible stature and professional standing should be selected for new key positions. It will be remembered that the defence organization underwent constant evolution throughout the Hellyer years. After integration, the organization changed often as the most effective organization was sought on a trial and error basis in order to find the best mechanism to embody the philosophy of defence that unification and integration had in mind. In October of 1971 the CF and DND were distinct entities. Within CFHQ, the CDS staff included four major functions: operations under a VCDS, technical issues under Chief of Technical Services (engineering, construction etc), personnel under the Chief of Personnel, and finance under the Comptroller General. On the DND side, the Deputy Minister's Organization included logistics, finance, and manpower sections. The MRG made recommendations, some of which were followed, that would drastically change this composition. The Office of the Minister, Deputy Minister, and Chief of Defence Staff were all significantly re-thought (See Fig. 6).

The centerpiece of the recommendations was the endorsement that the Office of the MND be broadened and institutionalized as the "ultimate point of Departmental authority and responsibility in both political and administrative senses." To this end, the MRG felt that the DM and his personal staff be

Figure 6: Management Review Group Proposed Organization



included in the office of the Minister—a redefinition that would fuse the dichotomy between political responsibility in the Minister’s office with enhanced administrative and control responsibility in the DM’s office, providing a sound base for visible management and control of the CF. Under such an arrangement, the Chief of the Defence Staff would bring to the Minister’s attention, any advice or concern over military issues, but in the normal course of events, “policies and activities of the Department [would] be fashioned in concert by the Chief of Defence Staff and the Assistant Deputy Minister under the coordinative direction and leadership of the Deputy minister acting on behalf of the Minister...”⁶⁷ The DM would be senior advisor to the Minister on Departmental affairs, and be responsible for directing development of Departmental policies in order to ensure that such policies are

⁶⁷ “The Management Review Group,” p. 209.

reflective of the intent of Government, in line with legislation, and for maintenance of effectiveness.

Importantly, the DM would be, under the plan, the superior DND official with the CDS a subordinate.

As far as the Chief of the Defence Staff was concerned, firstly, the position was to be renamed Chief of the Defence Forces (CDF). More important, it was intended that the office be directly responsible and accountable to the Office of the Minister with heads of operational Commands reporting to the Offices of the CDF. Two Deputy Chiefs would coordinate for operational matters and support services. The key feature of this organization was that this office would be distinct from the Office of the Minister of National Defence. The MRG felt that this would allow for the achievement of visible management and control over the forces, which would otherwise be compromised by the inclusion of the CDF within the Office of the MND. Second, a separate office for the CDF with a distinct status would allow for more adequate delegation of authority to the CF and in a more unambiguous way. Finally, a separation of the office would allow the CDF to have the clear status emphasizing his responsibility of military advice and operational control, as opposed to involvement in general political and administrative direction of defence policy. In no way did the MRG intended to compromise or reduce his direct access to the MND.⁶⁸

In addition, the Management Review Group recommended that responsibilities for some of the specialized areas of management, such as strategic planning, personnel policy, financial services, engineering and procurement, be moved from the CF senior staff to four Assistant Deputy Ministers (who would usually be filled by civilians), with one ADM responsible for policy formulation and management of these support functions.⁶⁹ The Defence Council was deemed ineffective as a forum to assist the MND in decision-making as a result of its size and preoccupation with issues pertinent to lower

⁶⁸ The Directorate of History and Heritage, Department of National Defence (DHH), 92-228 (Fonds of Charles J. Gauthier), file 138, "Management Review Group Recommendations: Proposed NDHQ Changes Announced," n.d., p. 2.

⁶⁹ The Directorate of History and Heritage, Department of National Defence (DHH), 92-228 (Fonds of Charles J. Gauthier), file 82, "Overview of the 1972 Reorganization of National Defence Headquarters," n.d., p. 15.

levels of management organization. Thus, the MRG felt the need to decentralize and the reconstitution of the Defence Council to serve as a small but highly confidential advisory body for the exchange of opinions and views, as well as information. This would be the formal device for knowledge transfer between the Minister and certain departmental officials, but would not be a decision-making body. It would be a forum for informing the MND on policy issues so that he could be informed when making decisions. Interestingly, where Hellyer had sought to increase its scope and use as a tool for the Minister who was to operate as the Department's head, under the MRG the size and scope was reduced in an effort to ease its demand on the Minister—a fundamental difference in approach to defence management than had been the case under Hellyer who sought to exert full control and power endowed in the position and serve as the ultimate and final source of decision-making and authority on defence matters.

Finally, coordination of policies and programs to the Department and exchange of views among senior officials was to be conducted through a Management Committee (DMC). The DMC would provide the MND with information and advice for making decisions “on behalf of the Minister,” and for referral of issues to the Defence Council. The Management Committee was thus to act as a screening stage for issues before reaching the Minister, acting as a buffer between the Minister and the military. The purpose of the DMC was to investigate management issues, review policy, program, and equipment proposals, as well as estimates and forecasts. It was a retreat from Hellyer's Defence Council which had been established to be an important tool for the MND, with an important part in policy-making. The DMC, on the other hand, acted as a buffer between important issues and the Minister. It was a key instrument for the Deputy Minister and further evidence of the MRG's attempt to consolidate greater power in his Office.

THE ESTABLISHMENT OF NDHQ

The final MRG report was submitted in July of 1972, but important developments occurred beforehand. First of all, Minister of National Defence Donald Macdonald left the position late in 1971 in advance of the report's completion. He was replaced by Edgar Benson. Deputy Minister Alan Armstrong also left his post to be replaced by Sylvan Cloutier in 1971. And while the Chief of the Defence Staff, General Sharp, was not scheduled to retire until 1972, his replacement, General Jacques Dextraze, was designated in 1971 to allow for his involvement in the process of implementation. By the time the final report was issued and implementation could get under way in full, the complexion of upper management had changed, having an impact on implementation of the recommendations. For example, Benson did not share Macdonald's views on defence, particularly the concern over defence management. Moreover, CDS Dextraze expressed objections early about the notion of the CDS as being responsible and accountable to the DM. As Dextraze was successful in convincing Deputy Minister Cloutier and the Minister of National Defence that this recommendation should not be implemented, instead the DM and CDS should be placed on the same level in the organization hierarchy.⁷⁰ As a result, the management approach recommended by the Management Review Group was largely implemented with the most significant difference being that the concept of a Chief of the Defence Staff responsible and accountable to the Deputy Minister was left out.

Two other key changes included the disbanding of the Defence Research Board (which occurred a short time later, in 1974) with its responsibilities going to ADM(Matériel), and the downgrading of the ADM(Evaluation) function to branch chief level and merged with the Associate ADM(Policy). With the amalgamation of research functions, the once three-pronged establishment—CFHQ, DND, and DRB—became a fully integrated single entity—the ultimate end to the quest for rationalization that had been

⁷⁰ The Directorate of History and Heritage, Department of National Defence (DHH), 92-228 (Fonds of Charles J. Gauthier), series. 6, file 82, Charles J. Gauthier, "Overview of the 1972 Reorganization of National Defence Headquarters," n.d., p. 18.

ongoing since the Second World War. The organization fluctuated constantly, but was slowly whittled away as the process of integration/unification was entrenched bit by bit. Another important change made was that where it had originally been felt that the four Assistant Deputy Minister positions would be filled by civilians (with military associates), it was decided shortly after the implementation began that a civilian ADM(Personnel) be replaced by a military officer, with civilian associate. Finally, it was the MRG's view that one work-force concept should apply throughout the organization. As a result, serving military officers with proper experience and qualifications would serve in policy, administrative, and technical positions and civilian personnel should be able to serve in appropriate positions within the operations oriented force—although the latter did not in fact occur, while military personnel indeed served in all manner of appointments at all levels in the ADM sections.⁷¹

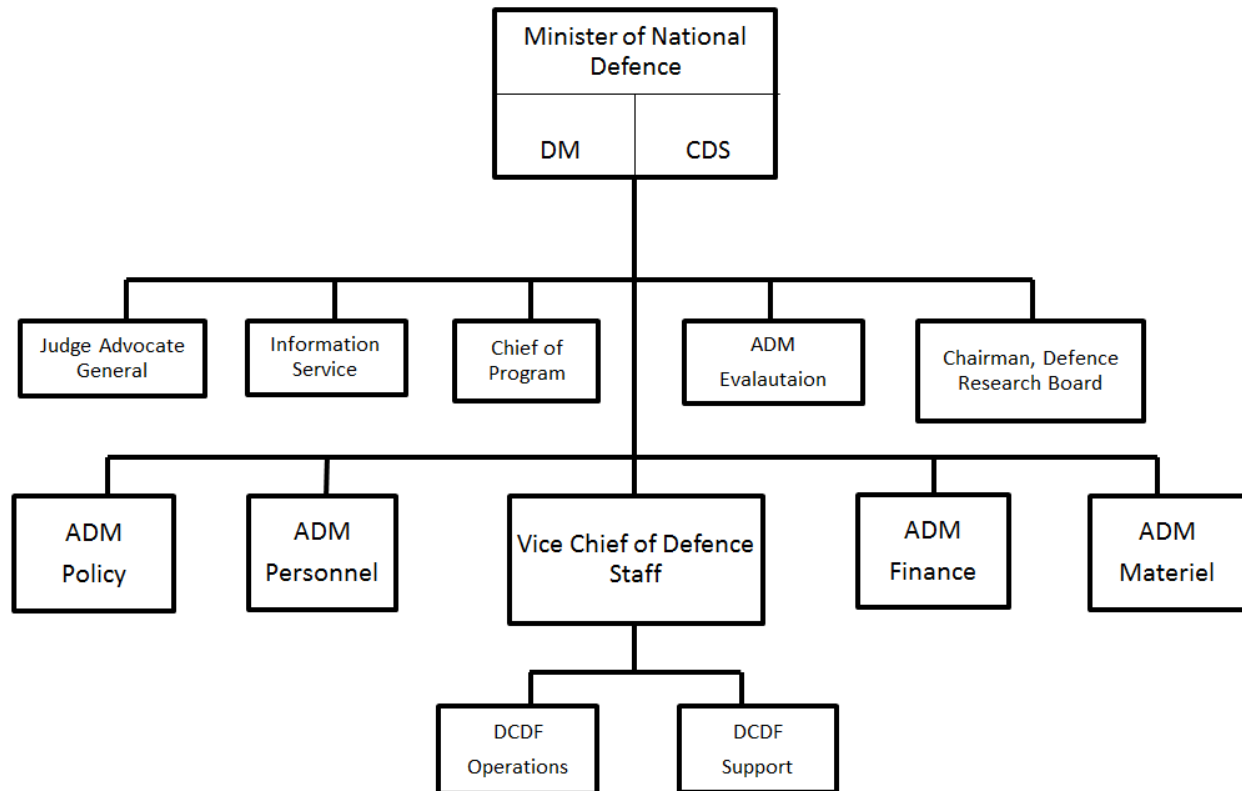
The New Defence Organization

A revised structure for NDHQ was announced by the MND in 1972, to be effective in September, which sought to eliminate the “we” and “they” between the public servants and the military personnel (See Fig 7). It was endorsed by Edgar Benson who felt that it would eliminate red tape and paperwork, save time and money, as well as clear up blurred lines of authority within the Department. The CDS continued to have direct access to the Minister of National Defence. The military component would be responsible to the VCDS through his two Deputy Chiefs of Defence Staff. The Chief of Personnel, Chief of Technical Services, and Comptroller General branches were consolidated under the DCDS(Operations) and DCDS(Support). On the civilian side, the Deputy Minister would have five ADMS instead of three (as had previously been the case). ADM(Evaluation) was to examine effectiveness of policies, programmes, and organizational structures, and evaluate adequacy of management throughout the department and

⁷¹ Ibid., pp. 19-20.

commands. ADM(Personnel) replaced ADM(Manpower) and would develop personnel policy for military and civilian staffs. ADM(Finance) was to take over the responsibilities of the Comptroller General and

Figure 7: National Defence Headquarters, 1972



develop and operate management information systems. ADM(Materiel) replaced ADM(Logistics) and was tasked with research establishments, provided engineering services, and was to operate a centralized procurement and supply service. ADM(Policy) was to be responsible for strategic studies, policy, capability planning, programme analysis and generally functions previously part of the CDS staff or ADM(finance).⁷² In addition, there were three independent divisions—information, intelligence and security, and the Judge Advocate General. A Vice Chief of the Defence Staff was to act as general manager to the HQ and as second in command to the Chief of the Defence Staff for the Canadian Forces. Most importantly, however, the CDS and DM were coequals, sharing responsibility and authority for the

⁷² Kronenberg, pp. 95-97.

functioning of the HQ. They were made both responsible to the MND. Harriet Critchely states that overall the system was designed to be more efficient and TO overcome past flaws.⁷³ In the past, plans would filter up through the military but hit a wall when it reached the Deputy Minister, to be sent back down for revisions. This was slow and wasteful and the new coordinated and integrated system was seen as overcoming this deficiency.

