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Averting Operational Paralysis

"A Logistician's Perspective"

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Averting Operational Paralysis: A Logistician's Perspective

“We will formulate the strategy of tomorrow by the way we spend and manage our defence budget today.”¹

- Vice Admiral Turner

Introduction

A defence strategy's primary purpose is to minimize the overall risk to national security, both by addressing those challenges that exist in the near term, and by being prepared to meet those challenges that emerge over the long term. A defence strategy accomplishes this by the prudent allocation of resources- the means available to achieve the strategic end of minimizing the nation's security risks. As it serves as the blueprint for resource allocation, it is extremely important to "get the strategy right." Most debates over the defence budget concern "How much is enough?" to fund the Defence Services Program (DSP). Regrettably, very little discussion has been focused on the more critical question of "How wisely are we spending?" our defence dollars.²

Successive cuts to funding, infrastructure and personnel over the last several years have seriously constrained the Canadian Force's (CF) ability to undertake operations while the operational tempo has increased significantly. The 1994 White Paper underscored this fact stating that "fiscal considerations are a key factor in formulating an

¹ Vice Admiral Stansfield Turner, *Convocation Address to the 89th session of the Naval War College*. Naval War College Review, Vol. L1, No. 1, Winter 1998, p76. [<http://www.nwc.navy.mil/press/review/1998/winter/art8-w98.htm>]

² Andrew Krepinevich, *The Defense Budget: A Strategic Perspective by Andrew Krepinevich*- Appearance before the U.S. House Budget Committee, Mar 11, 1999. Mr. Krepinevich examines the questions "How much is enough?" and "How wisely are we investing?" p1-14. [<http://A1/budget1.strategy.htm>]

appropriate and realistic defence policy."³ Moreover, it is notable that the defence budget for 1999 is approximately half of that forecasted in the 1987 Defence White Paper. Despite these major budget cuts, there are still examples where financial losses have been attributed to "a clear breakdown in accountability."⁴ In practical terms, this has had a major impact on CF's operational capability and will continue to do so unless commanders and central staff become more effective and efficient in the management and utilization of allocated resources.⁵

Considerable work has been written on resource management at the strategic level; however, there is a dearth of materiel on this subject at the operational level. It is, nevertheless, important to sensitize operational commanders in this subject area considering the current "fiscal squeeze" in which the CF finds itself and in recognition of the fact that resource management transcends all levels of conflict, with its particular impact on the "operational art"⁶ and the ability of the CF to conduct to operations. As part of the "operational art," logistics involves those activities to support forces in campaigns and major operations within a theatre of area of operations. Within the financial realm, it includes identifying resource requirements sufficient to ensure

³ Canada, Department of National Defence, *1994 Defence White Paper*, Ottawa, p.10.

⁴ LGen. R.R. Crabbe, *Accountability On Deployed Operations*, 1450-1 (DCDS) 13 July 1998, p1

⁵ B-GG-055-004/AF-000 p 7-3 and GL-E-2. Operational Capability can be defined as a state of having sufficient power, skills and ability to carry out a military activity or operation. Environmental Chief of Staffs and Group Principals, collectively called supporting commanders are responsible for providing suitably trained and equipped forces for sustaining their assigned capabilities as derived from the White Paper and Defence Planning Guidance document.

⁶ B.J.C. McKercher and Michael Hennessy, The term "operational art" refers to an intermediate phenomenon existing between discrete tactics and wider strategy. It also generally refers to the practice of generals or their staff colonels for achieving operational success. *The Operational Art* also provides a compelling argument that as the content, cope, and importance of operational art has evolved over time in consonance with the changing nature of war, the paradigm of the operational level also clearly holds budgetary and force utilization implications. p 1 & pp. 141-142.

continuity of operations through all phases of a campaign or an operation and balancing resource consumption with the need to build up logistic support for subsequent operations.⁷

Aim

This paper argues that, unless radical changes occur in the way that DND/CF manages its limited resources, the degradation in the operational capability of the CF will continue. To this end, it is contended that, as budgets are reduced, commanders and central staff will have to place a much greater emphasis on logistics particularly in realm of comptrollership and resource management, if they expect the CF to survive as a credible and operationally viable entity.⁸

Background

All military and indeed, all civilian members of the Department of National Defence have an obligation to ensure the efficient and effective use of tax dollars.⁹ There is a public and Government-wide expectation that managers and Commanders will ensure that all the activities they undertake, serve the public's best interests in terms of

⁷ B-BB-005-004/AF-000, *Canadian Forces Operations*, p27-2 provides an excellent outline of operational logistics activities in the CF.

⁸ Consulting and Audit Canada, *Survey of Best Practices of Comptrollership*. [<http://www.tbs-sct.gc.ca/Pubs-pol/dcgpubs/TBM-133/SBPC-e.html>] The Comptroller General of Canada defines Comptrollership as the "essential, integrated business processes that must be in place in any organization to manage financial risks, understand the financial implications of decisions before they are taken, properly tracking and accounting for financial transactions and operating results of all financial decisions; and protecting against fraud, financial negligence, violation of financial rules and principles, and losses of assets."

⁹ QR&O Art. Vol. I, Article 4.02 (d) states that a general responsibility of all officers is to ensure the proper care