PPBS, Responsibility Accounting and a New Planning & Policy Process

The MRG investigative team took a very close and hard look at defence planning and policy development capabilities in Canada in the early 1970s, outlining its findings in a detailed 70 page staff report produced in 1972. It started by emphasizing the importance of financial management for effective planning, stating that plans are only useful when they can be implemented. This required resources which itself required money. Thus, effective management requires that planning and financial management is harmonious. This was to be achieved through the PPB system (the primary means for planning) and responsibility accounting (the primary means for financial management) which were seen as complementary tools, stressing the meeting of objectives and the measurement of results. As has been outlined already, PPBS sought the efficient use of resources and was a tool of decision-making. It identified objectives, alternatives, produced estimates and forecasts, and reviewed and evaluated programs. On the other hand, the concept of responsibility accounting was rooted in the idea of *motivating* efficiency within management by delegating responsibility to managers in order to allow them to plan, acquire, and manage resources. The underlying philosophy was akin to 'management by objectives,' a concept championed by the management guru, Peter Drucker where clear goals and the authority and responsibility for resources needed to achieve these goals, would guide managers in

⁷³ W. Harriet Critchley, "Civilianization and the Canadian Military," *Armed Forces and Society* 16, 1 (1989), p. 129.

performing their duties. This, in conjunction with mechanisms for accountability to superiors, would motivate managers to achieve effective and efficient performance.

However, while the investigators argued that planning might not be perfectly rational and PPBS and responsibility accounting might not create an environment that fully overcame the necessity of judgement, they felt they were the best tools available in this regard and that their goals and aims were “laudable.” And so the report supported the use of PPBS and responsibility accounting, despite their limitations, and set out to comment on the weakness of policy planning and recommend ways to improve it within the context of that support. In general they felt that an overly rigid bureaucratic hierarchy, with an over-emphasis on highly structured procedures, produced compartmental thinking and limited the free exchange of ideas. A more open environment with less formal relationships, where top management played a creative role in policy-making, was seen as imperative.⁷⁴ This ultimately set the stage of their recommendation for a central Departmental planning group, and more importantly, the idea of an integrated NDHQ which could eliminate ineffective strategic planning, discontinuous policy formulations, and produce better policy guidance.⁷⁵ Even if policy could not be *perfectly* rational, it could still be made more so.

For the MRG, the key to Departmental strategic planning was in the relevance of such planning to managing defence. The highest levels of management in both the Department and the Government need a facility to utilize the full potential of strategic studies and planning in policy-making. Moreover, external threats were no longer seen as being the sole focus of such planning—the nature of threats to security was evolving and concerns of defence policy were moving beyond external threats of an exclusively military nature. The MRG believed that there is no such thing as a “purely military” requirement, but only alternatives with varying risks, costs, and military involvement. A clear concept of

⁷⁴ The Directorate of History and Heritage, Department of National Defence (DHH), 84-32 (Fonds of the Management Review Group), file 3, MRG Planning Task Group, “Staff Report B: Strategic Studies, Planning and Policy Development,” June 1972, pp., p. 31.

⁷⁵ Ibid., p. 41.

what constitutes a threat to security must be the foundation of successful and relevant defence management.⁷⁶ Therefore, the MND needed to be presented with alternative policies and objectives while taking into account a range of factors and considerations, not all of which are military. The concept of “threat” had to be broadened and the scope of planning had to include strategic planning and policy formulation—search for policy options, evaluation of options, choice between them, and formulation in clear terms to be used by management in forming defence policy—developmental planning and programming—search for alternative means to achieve selected and stated goals and assessment of cost and effectiveness and choice of most best means for implementation—and functional and operational planning. For the MRG, there were deficiencies in the planning process, particularly related to policy analysis and strategic planning as coordination for this job between the ADM(Finance) and Deputy Chief of Plans was lacking.

The report articulated the belief that in terms of the ADM(Finance), policy analysis had been limited in scope in interpreting government policy, while the DCDS(Plans) strategic planning was ineffective due to other demands. And in each case, this responsibility tended to be “too far removed from top management and lacking in some of the expert knowledge appropriate to the whole function.”⁷⁷ Thus, there was a failure at the highest level of management to involve itself in creative planning. The results were twofold: issues of defence policy relevance were raised first outside of the Department by other agencies and departments; and second, planning within the Department was defensive, reactive, and pressured by time.⁷⁸ To combat this, the MRG recommended appointing an Assistant Deputy Minister, Strategy, Policy and Plans, under the Minister’s direction to be responsible for “conduct of strategic studies for the purpose of developing policy recommendations for Canada’s general defence posture, as well as for specific roles and objectives...he would also be responsible for

⁷⁶ “The Management Review Group,” p. 220.

⁷⁷ Ibid., p. 220.

⁷⁸ Ibid., p. 220.

interpreting approved policy of the Government into recommended plans for the Department and for the formulation of programs to achieve them.”⁷⁹ To ensure continuity of aims with overall national and international objectives, this body was intended to be the focal point for cooperation with the Privy Council Office, Treasury Board, and External Affairs, plus provincial and foreign governments. The group felt that the Forces were capable of effective operations, but saw management deficiencies in terms of control of resources, clarity of responsibility and authority, and firm control.

The foundation was set for an advanced administrative and policy process which built upon the previous Integrated Defence Program (IDP). The IDP, like all corners of defence policy, faced a continuous evolutionary process during the 1960s and through the reorganizations in the early 1970s. In a March 1973 meeting of the Defence Management Committee, ADM(Policy) introduced a paper which proposed a new programming system. Although the proposal outlined a rough picture of what the new system was to look like, over time a full system evolved into what became known as the Defence Services Program (DSP)—a highly complex and bureaucratized policy-making process/system⁸⁰ where one of its key management purposes was for the requirement that military activities meet defence objectives (a requirement reminiscent of the management by objectives approach that had become in vogue in management theory).

This process began with a Strategic Assessment based on intelligence, technological, and political estimates by NDHQ. It then moved to an assessment to determine existing capabilities and comparison to range of capabilities in the strategic assessment, followed by a capabilities planning guide to adjust or modify activities and capabilities. Next, a Force Development Guide established a long-term plan for each service. This was followed by program/force proposals which lead into the programming component—deciding what is needed, what to buy, how to allocate funding—and a Defence Service Program—a computerized list of costs of activities planned for each succeeding 15 year period, leading

⁷⁹ Ibid., p. 221.

⁸⁰ See Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985*, pp. 171-174.

to acquisition plans and project management. The process finished with the creation of forces in being and a range of Defence Capabilities. Overall this process represented a simple, rational step model.⁸¹

Assessing the NDHQ Reorganizations

During the reorganizations the Department published an address that outlined the weakness in defence and the steps taken to correct them. It is telling that at the top of the list was the high demand on the time of the Minister, the poorly defined role of the Deputy Minister, “confused and duplicated management,” and the pace of responding to political change. Not only did the address view the problems of defence as managerial problems to be solved by management solutions, but where the re-examination of defence was inspired by problems at the lower levels of defence program management, the final focus was on the highest level of decision-making and organization. It represented the continued evolution of power-arrangement and civil-military relations within the department. The most important changes and recommendations were in these areas—the creation of the Defence Management Committee and Defence Council which sought to relieve pressure on the MND, the redefinition of the DM’s role and the establishment of ADM(Policy) which would provide more sensitivity to political desires.⁸² Writing in 1978, Charles Gauthier, former General and ADM in defence, argued that the success record of the reorganizations was unclear, partially because there had been no attempt to evaluate the new organization or determine whether stated objectives of the MRG were achieved. Still, he felt that national defence was one of the best management departments in government, despite some criticisms from personnel within the Department regarding the

⁸¹ See George G. Bell, “The Policy Process in National Defence Headquarters,” in *Canada’s International Security Policy*, eds. David B. Dewitt and David Leyton-Brown (Scarborough: Prentice-Hall Canada Inc., 1995), pp. 131-138.

⁸² Library and Archives Canada (LAC), RG24 G-7-3 (Fonds of the Task Force Review on Unification), vol. 18,188, “MRG - Departmental Action to Address Observation,” n.d.

organization.⁸³ Not all blame for defence ills in the post-Cold War era can be placed on the Management Review Group as the MRG recommendations were not fully implemented—organizers chose to act on some and not others, and included some of their own changes. The Task Force Review of Unification felt that had the MRG recommendations been fully implemented, strategic planning would have been substantially improved and the organization of defence was compromised by making the DM and CDS as coequal.

Despite the work that went into the reorganizations, Benson had a difficult time in explaining the rationale behind the relationship of the Deputy Minister and Chief of the Defence Staff to onlookers who were confused over the level of access that the CDS had with the MND. The argument for the new approach was that relationships had not changed (this had to be the case as the NDA was not amended), but the new organization chart better reflected the reality of the organization. It appeared in previous charts that the Deputy Minister, Chief of the Defence Staff, and Defence Research Board were separate entities—component of a three part competitive organization. But the new organization, which fused the DM and MND and placed the CDS at the same level of the DM, was a better reflection of the goal of defence working as a single entity where all actors worked together towards a common aim. In one of the first attempts to graphically display the new organization, the MND, DM, and CDS were all placed together, one on top of the other. It gave the impression that the Chief of the Defence Staff only had access to the Minister at the top through the DM, who sat between them. Later, the chart was amended so that the CDS and DM were side by side, both directly below the MND, better indicating the direct access to the Minister. Still, confusion and ambiguity persisted. The NDA was never amended (a key difference from Hellyer's reorganizations). Thus the roles and responsibilities as laid out in law continued to apply under the new organizational framework. Although it was insisted that this new

⁸³ The Directorate of History and Heritage, Department of National Defence (DHH), 92-228 (Fonds of Charles J. Gauthier), series. 6, file 82, Charles J. Gauthier, "Overview of the 1972 Reorganization of National Defence Headquarters," n.d., pp. 20-21.

framework was still founded in the roles and responsibilities as laid out in law for the DM and CDS, and even *better* reflected it, in reality this was not quite the case. The distinct and separate entities of the office of the DM and office of the CDS, with the CDS being a separate entity with control and administration of the CF as his main purpose, became blurred as those within defence could not clearly tell you whether the CDS was superior, equal, or subordinate to the Deputy Minister.⁸⁴ It could be suggested that the Deputy Minister is responsible for defence policy and advice and Chief of Defence Staff for military advice. This is not, however, totally satisfactory because it subordinates the CDS to the DM. But more importantly, no distinction is made in the National Defence Act for this kind of arrangement or definition of roles. The CDS position emerged from the idea that the central organization of military advice is necessary and this was established in 1964. Until 1972 the CDS controlled the policy-process. With the Management Review Group, the CDS's role in policy-making was de-emphasized and he became a partner to the DM. Policy-planning moved from the Vice Chief of the Defence Staff and became separated from operational planning as a result of the creation of ADM(Policy).

It is important to note that while the establishment at NDHQ can be understood within the continued historical evolution of defence organization and management, at the same time it is distinct from the early reforms started by Hellyer. The MRG was established by a different Minister, who had his own perspective of defence. That review was conducted by observers independent of those who worked on the integration and unification of the forces in the 1960s, and the implementation of the MRG was done by actors even further removed than Macdonald. Although the ultimate NDHQ structure appears to share in the process of integration/unification that was occurring in defence for nearly a decade, that initial intention of Hellyer's scheme never envisioned the kind of integration that emerged

⁸⁴ Douglas Bland, "Institutionalizing Ambiguity: The Management Review Group and the Reshaping of the Defence Policy Process in Canada," *Canadian Public Administration* 30, 4 (Winter 1987), p. 549.

in the early 1970s. In fact, Hellyer disapproves of the overall concept of NDHQ and any attempt to connect his reorganizations to those initiated by Macdonald and carried out by Benson. Hellyer states:

The so-called “civilianization of the armed forces” had absolutely nothing to do with integration and unification as I had perceived it and as Leo Cadieux and I had put it into effect... The idea of having a mixed civilian and military headquarters is so totally incomprehensible that I shook my head in disbelief. Military are military and civilians are civilians and the two do not mix!...If it had to happen it would have been nice if it had happened at some other time in history when the naysayers of integration and unification couldn’t stretch their imagination enough to mix apples and oranges and blame it on what we had done in the 1960s. Anyone who tried to tie this crazy experiment to integration and unification should have their knuckles rapped for lack of objectivity and fairness.⁸⁵

To be sure, the management philosophy initiated by Macdonald had its differences with the vision that Hellyer had for defence. The reversal of defence priorities, deemphasizing the demands of the Minister, and the full integration of civilian and military personnel in the running of defence are all differences that have been touched on in this chapter. However, even if it is important to perspective with respect to how one links Hellyer’s and Macdonald’s reorganizations, one can still understand them in context of one historical continuum. Although initiated by different men, they form the keystones to the overall trend of management development in the post-Second World War world. Hellyer might have disagreed with the extent to which the notion of integration was carried after he had departed defence, but the fact remains that the integration that occurred at NDHQ in the 1970s was likewise a quest for greater degrees of civilian control in defence and rationalization of administrative functions. This is clear in the new power-arrangements of defence actors and in the origins of the entire reinvestigation of defence, which lay in a perceived shirking of military accountability and the mismanagement of R&D and procurement. The need to gain a firm control over the full implementation of Cabinet decisions in defence as well as over the costly and ever-changing technological advancements was paramount. The

⁸⁵ Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

military had a tendency to make pronouncements about the unaffordability of unwanted options without much supporting evidence, or felt free to lowball estimates of preferred options.⁸⁶

As under Hellyer, the external environment was a key factor for senior defence actors in the early 1970s, both in terms of foreign policy, domestic policy outside of defence, and, as mentioned, the technological/industrial. The changes in defence can therefore be framed within the continuous adaptation of the organization and the perceived need for flexibility and willingness to changes in order to cope with the changing realities of external, and of course internal, environments of defence. Other management philosophies were also highlighted by the MRG investigators, as they had been by previous critics. For example, the concern for information management, a recurring theme in the history of defence management and a feature of the Internal Process model of management, continued in the 1970s. The Management Review Group referred to it as an area of interest in their report on military support services, indicating its improvement as a key feature in costing alternatives and aiding decision-making.⁸⁷

Moreover, the quest for rational management continued into the 1970s and was a feature of Trudeau policy-making. By his own admission, Trudeau states that this was his obsession.⁸⁸ Canadian policy expert Bruce Doern argued in 1971 that structures of the Canadian policy-making process in the early 1970s were indeed representative of rationalistic aspirations—an attempt to provide the government with a greater capacity for intelligent decision-making.⁸⁹ Structures, such as the PPB system, as well as Trudeau’s advisors in the Privy Council Office and Prime Minister’s Office are examples. Doern contended that the PPB system was an attempt to provide central and departmental decision-making

⁸⁶ Kasurak, p. 148.

⁸⁷ The Directorate of History and Heritage, Department of National Defence (DHH), 84/32 (Fonds of the Management Review Group), file 5, “Staff Report D: Military Support Services: A Report to the Management Review Group by its Military Support Services Sub-Group,” June 1972, pp. 4-6.

⁸⁸ Pierre Elliott Trudeau, *Memoirs* (Toronto: McClelland & Stewart, 1993), p.108.

⁸⁹ Bruce Doern, “Recent Changes in the Philosophy of Policy-making in Canada,” *Canadian Journal of Political Science* 4, 2 (June 1971), p. 243.

with a more “rational basis on which to conduct the budgetary and resource allocation process,” and Trudeau’s personal ideology and the advisory staff he instituted in his government were “imbued with rationalistic aspirations” where he had a firm belief in reason and rationality.⁹⁰ Trudeau felt that political tools were the product of reason and at the very least, designed and appraised by a more rational standard than had been the case in the past. Logic, not passion, was stressed, and this was the foundation of his approach to foreign and defence policy; foreign policy determined defence policy in too great a way, and his reviews of policy were an attempt to form a rational foundation for defence policy based on Canadian goals and objectives. Basing policy off of NATO policy, which might not be in the best interest of Canada, was no way to formulate policy for Canadian defence. Close reviews were the basis for greater understanding of what the government was doing, and in order to help be more efficient at accomplishing objectives. According to Doern, there was a great emphasis on goal setting and clarification in Trudeau’s approach to policy, and this was a feature of his advisors—the PMO and PCO was a mixture of legal, business, and communications professors.⁹¹ While it might have shown a difference in approach in comparison to some of the management concepts applied under Hellyer’s scheme, the management of the early 1970s was equally about discovering further rationalization of the operations of defence management, hoping to reduce duplication, uncover economies of administration, sound information management, and ensuring clarity and logic in planning and decision-making. The notes made by John Harbron while working on the MRG indicate that the investigators were concerned with the functioning of the system, including features such as “log rolling,” “too many layers of decision-making,” and the greater “need to break things into manageable units.”⁹² The amalgamation of civilian and defence arms of defence into one headquarters was the ultimate effort at rationalization, even if one disagrees with the validity of the idea in achieving it.

⁹⁰ Ibid., p. 243.

⁹¹ G. Bruce Doern, “Recent Changes in the Philosophy of Policy-making in Canada,” *Canadian Journal of Political Science* 4, 2 (June 1971), pp. 241-264.

⁹² Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 7/1, 17 June 1971.

CHAPTER 8

THE EVOLUTION OF DEFENCE MANAGEMENT THROUGH THE YEARS & ITS EFFECT ON THE MILITARY PROFESSION

It has been argued that the historical evolution of defence management in the post-Second World War era has largely been driven by Ministers' unconscious attempts to design the optimum organizational framework for defence, striking the right balance between competing institutional values, means, and ends. With all of the focus on planning processes, accounting procedures, decision-making hierarchies, and committee arrangements, civil-military relations did not exist independently from this balancing act. To the contrary, the power structure between politicians, civilians, and military personnel in the formulation and implementation of policy is firmly embedded within the overall organizational design. Thus, the theme of civil-military relations and civilianization is a central component of the history of defence management during the period under review, as the relationship between government and military has been in constant parallel evolution to that of the management philosophy. The rationalization of defence, intended to improve political control over the defence, had important consequences. This included the apparent negation of military professionalism and the usurping of technical expertise by managers. Moreover, there are important issues of private versus public management theory, leadership concepts, and change management, which are all interrelated components of the history. These issues and themes are difficult to untangle but necessary aspects to understanding this history.

THE CONTINUING EVOLUTION OF DEFENCE MANAGEMENT

In the early 1970s, capital spending was eroded by inflation. To find more economies, further rationalization occurred in the Commands. Air Command was established, which gained control over Transport and Air Defence Commands, in addition to the air groups—Tactical Air Group, Maritime Air

Group, and 1 Canadian Air Group. Training Command was also altered and much of the equipment that the military was using was quickly coming to the end of its life-cycle. By 1975 there existed four Commands: Maritime, Mobile, Air, and Communications. At that time, there occurred some reversal of unification trends—personnel cutbacks began to be reversed and *Navy*, *Air Force* and *Army* became acceptable terms, replacing “element” or “environment.” Despite the great effort at unification, service identity persisted beneath the surface. In 1979, Minister of National Defence Allan McKinnon established the Task Force on Unification in order to examine the merits and disadvantages of unification and provide comment on that system of organization. McKinnon, appointed by the newly elected Progressive Conservative Prime Minister, Joe Clark, opposed unification and the predominant role of the DM at NDHQ.¹ Chaired by G.M. Fyffe, the task force panel had to deal with the fact that the unified defence establishment had been in a state of constant change since integration. This made their review very difficult. As its mandate, the panel set out to explore unification as it existed at the time, in 1979, and intended to use the operational effectiveness of the Forces as the guiding principle in the audit. In examining the goals of unification—financial savings, increased operational effectiveness, common identity, and enhanced career opportunities—the Task Force was hesitant to declare that the intended goals were achieved. This was largely due to the evolutionary nature of the policy, which made it difficult to compare the situation in 1979 to the stated goals in 1964. Still, the panel identified what it saw as key problems.² On the issue of command and control it was felt that there was “insufficient sea, land and air environmental expertise available to senior decision makers,”³ and that the Commanders

¹ Douglas Bland, ed., *Canada's National Defence, Vol II: Defence Organization* (Kingston: School of Policy Studies, 1998), p. 249.

² Including: decline in environmental knowledge in support services and trades, inhibiting performance in operational conditions; poor efficiency due to cross-posting of personnel between environments; general deficiencies in the organization and administration of the base concept; inadequate mobilization capabilities; insufficient input into the decision-making process at the senior levels of NDHQ and problems of command and control (although it shrugged off complaints of civilian influence in decision-making, arguing that the relationship between military and civilian personnel was of high quality and that more military involvement in decision-making would help change the perception of civilian undue influence); and problems of identity.

³ Bland, p. 304.

should have a greater voice in administration, as well as in providing advice and consultation to decision-makers at NDHQ. Generally, respondents agreed that there should be greater access to the MND from senior members, who were concerned about the quality of advice reaching Ottawa. In terms of operational effectiveness, the review concluded that the Canadian Forces completed their activities with discipline and capability and were well administered. There were, however, some shortcomings. These included obsolete equipment as well as resource and personnel constraints, despite the military's ability to fulfill their tasks efficiently.

In 1980, the Liberals returned to power. With the Fyffe Review recommending greater involvement of environmental Chiefs in Ottawa and threatening the power and status of the CDS and DM, another review was commissioned under Defence Minister Gilles Lamontagne. A Review Group on the Task Force was established to investigate the findings of the original study. In 1980, Major General John Vance was appointed by the CDS and DM to review the Task Force Report and prepare an appreciation of its findings in order to understand their practicability. One outcome of the review was that the Armed Forces Commanders were asked to join the Defence Council and Defence Management Committee on a trial basis in Ottawa. (Although some were still concerned that this was not enough to address the worry that the environmental Commanders gain greater influence be fully recognized in matters of operations, training, personnel and administration of the operational forces). The Review Group felt that the trial basis at the Defence Council and Defence Management Committee was to be the first step of an ongoing evolution of the role of Commanders at NDHQ and refinement of the interrelations of defence actors. On the issue of civilianization and command and control, the group decided that the civilian/military dichotomy at NDHQ was affecting the morale of the Forces. There was expressed concern for the increased civilianized approach to military problems and the gradual imposition on the Department of civilian standards and values in managing the Forces and in assessing

needs and goals. There was also fear that such civilian standards stood to replace military counterparts and erode the fibre of the military profession. Thus, there existed a crisis in military ethos.⁴

The evolution did not stop, however. It continued into the 1980s and 1990s, and although the Cold War ended by the early 1990s, many of the themes and issues that had been ongoing in defence for decades persisted into the new millennium—particularly the development of management philosophies in defence which were informed by private sector management ideas, in addition to the continued quest for efficiency and effectiveness of defence where control and direction could be guided by the right managerial approach. In the 1990s, spurred on by the popular New Public Management Trend within public organization (which emphasized management over policy, performance appraisals, and efficiency⁵), the Canadian government increasingly looked to the private sector for ideas on how to operate in an environment that seemed to be demanding more and more productivity, while also reducing overheads. In 1993, DND was facing problems of efficiency and what many deemed to be a wasteful administration, plagued by bureaucratization in day to day management. This included a “loose” policy environment and a problematic financial system.⁶ Also heard were complaints of an overly centralized National Defence Headquarters (NDHQ) and an officer corps that felt that the

⁴ It was recommended that: further education on the organization, responsibilities, and management system at NDHQ would help to better inform members of the Forces on the issue of civilianization and so that perceptions can be replaced by informed understanding; the military/civilian concept be reviewed; and military values be clearly enunciated as a step towards their recognition and the preservation of military ethos. Overall, in terms of operational effectiveness, the Review endorsed the Task Force recommendation and added their own: operational effectiveness be identified as the governing criteria in the monitoring of progress and improvement in CF; the test “will it work in conflict?” be applied in all issues requiring decision; and finally, the reinforcement of the principle that the needs of the services come ahead of the aspirations of individuals. Lastly, the basic principle of unification was endorsed.

⁵ Donald J. Savoie, “What is Wrong with the New Public Management?,” *Canadian Public Administration* 38, 1 (1995), p. 112. For more on NPM, see: M. Barzelay, *Breaking Through Bureaucracy: A New Vision for Managing Government* (Berkeley: University of California Press, 1992); M. Bevir, R.A.W. Rhodes, and P. Weller, “Traditions of Governance: Interpreting the Changing Role of the Public Sector,” *Public Administration* 81, 1 (2003), pp. 1-17; D. Osborne and T. Gaebler, *Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector* (New York: Penguin, 1993).

⁶ David Detomasi, “Re-engineering the Canadian Department of National Defence: Management and Command in the 1990s,” *Defense and Security Analysis* 12, 3 (1996), pp. 329-330.

bureaucratization of the department set limits on the flexibility that was naturally required in professional military administrations.

The result in the defence sector was the application of two concepts that had emerged within business theory: “Re-engineering” and “Total Quality Management” (TQM). Their essential assumption was that re-designing the work that people do had the potential to yield greater levels of efficiency and service. This was equated with better use of resources, leading to a smooth-running operation. ‘Re-engineering’ calls for organizations to eliminate all wasteful and non-productive processes, and the empowerment of employees to make decisions. Moreover, the emphasis in management is on motivation and leadership, where managers become “visionaries,” guiding the process. In ‘Total Quality Management,’ employees work with customers to help improve processes, and any activity not efficiently accomplished by the organization is outsourced to more efficient suppliers.

Re-engineering became one method to ensure improvement to service delivery, as well as maintaining effectiveness in the post-Cold War environment. These concepts were incorporated into the *CF Defence 2000* renewal program, in which operational capability was identified as the core product/service and the measure of value of defence. In support of the program, the ‘Management Command and Control Re-engineering Team’ (MCCRT) was established. The MCCRT was a team of officers and civilian personnel who took control of DND’s re-engineering program. It also represented a series of organizational changes based on management theory, guided by the 1994 Defence *White Paper*. These efforts were rooted in the belief that management practices used in the private sector would be able to realize savings by cutting administrative and bureaucratic waste in DND and improving efficiency and service delivery. In addition, better use of defence resources were to be made while also allowing the department to focus on the core “business” of defence—maintaining quality, combat ready Canadian Armed Forces. As a result, operational headquarters were reduced, Commands were

consolidated, and personnel were downsized.⁷ According to Franklin Pinch, DND essentially was rationalized along corporate management lines. He characterized the change as representative of a corporate arrangement. Business metaphors and modelling were used to make changes in the CF organization, and emphasis was placed on business plans and case studies to support management initiatives. In addition, a teamwork concept was promoted where civilians were to become permanent participants in defence management in addition to the increased use of civilian consulting and alternative delivery service. All of this pushed the defence organization towards a closer resemblance to mainstream civil society and influenced, in an intimate way, the overall institutional character of the CAF.⁸ In the 2000s, the Canadian Forces continued their period of transformation. In the post-9/11 world, many defence experts and military officers saw the need to develop a new vision to guide the CF as a result of asymmetric threats, such as terrorism and failing states. When General Rick Hillier assumed the senior military position of CDS in 2005, he brought with him a bold vision for Canadian defence, ushering in a period of renewal.⁹ However, concepts of management, such as Totally Quality Management and Re-engineering, are not a panacea to the administration of defence, which has proven to be quite elusive. Moreover, the continued quest to achieve it has further given rise to complaints of civilianization and a decline in the state of military professionalism, morale, and military ethos.

⁷ Allan D. English and G.E. (Joe) Sharpe, *Principles for Change in the Post-Cold War Command and Control of the Canadian Forces* (Kingston, ON: CF Leadership Institute, 2002), pp. 13-14.

⁸ Franklin C. Pinch, "Canada: Managing Change with Shrinking Resources" in *The Postmodern Military: Armed Forces After the Cold War*, eds. Charles C. Moskos, John Allen Williams, and David R. Segal (New York: Oxford University Press, 2000), p. 175.

⁹ In "Hellyer's Ghosts: Unification of the Canadian Forces is 40 Years Old," Major-General Daniel Gosselin explained the renewal in this way: "Fuelled in large part by Hillier's bold vision of a new role for the CF as part of Canada's international policy, a serious commitment by two successive governments to re-invest in defence and rebuild the CF, along with a demanding combat engagement in southern Afghanistan, Canada's military has transformed significantly in recent years." Major-General Daniel Gosselin, "Hellyer's Ghosts: Unification of the Canadian Forces is 40 Years Old – Part One," *Canadian Military Journal* 9, 2 (2008), p. 7.

MILITARY PROFESSIONALISM & CIVILIANIZATION

The period through the Cold War in Canada (and the U.S.) witnessed militaries which were becoming more managerial—adopting civilian values, practices, and procedures. An essay produced by Air Transport Command in 1970 argued that traditional military emphasis on leadership must recognize that military activities are pervaded by management processes and that leadership within a military environment must be considered as part of the overall management process. As a result, the military can learn much from management methods and leadership theory. Like any bureaucratic organization, militaries must effectively guide vast amounts of resources, men, and material. What is more, management becomes that much more important with the growth of technological and strategic complexity, as well as the greater integration of S&T within military contexts.¹⁰ Of course, while managing militaries is paramount, so too is leadership—especially in an institution that needs to inspire “followers to do the seemingly impossible and do it willingly.”¹¹ Writing just before the controversial integration at NDHQ, but still at the height of the unification period, the authors touched on the increasing management emphasis in Canadian defence and the conflict this was creating with many officers who felt that management and leadership were competing concepts within defence. Many officers regarded management as a peacetime exercise, meant for administrative support, where the true meaning of the military—combat—is dependent on leadership to be successful. However, in reality military men must be both managers and leaders and a successful military leader is also a successful manager. This is because military officers, aware of it or not, spend a good deal of time managing, and the functions of management apply equally to the execution of tactical missions.¹² Management and leadership were seen as complementary—leadership is a manifestation of human behavior whereas management is a method. Therefore, it is not a choice between them as “good leadership supports

¹⁰ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 6, file 6/24, Air Transport Command, “Management and Leadership in the Military Environment,” October 1970, p. 1.

¹¹ Ibid., p. 1.

¹² Ibid., pp. 4-5.

effective management.”¹³ The conclusion reached was that the “risk that is run by the military is that through an attachment to a traditional and ill-defined concept of leadership, and semantic difficulties, they will bypass the useful body of theory and the functional framework presented by the management process.”¹⁴

This perspective emerged as a consequence of the long development of ever-increasing management thinking in defence, which was accelerated under Hellyer (and McNamara in the U.S.). The effect that this managerial revolution had on the military profession cannot be understated. In both the U.S. and Canada, the new tools of defence management and policy planning, such as Systems Analysis, required new kinds of personnel which new kinds of management skills. According to Richard A. Gabriel and Paul L. Savage, U.S. officers became more entrepreneurial during the Vietnam War, more concerned with career management than military leadership, while Segal and Segal argue that the institutionalization of Systems Analysis and Operations Research techniques created too much focus on “dispassionate” rationalistic management at the expense of leadership.¹⁵ As a result, officers became more entrepreneurial in of tone, language, and style, especially as more and more of them became increasingly concerned with career management. ‘Management’ and ‘managing’ became the keystone to career advancement as the military went beyond merely adopting modern business technologies and management strategies, but became deeply influenced by its values and ethics.¹⁶ In 1978 Dr. J.E. Maywood referred to an “MBA Syndrome”—the management credo of cost effectiveness and cost-benefit analysis within the military and the infestation of MBA’s in military management.¹⁷

¹³ Ibid., p. 6.

¹⁴ Ibid., p. 7.

¹⁵ See David R. Segal and Mady Wechsler Segal, “Change in Military Organization,” *Annual Review of Sociology* 9 (1983), pp. 151-170.

¹⁶ Richard A. Gabriel and Paul L. Savage, *Crisis in Command: Mismanagement in the Army* (New York: Hill and Wang, 1978), p. 20.

¹⁷ The Directorate of History and Heritage, Department of National Defence (DHH), 80-225 (Fonds of the Task Force Review of Unification of the Canadian Armed Forces), vol. 5, file 78, Dr. J.E. Maywood, 31 August 1978, p. 12.

Similarly, the Canadian military professional leader came to possess skills of both operational leadership as well as those of civilian management. As a result, career development was designed to encourage the acquisition of both military and non-military skills and perspectives as a requirement for senior executive management positions.¹⁸ Moreover, career paths in the military required a distinct set of management and military skills and those without the right knowledge often enrolled in business schools.¹⁹ The work of Morris Janowitz—a leading expert on the subject—indicates that as a result of civilianization trends, military officers gained a dual nature: they were warriors and combat leaders on the one hand, displaying traditional values of courage, duty, sacrifice, obedience and discipline; and rational manager on the other, bound to cost-benefit analysis. Thus, the military leader of the Cold War was both military and civilian.²⁰ This is a view shared by Franklin Pinch who contends that the dominant type of military professional was the soldier-diplomat/corporate leader-manager. Military leaders in the Cold War needed political awareness, knowledge of technological advances, appreciation of economic trends, knowledge of social change, and the ability to cope with human resources issues; in all, there was emphasis on corporate management issues and techniques, and an understanding of political, economic, and social issues. In other words, the dominant leader in such an environment was one who combined the skills of the soldier and of the corporate leader/manager.²¹

As the nature of defence problems evolved, so too did the kinds of people working on those problems. In *The Administration of Defence*, Bland argues that an approach characterized by civilian analytical staff as a counter-weight to military advice was founded on the negation of military

¹⁸ Pinch, p. 157.

¹⁹ David Detomasi, "Re-engineering the Canadian Department of National Defence: Management and Command in the 1990s," *Defense and Security Analysis* 12, 3 (1996), pp. 334. To be sure there were some, such as Paul Hellyer, who argued that we need cross-pollination between the military and business managers and that Canada needs businessmen who work in government and business people participate in assisting the running of the country. Library and Archives Canada (LAC), MG32 B33 (Fonds of Paul Hellyer), vol. 48, file 48-12, "Speech at Queen's University," n.d.

²⁰ Marina Nucari, "Models and Explanations for military Organization: An Updated Reconsideration," in *Handbook of the Sociology of the Military*, ed. Giuseppe Caforio (New York: Springer, 2006).

²¹ Pinch, p. 328

professionalism.²² This led to a debate over the degree to which military advice should be subordinated to civilian analysis. Such a discussion is important as it helps to add a layer of understanding to the overall interaction between the military and civilian (i.e. business) “way” of management and administration—an issue equally felt in the Canadian context. During the Cold War the use of armed force became about more than simply the physical destruction of the enemy (or the enemy’s capacity to resist and retaliate). Instead, defence developed was a component that was meant to convey a diplomatic message. Combat became subordinated to politics and civilian participation grew swiftly in what was traditionally the province of the military which no longer had sole possession of exclusive expertise in defence.²³ This had an effect on the nature of the military profession—one which critics felt was making the military more civilian and businesslike (to the detriment of the armed forces).

As a graduate education in business administration became the norm for many managers, the language and style of systems analysis became entrenched. As a consequence, the Army assumed and imitated the ethics of a business corporation due to the adoption of some of the same technology and the presence of the business trained managers. Officers, increasingly concerned with career management, “had come to believe that leadership and management were one and the same thing and that a mastery of the techniques of the latter would suffice to meet the challenges of the former.”²⁴ Consequently, the traditional motivations for military service waned and the minimization of risk among officers was the norm. Managing replaced leading. But leadership is a vital element of command and an important part of management, as without it management is possible but command is weakened. While management is inherent in command (as Commanders always administer resources), management is only one part of the whole: management systems can be applied to the administrative side of military

²² Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987), p. 9.

²³ Robert G. Gard, Jr. “The Military and American society,” *Foreign Affairs* 49, 4 (1971), p. 700.

²⁴ Gabriel and Savage, p. 19.

activity but men cannot be managed in the face of the enemy, instead needing to be commanded.²⁵ It appeared to many observers at the time that management had become an end in itself in defence, overriding other considerations. Leaders win wars, not technology, and the military should guard against adopting passing organizational and management fads or risk damaging the professional image, identity, and internal cohesion of the armed forces.²⁶ Fighting force is a matter of command and leadership, not a question of modern management techniques or answers coming from a computer.²⁷

The intent, however, of those who instituted new management tools and techniques of defence analysis—such as forecasting, simulations, Systems Analysis—which often used mathematical models and computers, was not to replace military judgement but to augment it. During the complex Cold War-era, there was an opinion that there is no such thing as a purely military requirement, and thus the military alone cannot determine them. Civilian advice, however, was never intended to replace that of the military. It was not a question of civilian participation or not, but simply a question of degree. It was also a question of participation that was meaningful and which contributed to the overall efficiency of administration and effectiveness of operations. To be sure, civilian analysts lack the expertise and knowledge that comes with military careers, but as Alain Enthoven has stated: "A Secretary cannot be a strong and active leader in the critical area of planning national security policy without staff assistance that is independent of vested Service interests."²⁸ This might be a somewhat controversial statement but he argued that it was the responsibility of the Secretary to provide advice to the President (and Congress) as to the degree of resources that needed to go into defence, as well as advice on how those

²⁵ The Directorate of History and Heritage, Department of National Defence (DHH), 80-225 (Fonds of the Task Force Review of Unification of the Canadian Armed Forces), vol. 7, file 108, Brig W.N.R. Scotter OBE, MC, "UNIFICATION - MANAGEMENT AND COMMAND," February 1970.

²⁶ The Directorate of History and Heritage, Department of National Defence (DHH), 80-225 (Fonds of the Task Force Review of Unification of the Canadian Armed Forces), vol. 5, file 78, Major W.J. Graco "Civilian Models," *Defence Force Journal* 18, September/October 1979. Sean Maloney's "Global Mobile II: The Development of Forces Mobile Command, 1965-1972," p. 15.

²⁷ R.B. Byers, "Structural Change and the Policy Process in the Department of National Defence: Military Perceptions," *Canadian Public Administration* 16, 2 (Summer 1973), p. 234.

²⁸ Alain C. Enthoven and K. Wayne Smith, *How Much is Enough? Shaping the Defense Program 1961-1969* (Santa Monica, CA: RAND, 2005), p. 79.

resources should have been used. Thus, to judge the merits of proposals the case against those proposals was needed. This was the job of Systems Analysis—to free decision-makers from dependence on purely military advice, as “What is worth trying to do depends, among other things, on what is possible, on how effective the means for doing it are, and on what it costs.”²⁹ Decisions for in one area, is a decision against in another. There are always trade-offs and resources are always limited. Military decisions are dependent on factors that exist outside the military and decisions made in the military sphere have consequences for areas outside of it. All factors need to be considered at the same time and balance needs to be sought, as best as possible, between benefits and costs/risks. The job of the civilian experts was to help bring the additional information and viewpoints into the defence conversation and decision-making process and the system never intended to ignore military advice and experience. Speaking in the U.S. context, Enthoven and Smith stated:

Effective leaders reserve the right to challenge preferred solutions, to be skeptical, to suggest alternatives, and demand analysis rather than assertions. McNamara, the strongest leader the Defense Department has known, operated under the theory that information is power. To help him get that information in the area of military objectives, force requirements, and costs, he created the Systems Analysis office.³⁰

Thus, both military and civilian men have something to offer the decision-making process. The real question is whether or not the military should be the only voice of advice. The more perspectives sought the more information that brought to bear on issues. In *Management of Defence* John Downey argues that the nature of modern warfare in the Cold War was increasingly scientific. Whereas prior to the 1930s, military leaders had little expertise beyond their personal training and experience in war, afterwards the scientific nature of war led to a greater need for the application of the scientific method. This required turning to experts outside the traditional military sphere as the professional soldier could

²⁹ Ibid., p. 80.

³⁰ Ibid., p. 88.

not make use of contemporary weapons without collaboration with science, and the professional military man could not plan defence in the modern context without science.³¹

It should be clear that the period under review was characterized by ever-shifting ideas about defence policy and strategic priorities. And just as conceptions of defence policy and strategy were evolving, so too were conceptions of its structure and guiding management principles. At the heart of such shifting ideas were changing conceptions of how the military relates to the government. Civil-military relations are at the heart of the defence operation. While no Minister ever directly refuted the role of the military as a source of professional advice, the history has been characterized by a search for the best way to structure the provision of that professional advice—military and otherwise—and in response to changes within the defence environment. New objectives and priorities for defence emerged in the early 1960s with the arrival of the Liberals and Hellyer's new vision for the future of Canadian defence, as well as tight budgets and limited resources. The commitment-resource imbalance that emerged was a core factor in the need for a new approach defence management, and consequently, an effect on civil-military relations and the role of the military as a source of advice was inevitable. Glassco questioned the dependence of the political powers on military advice while Hellyer sought to establish new centres for professional advice and to infuse greater political control into defence decision-making. Hellyer unified the military, creating one source of military advice, while also providing equal access to two other sources: civilian and scientific. Not to be captive to any single source, the Minister was the undisputed head of the Department, which was made more centralized, streamlined, and rationalized, with clear and firm control. Control was something that was seen as lost in the years leading up to the fall of the Diefenbaker government but this was not necessarily the fault of the military, as political direction had been lacking under the Progressive Conservatives, as evidenced by the Cuban Missile Crisis.

³¹ John C.T. Downey, *Management in the Armed Forces: An Anatomy of the Military Profession* (Maidenhead, Berkshire, England: McGraw-Hill Book Company (UK), 1977), p. 148.

At the time, there was general agreement on the principles governing civil-military relations. The political authorities had the right to make final decisions on defence issues, and the military served the political authority and was expected to be responsive to the desires of the government. The source of trouble was in the ability to assess information and proposals. It was in the early 1960s that there occurred attempts to improve the ability of civilians to assess military proposals and act as a second source of advice—a counter-balance to the military. Glassco questioned the ability of civilian control as defined above, if such a counter-balance did not exist. An increased civilian role in defence became a feature of improved control. Hellyer stated that a single defence staff, presenting its findings through the Defence Council, and analyzed by Deputy Minister's staff before consideration, would allow for better control over defence decision-making than had been the case in the past. Additionally, the Defence Council acted in the same way as a cabinet in DND by permitting complete and full expression of opinions from both civil advisors and well as military, so that best opinions, advice, and information, could be available to the Minister and considered before decisions or action taken. This permitted better civilian control and direction.³²

The decision-making process at the highest levels of the defence organization, the forum for advice that feeds into that process, and the actors who work together (or not) within the system represented a contest over the advancement of ideas. Those better able to advance their own ideas and perspectives can be understood as holding more power than those who cannot. The evolution of the organizational charts is essentially representative of the quest for power arrangements and the search for the best way to structure and facilitate decision-making. Therefore, while the basic tenets of civil-military relations were never questioned in the 1960s, the ideal arrangement to ensure the proper function of civil/political-control was at the centre of the evolution of defence. This was particularly so with respect to the role of the civilian versus military experts. A rational arrangement was sought to

³² See Library and Archives Canada (LAC), MG32-B33 (Fonds of Paul Hellyer), vol. 1, file 1-82, "Statement by the Honourable Paul Hellyer Minister of National Defence in the House Of Commons on May 12, 1964," n.d.

ensure the proper organization of responsibilities for management and administration and for the provision of advice and the role of the civilian bureaucratic slowly but surely evolved in power and status through the process of increased integration.

While the intent has been clear, the motivations have been debated. Some, such as Douglas Bland, have argued that the purpose of creating multiple centres of advice was to provide the Minister with an “out”; a more politically sensitive source of thought that acted as a counter-weight to military advice which was not always desirable. Bland’s assessment was that the military was seen as lacking political sensitivity to government desires and had been unable to provide politicians with the answers it wanted.³³ A similar observation was made in 1972 in the *Calgary Herald*: the Minister was set up with a buffer—a small team of his own to translate government policy into directive for DND and then to coordinate and police them—an argument McNamara used to “manhandle” the Pentagon and keep the military from dragging its heels on policies it did not agree with. This, it was argued, was the same principle being applied in Canada: appointed experts, responsive to him, were set up under his control, as an act of good management.³⁴ Macdonald saw questions on policy from senior military leadership as rebellion³⁵ and the establishment of the MRG and subsequent organizational reform was, therefore, as much about conceptions of civil-military relations as it was about organizational dysfunction and the quest for economies.³⁶ It is difficult to argue with exact certainty that the reforms were intended to provide more *politically favorable* advice to decision-makers. This author has found no evidence that the government turned away from military advice, instead establishing an alternative source that would provide the politically appropriate answers the government desired in order to justify their already held

³³ Douglas Bland, ed., *Canada’s National Defence, Vol I: Defence Policy* (Kingston: School of Policy Studies, 1997), p. 116.

³⁴ Library and Archives Canada (LAC), MG31 D-224 (Fonds of John Harbron), vol. 7, file 8, “Another Shakeup Faces DND,” *Calgary Herald*, 8 January 1972.

³⁵ Craig Stone, ed., *The Public Management of Defence in Canada* (Toronto: Breakout Educational Network, 2009), p. 223.

³⁶ See R. Bothwell and J.L. Granatstein, *Pirouette: Pierre Trudeau and Canadian Foreign Policy* (Toronto: University of Toronto Press, 1990) and Sean Maloney, “Global Mobile II: The Development of Forces Mobile Command, 1965-1972,” *The Army Doctrine and Training Bulletin* 4, 2 (2001).

beliefs and plans. Hellyer certainly showed himself willing to remove from positions of power those who opposed his reorganizations, and in their place promoting individuals willing to toe the line with implementing the reform. He also displayed a degree of mistrust of military advice, not only in vocalizing his fears of inter-service rivalry, but also in the functioning of the new system by bypassing more senior officers for the opinions of more junior officers. The stated intent of the structure itself, however, was intended to provide alternative/additional advice, not more favourable advice. Anything beyond that must remain speculative

While we can say with more certainty, however, that the reforms were intended to infuse greater *political control* over the military. Hellyer repeatedly stated this as a goal of his reformed defence management system. In the early 1960s the events surrounding the Cuban Missile Crisis was indicative of a problem of political control. Moreover, with limited resources and a new policy direction, the possibility of inter-service rivalry over programs and planning, Hellyer felt a new degree of political control was necessary. While he does not seem to have viewed the military as rebellious, he certainly appears to have had little trust that individual services had the overall best interest of the CF, and Canada, in mind. Hellyer does not seem to realize, or at the very least, never outwardly acknowledged that deep down he was making a statement on civil-military relations—the belief that the military had shown itself to be incapable of effectively managing their resources, therefore it was something that could be more efficiently done through tighter political control and modern management methods.

In the early 1970s, on the other hand, it is possible to view the military as having been disciplined for the shirking of their duties and responsibilities, particularly in failing to implement fully Cabinet decisions with respect to the NATO role. Macdonald was distressed that the Army refused to follow Cabinet direction and arrange for the withdrawal of Canadian troops from NATO's Central Front. He responded by "restructuring National Defence Headquarters (NDHQ) to permanently reduce the

independence of the military and create civilian alternatives to military advice.”³⁷ It is not an uncommon argument that the MRG resulted in the institutionalization of inappropriate civilian concepts of management to defence—a perspective has left “the overall impression that Macdonald and his civilian advisors had wantonly imposed an unsuitable organizational structure on the Canadian Forces either to stifle criticisms of policy or simply as a disproportionate and unsuitable solution to problems of organizational efficiency.”³⁸ It should be noted, however, that there was not a pernicious nature to the growth of the civilian manager’s role in defence, but an evolutionary one. It has already been stated that Hellyer and his supporters saw their role as bring the organization up to date with modern management techniques. Moreover, civilians were seen as having a place within decision-making since the early days of operational research and many believed that the increasingly scientific nature of the defence environment required an increasingly scientific approach. Defence began infusing the planning process with tools and methods from academia, business and general management theories, thus civilian analysts gained a greater share in the process. Still, this led to civilianization trends and the increasing involvement of civilians and the military in each other’s traditional area of employment.³⁹

The period of reorganizations under review do need to be placed within the context of civil-military relations. Issues of defence management and organization will always involve this dimension in

³⁷ Peter Kasurak, *National Force: The Evolution of Canada’s Army, 1950-2000* (Vancouver: UBC Press, 2013), p. 108.

³⁸ Peter Kasurak, “Revisiting the Management Review Group of 1972: Civilian Arrogance or Military Insubordination?” (paper presented at IUS Canada Conference, Toronto, 15-17 October 2010), p. 5.

³⁹ The Directorate of History and Heritage, Department of National Defence (DHH), 80-225 (Fonds of the Task Force Review of Unification of the Canadian Armed Forces), vol. 5, file 78, Major W.J. Graco “Civilian Models,” *Defence Force Journal* 18, September/October 1979. Sean Maloney’s “Global Mobile II: The Development of Forces Mobile Command, 1965-1972” gives a brief account of this mixing, and the problems it caused. He outlines how in the new NDHQ structure, the VCDS (which included operations and planning staffs) became bureaucratic equivalents to the civilian ADMs, the result of which was that the uniformed operations function became submerged in civilian bureaucracy and as a result, operations became treated the same as the other administrative functions, not something unique. Moreover, the overlap in functions between ADM (Policy) and the DCDS groups led to the meddling of civilians in areas traditional reserved from men and women in uniform. See Sean Maloney, “Global Mobile II: The Development of Forces Mobile Command, 1965-1972,” *The Army Doctrine and Training Bulletin* 4, 2 (2001), p. 20.

some way, especially where roles and responsibilities are altered or redesigned. Perspectives of the working relationship between the military, civilian bureaucrats, and political decision-makers did help drive the reorganizations, which in turn further influenced civil-military relations and military professionalism. The management tools and perspectives that underlay that organization served to influence the military ethos, perpetuating the management thrust. Thus, while men like Hellyer accelerated the managerial frame of mind within defence in terms of the bureaucracy as well as the military, after years of entrenchment of the management ethos this new management-centric defence organization became self-propelled—it was not something imposed on defence by top level decision-makers but a characteristic intimately woven throughout the organization and its actors, civilian and military.

CONCLUSION

Despite the constant reorganizations, the problems of defence were never fully solved. The desire to find efficiencies in defence planning, eliminate inter-service rivalry, improve coordination, and ensure political control are constant themes and have all been at the root of reorganization efforts since the end of the Second World War. The creation of a single Minister and Department of National Defence, Claxton's integration, the creation of a CDS, Hellyer's integration/unification, and the MRG were all attempts to solve these management issues. The history of organizational and administrative evolution, with its ever-increasing degrees of integration and centralization of decision-making are indications that defence planners were never fully satisfied with previous attempts to solve management concerns. In many ways, subsequent reorganizations led to new problems. The Fyffe Review argued that unification led to a loss of environmental and leadership training, slowed supply in the support services branch, created a loss of leadership standards, and led to problems regarding training and base structures. Of course, some of the problems of defence identified in the 1970s were not solely the result of unification but also due to the integration of NDHQ, which "instituted ambiguity" in the roles of the CDS and DM.¹ Moreover, the Somalia incident and problems of professionalism in the 1980s indicate that despite the efforts to fix defence, reorganizations had either fallen short or simply led to new issues which the management reforms of the 1990s were to address. The period of change ushered in by Hellyer in the early 1960s is part of that same historical continuum.

The Defence Management Environment: A Mix of Organizational, Economic, and Political Problems

The reforms were initiated in response to perceived problems of defence. It would be an overstatement to say that defence policy and management was broken when the Liberals came to power in 1963, however there certainly were problems arising from internal and external pressures. The

¹ Douglas Bland, "Institutionalizing Ambiguity: The Management Review Group and the Reshaping of the Defence Policy Process in Canada," *Canadian Public Administration* 30, 4 (Winter 1987), pp. 527-549.

preceding chapters of this thesis have touched on the inter-service rivalries, for example, that has been ever-present in the history. Moreover, the overgrown committee system that developed after the Second World War, a lack of coordination between services in planning and programming, and issues of civilian control are all issues that contributed to Hellyer's understanding of defence. It was therefore a combination of organizational, economic, and political factors that contributed to the reorganizations. The archival material with respect to the reasoning for the reorganizations places greater emphasis on the economic situation. A greater share of the federal budget was going to new social welfare programs which were seen as highly desirable by the Canadian public, leaving less money for defence. Although Canada was operating within a cold war, not a hot one, defence and security remained a costly endeavour as increasingly sophisticated technology threatened allied forces and pushed spending to the limit of what politicians were willing (and able) to pay. The alternative options to reform were to spend more money on defence or commit to less within international commitments; neither one of which were seen as politically viable. Thus, the reorganization was politically favourable compared to the two alternative options considered. Defence planners were placed in difficult position due to the commitment-capabilities problem—that is, an overly committed Canadian defence which struggled with lack of resources to accomplish them all—and the reorganizations can be seen as political in the sense that those commitments were deemed politically unavoidable. Moreover, the Liberals had witnessed the Diefenbaker government fall amidst problems of defence policy. Hellyer's assessment of Canada's middle power role within defensive and strategic alliances and the contribution it could make to the Cold War strategic environment was a guiding force in his decision to reorganize defence based on integrated and unified forms. Policy is not usually a perfect solution, but instead seeks the best way forward based on the needs, resources, and information at hand, as well as the alternatives available. Therefore, although there was a mixed perception of the strategic value of unified forces, the need to find savings to allow for the continued effectiveness of the Canadian Forces was acute.

Operational effectiveness was a concern for the Minister and he openly stated that his visits overseas during his time as Opposition critic exposed him to the low morale of troops resulting from their inability to carry out duties and commitments. As Minister of National Defence he was briefed on the needs of the separate services. Cabinet discussions show that Hellyer understood that tight economic times would have a serious impact on the ability of the three services to do their jobs. Ultimately, the commitment-capabilities gap was an issue of scarce resources. Hellyer's preoccupation with the financial component of defence is clear in the archives. Operational effectiveness was of concern and it would be wrong to give the impression that it was not. For Hellyer, it was seen as one side of the coin, with the other being economics.² The two were linked and improving operational effectiveness had to start with improved economics. It is true, however, that operational effectiveness received less emphasis as an explanation for the reorganizations compared to other management factors, and even less during the MRG investigation. While operational effectiveness needs to be primary benchmark for the proper functioning of defence administration, discussions in this regard appear to have been more lip service than a principal concern.

The changes that occurred in the decade from 1964-1972 did represent a greater concern for the management aspects of defence, with implications for command and control and civil-military relations. Indeed, conceptions of civil-military relations were an important factor in defence and this feature cannot be understood separately from the bigger picture. Political control—a well-established principle of civil-military relations, both conceptually and institutionally—were goals of the Hellyer and Macdonald investigations. Hellyer was concerned that without greater political control, inter-service rivalry would dictate policy-making, planning, and programming, while Macdonald was concerned with ensuring that policy was properly implemented. The impression left was that Hellyer did not trust the services to properly manage defence resources and Macdonald did not trust the services to carry out

² Paul Hellyer, e-mail message to Michael Thompson, January 7, 2014.

directives. Thus, management was modified. Defence management was not broken, but persistent problems required management readjustments. It was the economic situation, in combination with both political decisions regarding defence commitments as well as weaknesses in the policy-making process that history of management reform found its strongest motivating force.

The Guiding Philosophy: Rationalization and Management Control

The overall trend of integration in Cold War Canada, and management tools that supported it, indicates a guiding philosophy of at the time—the belief in, and the quest for, rational management. The reorganizations of defence management, started with Hellyer's arrival at defence in 1963 and which were carried through to the creation of NDHQ in 1972, were largely about the pursuit of management rationality. Due to budgetary limits, Hellyer looked to administrative process to find economies. Integration and new management methods created new degrees of efficiency that allowed for the elimination of administrative overlap and the reduction of costly manpower. This rationalization was the primary source of financial savings which were to be redirected towards capital equipment. It was an opposite approach to those who say what is required to be effective in defence dictates the cost, not the other way around.³ But Hellyer was not a military man—he was a public servant and businessman. Integration and unification were seen as business decisions that needed to be made as a result of political decisions for which defence is not immune. Thus, savings were sought through integration, attrition, and a rational management philosophy that made use of modern management techniques.

The growing sophistication of military technology put pressure on management for efficiency and control, especially in the area of cost. New analytical and managerial skills became an important component to military leadership. Representing a rational goal and internal process perspective, planning and efficiency, as well as control and information management, were stressed in the post-

³ Douglas Bland, *The Administration of Defence Policy in Canada, 1947-1985* (Kingston, Ontario: R.P. Frye Co., 1987).

Second World War defence environment through the use of such tools as PPBS, PERT, and Systems Analysis. This led to an organization whose structure was predicated on firm forms of control. The idea of organizational rationalization as a means of further ensuring the rationalization of policy outcomes was a defining feature of Canadian defence management in the late 1960s and early 1970s. The principle of integration and unification of the Forces with a single CDS, the integrated civilian and defence arms of defence at NDHQ, and the quest to eliminate the vast committee system are all indicators of such an approach.

The reforms were also, as Hellyer has reiterated, about infusing a greater degree of political control over the defence portfolio, as it was felt that such control had diminished under Diefenbaker. The Minister was to have total authority over defence and it was Cabinet that was to set policy goals while military was to implement them. At a broader level it was about managerial control—that is, control over the management process (particularly programming, planning, and procurement) as a way to implement government policy efficiently and effectively. By ‘efficiently,’ it meant operating within strict budgets and tight resource availability in context of the high cost of technological R&D, manufacturing, and maintenance; and ‘effectively’ meant ensuring that the sharp ends stayed sharp and that the fighting forces were able to complete tasks assigned at a low cost to men and equipment. At a time when budgets were shrinking and costs were rising, where strategic change led to uncertain future roles, requirements, and needs, and where the cost of failure was so high due to the nuclear threat, there was very little room for error. This required a new degree of control over all aspects of defence—political control over the defence agenda and managerial control over the planning, programming, and procurement system. Mirroring the growing control of managers in private industry over production, defence management began infusing the planning process with tools and methods from academia, business, and general management theories. For example, ‘management by objectives’ was explored by

defence reformers in Canada in the 1970s. While the general philosophy was not overly explicit, it is observable.

Cold War Defence Management and Bureaucracy in Historical Context

The underlying philosophy outlined above was reminiscent of the “classical” management way of running bureaucratic institutions, and Hellyer’s reorganizations fit within a wider management context, both within defence and outside of it. Canadian defence had been on a progressively rational path and Claxton’s steps towards integration and the recommendations of the Glassco Commission are examples of other management attempts to simplify defence administration and find economic savings. In the U.S., Robert McNamara instituted a philosophy of defence management not dissimilar to the one in Canada. Overall, the post-Second World War management context was one of increasing control over work operations in order to achieve more efficient outcomes. It was also argued that the department had lagged behind others, including private industry in the application of certain techniques, and change was an opportunity to catch up to the modern management world. There was an air of newness and modernization with respect to the defence changes in the 1960s and it appeared to be a totally unique approach to defence. In some ways it was—unification, the greater use of computers, and responsibility accounting were all new. In other ways it was not. The philosophical undertone of rationalization and control were already well established. Hellyer did not use any specific management theory but his vision of defence certainly fit within a tradition that was rooted in management history for decades.

The history of the defence reorganizations can be placed within such a general framework of management history. The increased bureaucratization that occurred during the Cold War was the continuation of a process of enlargement of the military institution that had been occurring since its inception. Militaries have always been among the largest and most complex of organizations, public or private. As Miewlad has shown, Max Weber—one of the leading thinkers on the subject of

bureaucracy—understood military institutions as the ultimate form of bureaucracy; a rationalized, ordered, disciplined institution, structured for the purpose of coordinating activity based on calculation.⁴ For him, calculation and control are distinguishing features of increasingly rationalized bureaucratic organizations. Scientific management's emphasis on planning and centralized control in order to produce efficiency of operations and outcomes, in addition to predictability, was popular in industrial management thought in the North America. And although scientific management itself was gradually replaced by other forms of theory in the early part of the 20th century, its basic tenets became firmly entrenched in the management style of many institutions and organizations.

In the case of defence organization, there occurred a rearrangement of relationships between workers and superiors, established to improve quality and control of output that mirrored the rational movement of the private sector throughout the century that placed a great deal of emphasis on managers and management. The growth of organizations after the Second World War, both military and private, required a renewed attention to general management theory. As Wren points out, the specialists required to run large-scale bureaucratic organizations, the application, development, and production of wartime technologies, and the general increased complexity made management that much more important. It was the increased number of variables that had to be taken into account in decision-making that pushed management thought from shop level perspectives to more general theory.⁵ Likewise, the number of variables of the Cold War that needed to be accounted for and controlled in order to achieve goals and aims of the defence ministries opened the door to a variety of new approaches to management. It also led to the broader use of analytical techniques, such as SA and OR, which had been in use in defence since the Second World War. Thus, there is a much wider management history that the 1960s defence policy reforms can be placed within. Despite the newness

⁴ Robert D. Miewald, "Weberian Bureaucracy and the Military Model," *Public Administration Review* 30, 2 (Mar-Apr 1970), pp. 129-133.

⁵ Daniel A. Wren, *The Evolution of Management Thought*, 3rd ed. (New York: Wiley, 1987), p. 348.

that appeared to be the case on the surface, Hellyer was part of a continuum of defence management rationalization inside Canada and within the history of 20th century management. The underlying philosophy was consistent with historical trends.

Hellyer's Leadership Weakness

Hellyer's record as a leader and visionary is decidedly mixed. In terms of the implementation of Hellyer's reform, we can say that those in charge of carrying out integration and unification must be commended as the scope of the reorganization was immense. Yet, it was not without its problems, largely as a consequence of a lack of guidance from those at the top of the organization. In implementing change management programs, Michael Jeffery states that organizational revision is complex and difficult, and therefore more dependent on leadership than particular approaches.⁶ Organizational philosophies are not panacea, and while understanding principles of organizations are important, leadership is, above all else, vital. A component of this leadership is creating and articulating a vision which becomes the focus for change. While rationalization was an unstated goal, integration/unification—the structural representation of rationalization—was clearly articulated. While it was not undertaken blindly (Hellyer's review of defence, experience as Opposition critic, and use of Glassco recommendations indicate this), careful thought and consideration of the plan was Hellyer's alone, making little use of expert military advice. This failed to create a unified vision for defence organization and divided support for his plans. It is important to note that the vision for integration was generally accepted; even Landymore—one of Hellyer's fiercest opponents—was accepting of the rationalization efforts represented by that phase. It was, however, the vision of unification that failed to win supporters. While unification was always stated as a goal, a major weakness of Hellyer's change plan

⁶ Michael K. Jeffrey, *Inside Canadian Forces Transformation: Institutional Leadership as a Catalyst for Change* (Kingston, ON: Canadian Defence Academy Press, 2009), p., p. 20.

was that unification often vague and poorly defined. This created uncertainty and anxiety and many within the military could not accept the vision, let alone its implementation.

Even though both integration and unification proved to be achievable, their implementation was certainly ambitious and not without its faults. For example, the communication and motivation from leadership needed to overcome the potential for cynicism was lacking. Furthermore, Hellyer's abrasive and rough personality did little to help build the unity needed for a smooth change management process. An environment conducive to change was also impeded by his general lack of strategic planning and direction. Much of the implementation was done in an ad hoc fashion and much trial and error was needed. There were also concerns of the overly fast pace of change and criticisms of not enough dissemination of information. More importantly, there were many critics who felt there was simply not enough research into whether unification would have a positive effect on financial savings or improve operational effectiveness. Much was assumed—the benefits and outcomes that Hellyer and his supporters suggested simply became true once the decision was made to unify. This led to a breakdown in civil-military relations as evidenced by the high profile resignations and retirements such as Brock and Landymore. Overall, Hellyer provided the philosophical guidance, but little else.

As much as it fit within a general historical management trajectory, the change for those within defence was radical and disruptive. While one cannot discount the purely partisan motivations for opposing Hellyer's plans, there were indeed valid military objections to reorganization. From the military perspective, opposition was rooted in the concern over the potential negative effect of unification on culture, tradition, and morale. Hellyer justified integration on the grounds of rationality of administrative economies, but this rationalization was pressed to a degree which many thought unnatural and unnecessary. Full unification of the three services threatened traditions and ultimately operational effectiveness. Rationalization therefore came at the expense of other parts of the organization. A closer understanding of general organizational theory and management thinking might

have provided him with valuable insight into his re-organization. In particular, attention to some of the theories which stood in contrast to the kinds that his approach represented, such as human relations and cultural theories of management, might have helped him to better lead those in defence who stood to be impacted the most. Even though managers must pick and choose the organizational/management strategies that best fit their particular institution, there was a general disregard for the human side of the reform in favor of elements more representative of the open systems, rational, and internal process approaches. As Jeffrey indicates that major change often means the disappearance of organizational culture and the alienation of people, Hellyer's opposition was to be expected.⁷ But while Hellyer was a rational manager, his overall leadership left much to be desired.

Assessing the Justifications for Organizational Change and Management Reform

After the Second World War there emerged a growing sense that a corporate "culture" would allow for the linking of general management theory and organizational ideas. A basic articulation of concepts, policies, and beliefs, provided a sense of direction for firms and their employees, and success was dependent on mixing values, structures, and systems which would guide the institution.⁸ In defence, the new philosophy that underpinned integration and unification helped give rise to a new culture at DND, one that placed emphasis on management and slowly replaced traditional military values and culture. The articulation of new concepts, values, and policies provided a new sense of direction, albeit one that was highly criticized by those within and without defence. In particular, it was criticized for failing to properly incorporate the values of traditionalists who felt a strong connection to the historical heritage of the military and its ethos, and for establishing a structure that seemed to diminish the military's traditional role as a key source of advice for the Minister.

⁷ Ibid., pp. 39-40.

⁸ Wren, pp. 368-369.

This begs the question, was the management reform justified? On the surface it might have appeared so. The problems of defence were real and the policy direction indicated by the 1964 *White Paper* seemed to address them. The overall philosophy of rationalization stood to improve the efficiency of management through improved decision-making, reduction of the committee system, elimination of duplication, and savings through personnel attrition. Despite controversy, Hellyer had evidence to indicate that the plan was legitimate. Previous statements calling for unification existed, there were already established integration efforts, and the philosophical justification provided by the Glassco report bolstered his perspective. This was in addition to Hellyer's reading of the financial and equipment situation. Furthermore, Hellyer had senior advisors who backed his plan. While removing opposition to unification within the military opened the door for the promotion of those willing to back his agenda, the degree to which senior military supporters of Hellyer simply reflected a desire for personal gain was not explored in-depth in this thesis, and cannot be concluded with any certainty. Even if his supporters simply sought career advancement, in the end their support still served to reinforce in Hellyer's mind the rightness of the path that he was taking. Moreover, removing opposition is an accepted part of managing large change initiatives. The creation of a guiding coalition with the power to lead change and the removal of obstacles is part of the change management process.⁹ What is more, changing structures that undermine the vision is also part of the process.

This outward appearance of legitimacy holds up less when a deeper analysis is applied. While the Glassco Commission was conducted in the early 1960s, only a few years before Hellyer began his reorganizations, and with the intent to provide advice and feedback on defence, it would appear that Hellyer would be justified in taking that advice. However, no substantive in-depth framework was provided for reorganization and there was a lack of analysis of exactly where and how economies would be found in defence administration. Moreover, the degree to which the Commission fully understood

⁹ Jeffrey, p. 20.

the intricacies of defence management can be questioned. More importantly, Hellyer asked for very little advice in investigating defence when he became Minister and the big ideas laid out in the *White Paper* were his alone, not the result of senior military consultation. With respect to the policy direction of creating a mobile, mechanized force, this had its own internal contradictions. Moreover, the costs and resources needed to make it a reality were greater than Hellyer anticipated. In fact, not even his political colleagues were in total agreement with the policy or the costs it would require. What is more, when Hellyer handed the plan to military experts to figure out how to implement, they were at a loss as to how to make it a reality as Hellyer envisioned. And while savings were to be achieved through structural reorganization, the estimate of 25% savings to be redirected to capital equipment was an arbitrary number. In fact, no financial studies on where huge sums of money could be saved was ever made and so there was little concrete evidence to support the idea that integration and unification would lead to substantial economies. Without such a base of evidentiary support, reorganization was indeed an ambitious and curious plan.

From an operational perspective, unification had little apparent strategic value. It was never clearly addressed how unification would provide operational benefits based on the current force structures and strategic perspectives. Instead, unification was argued to provide effectiveness to the kind of force mobile force envisioned in the *White Paper*—however this type of force never fully came to be, and therefore the strategic value of unification was greatly diminished. Finally, it would have been obvious to Hellyer that the unification phase was to come into great conflict with the cultural elements of defence, creating a storm of controversy. Therefore, while an overall rational management perspective was not unjustified, there was little about his particular policy approach that was defensible. The outward logic of unification as Hellyer and his colleagues explained it was never able to fully overcome the concerns regarding its value and potential costs.

There is one aspect of Hellyer's program, however, that was of greater value than has been given credit for—the principles of management that were infused within defence policy-making. The charge that Hellyer introduced inappropriate management principles into defence is less substantive than the criticisms with respect to his unification plan. The complex Cold War environment was such that technological sophistication and the complex variables of policy-planning and strategic assessment required new kinds of expert knowledge. Writing in 1959, General Foulkes stated that there were no limits to the expenditures required in the field of early warning air defence—the principal means of protecting North America. Rapid strides in technology were expected to accelerate, bringing into doubt western military concepts and budgetary limits.¹⁰ This necessitated a greater degree of management acumen. The involvement of civilians and expansion of the position of the DM was a way to augment traditional leadership with a greater degree of management analysis.

The modern management principles and tools brought to defence were consistent with the trends of management in the Cold War, particularly rationalization and control within decision-making. Methods such as PPBS and Systems Analysis had a clearly stated role and were themselves not new. Moreover, at a conceptual level the evolution of defence management was moving in a direction that placed more emphasis on management and managing, especially as the experiences and expertise gained during the Second World War were becoming less relevant. Increasing forms of integration, rationalization, and bureaucratization of the military was a decades-old phenomenon. Therefore, the changes instituted in the 1960s were consistent with the evolutionary direction already occurring within defence, providing a degree of relevance. Moreover, there is no real consensus that private sector management concepts are inapplicable to the public sector, including the military. In describing his “business” approach, Hellyer made sure to highlight the fact that the military institution is unique and that modern management principles were understood to be within this distinctive context. A great

¹⁰ The Directorate of History and Heritage, Department of National Defence (DHH), 73-1223 (Fonds of Robert Lewis Raymont), vol. 123, file 3105, Charles Foulkes, “Canadian Defence Problems,” 30 July 1959, pp. 21-22.

degree of nuance is therefore required in assessing the validity of the defence reorganizations that started in 1963. While not a perfect process or a perfect outcome, both the general philosophy that existed at the highest level of the change, and the management approach at the lowest level were justifiable, even if Hellyer's general policy direction was questionable.

In many ways Hellyer was acting as a rational manager of institutional organizations. As has been outlined, the job of managers includes the search for the optimum organizational fit, balancing different organizational needs and values. Hellyer did not intend to eliminate the power and authority of the military side of defence nor destroy traditions and effectiveness. Instead he sought a new equilibrium between these features and the financial aspects of defence, the unity of its planning and programming, and its civilian management. Like Ministers before and since, finding the right balance has been a continuous and important job of defence managers, albeit elusive.

A More Nuanced View of the Management Era

We can conclude that the idea of the Management Era as articulated by Bland is indeed a very useful concept that neatly arranges post-war defence management thought between two competing value systems. However, in discussing such a conceptual framework, there must be subtlety to its understanding. It is perhaps too neat an arrangement to draw a hard divide in the history of defence management, splitting it into two sections between pre-1964 and post-1964. After Hellyer arrived as MND, there certainly was a growth of managerial concepts in defence which flourished in the following decade. However, such a history must be seen as an evolution, not a revolution. The period preceding Hellyer was not unconcerned with managing and management, and the difference between civilian and military aspects within DND were perhaps not as acute between the pre- and post-Hellyer days as might

appear.¹¹ The reorganizations were certainly a monumental event in defence, even revolutionary. However, while a new era of defence was ushered in with Hellyer, it was also part of an evolution of management. Scientific management and philosophies of rational management are indeed salient features of the 1960s defence arena, however, their place in Canadian defence management at DND must be understood within their historical context explained above. Managers in both defence and the private sector had been searching for these values in institutional management for years, even decades. And in defence, there are hints of the scientific management concepts pre-dating Hellyer. Moreover, the growth of civilianization often pointed to as a result of Hellyer's reforms—or more accurately the consequences of the establishment of NDHQ—might not fit nicely into the Command/Management Era dichotomy, either. Critchley's work questions the idea that pre-unification era saw less civilian control over defence and military ranks, or that the military side had more control than civilians.¹² The awareness of this history reduces the saliency of the unification period as the primary source of criticism for the increased managerialism and the subsequent civilianization trends based on inappropriate management concepts.

The Nature of Defence Management

Management processes and organizations are highly vulnerable to changing perceptions of defence problems and how to fix them. The sensitivity of the department to a single function (such as procurement/program management) and the sensitivity of the organizational structure to attempts to adjust one of those functions is indication of how defence can be understood as a complex system—a system of management, procurement, budgeting, command and control frameworks, and civil-military relations. This system is in turn tied to a larger system of defence, foreign affairs, economics, and

¹¹ W. Harriet Critchley, "Civilianization and the Canadian Military," *Armed Forces & Society* 16, 1 (October 1989), p. 126.

¹² *Ibid.*, pp. 117-136.

partisan politics. Where one problem is connected to another, a chain reaction of management change can occur when attempting to fix it. Attempts to adjust to budgetary issues, procurement problems, policy implementation, or international commitments can overwhelm defence managers and have a critical impact on the entire framework. More importantly, the organizational framework is often targeted as the solution for addressing defence problems, whether they are political, military, economic, or policy problems. In the 1960s and 1970s, different sets of investigators turned their eye to specific issues of defence management, the outcome of which were new management and organizational designs. This is evidence that defence managers constantly search for the best organizational scheme as Quinn and Rohrbaugh outline.

Different personalities are important in this way. Varying perceptions of organizational ills and cures and different management approaches and philosophies will influence the outcome of the defence institution. Claxton made the decision not to attempt full unification of the Armed Forces while Hellyer decided the best organization was a unified one with a single CDS. On the other hand, Donald Macdonald felt that management problems persisted and set the course for great change based on the investigations of the MRG while it was subsequent Ministers who decided how to implement the MRG recommendations. At a higher level, Prime Ministers play a role in both allowing MNDs to effect change and through their involvement in setting new defence policies and priorities. Key personalities make their own mark on defence, intentionally or not and with different motivations and inspirations. In this way, the management, administration, and organization of defence can often be victims of leadership turnover. From the time Paul Hellyer left the Minister's Office in September 1967 to the creation of NDHQ, four Ministers of National Defence rotated through the portfolio, along with three separate Chiefs of the Defence Staff and a new Prime Minister over the same period. The degree of change that occurred from 1963 to 1972 was incredible.

An important lesson that is borne out by this history is that policy is evolutionary in nature, not revolutionary. The history of policy outlined here shows a trajectory of steady development, interrupted by moments of critical choice. Hellyer's reforms were such a moment—they represented a turning point, a critical decision about the future of defence within its evolutionary course. What to do with the MRG report and its recommendations were equally a moment of critical decision in defence policy. The history indicates that the reorganization of 1972 was largely a consequence of the historical trajectory that began by Hellyer a decade earlier, and likewise, the history of Canadian defence in the 1980s and early 1990s was in a very fundamental way shaped by the 1972 reorganizations. What we see is that there is a great deal of inertia and momentum in policy development in defence. Periods of evolutionary calm create an environment resistant to change, where the moments of critical decision come with great difficulty—but once under way and decisions are made, it is very difficult to go back. The momentum that results makes it difficult to undo decisions, the cost of which can be very high.

Not surprisingly, as defence policy is evolutionary, successive change attempts build on those that come before, creating interplay between different goals, recommendations, and policy ideas of subsequent managers. As a result, new structures often contain the DNA of the organization that came before. The vulnerability of defence organizations mentioned above was affected by different management approaches and interpretations. For example Hellyer was inspired by Glassco and other experts who felt unification was the natural direction for defence operations. But for the MRG team members, Hellyer misunderstood key features of Glassco's recommendations—he took the report's advice with respect to the greater role of the DM, but within the context of full unification which was never the intent of the Commission. At the same time, it has been argued that the Glassco Commission investigation into defence never fully understood the true nature of administering the military—for example, the idea that the purpose of DND was primarily one of support, not command and control. It could therefore be said that as a source of evidence and advice for change, it had built-in defects. In

making use of these recommendations, Hellyer imbedded the perspectives of the Glassco investigators into the organization.

In a similar way, recommendations were sometimes implemented only in part, with equally important consequences. A clear example is the implementation of the MRG, which was not done exactly as the report had laid out, leading to the DM and CDS as being placed as coequals in the organization instead of the CDS as subordinate to the DM. The interpretative nature of defence management and organization was a key driving force, particularly with respect to the ideal power arrangement between defence actors. Therefore, as the years passed by and organizations built on previous change, often attempting to entrench, augment, or even significantly alter what came before, modifications were like a game of bureaucratic broken telephone—the final product was a distortion of its earlier version because of recommendations which were implemented in piecemeal, management and command philosophies which were not always fully understood, and individuals who had their own interpretations of the defence environment. While the overall guiding philosophy of rationalization and control was a motivating force for change, the final outcome was never certain. Each defence manager influenced the path that the organization took and the nature of policy-making over the years through their own perspectives and their interpretations of their predecessors.

Final Thoughts

The reorganizations started in 1963 were not brought about by a loose cannon Minister of National Defence. They came about due to the reality of the defence environment, in conjunction with Hellyer's reading of the strategic nature of defence. Defence management had shown weaknesses which he witnessed as Opposition critic and which others had articulated, such as inter-service rivalry and declining capital equipment expenditures. In undergoing integration/unification in the name of rationalization and control, he accelerated a process that had already begun before him. While the

weaknesses of his leadership have been outlined above, and this thesis has highlighted problem areas of his reforms (and the reforms of subsequent leaders), he was a rational manager who displayed the qualities of a calculating reformer and politician. Despite his significant miscalculations—such as the degree of savings unification would achieve or that unification would create a single loyalty stronger than that of the services—there was a logic to his plans which he reiterated throughout the implementation, albeit usually in too general terms and without much clarity. It was, however, a plan that many bought into.

Hellyer's suspicion of military advice, the ascendancy of civilian decision-makers, and his personal relations with the military certainly bred further mistrust. This does not, however, necessarily make him a loose cannon, nor do other controversial aspects of his plan; speed was required for political necessity, civilian analysts were seen as necessary in the technologically complex Cold War, and one does not have to have articulated and used specific management theories to be understood as being managerial. It is hard to defend his lack of consultation in deciding to undertake the reorganizations and his approach of letting others figure out how to implement his big ideas, however, integration was a rational approach to addressing the problems of defence at the time. Unification and the creation of NDHQ, while problematic and controversial also had their reasoning which colleagues and many within the public accepted. Reformers took the idea of rationalization further than many might have been expected or desired, however they were still extensions of the basic premise of rationalization and control. Furthermore, the philosophy of rationalization was not problematic per se—it was a goal and feature of bureaucratic organizations for decades. The history of Canadian defence prior to Hellyer shows this. Management of defence was constantly evolving to find the best design for its particular needs and integration, unification, and the creation of NDHQ fit within this context. All of the disruption of those ten years is part of the never-ending quest for efficient and effective management of defence.

And while the reorganizations did not solve all the problems of defence, defence prior to this period of accelerated management reform was itself not without problems either.

The so-called management era was really about responding to and coping with change. This was bound to be difficult as change and traditions were inevitably going to come into conflict. There was great difficulty in attempting to honour traditional conceptions of civil-military relations and defence management, while also avoiding fear of change and the need to challenge old ideas. Ministers and reformers certainly did not have all the answers, nor were they exemplary in their attempt to change defence for what they saw as the better. Their leadership left something to be desired and their assessments appear to have overestimated the degree to which management principles could solve the problems of defence, particularly with respect to the ability to make defence decision-making a highly rational process with highly predictable outcomes. There is indeed disagreement over the degree to which defence can be a rational process. Many argue that it instead represents a bureaucratic approach to decision-making where actors are not able to gain access to the full range of information needed to make completely rational decisions, and where outcomes are achieved through bargaining, hedging, and reliance on instinct and intuition. Be this as it may, it is not the goal of this thesis to make a conclusion on the fundamental nature of defence decision-making, but to understand its historical trajectory and the ideas that guided that trajectory in Cold War Canada. In the 1960s and early 1970s that trajectory was guided largely based on the idea that it *could* be more rational, and even if defence was characterized by a high degree of uncertainty—that the goal of overcoming that uncertainty, and making defence as rational, controllable and predictable as possible, was a worthwhile pursuit. In an environment of bounded rationality, the reorganizations were indeed an attempt to unbind it.

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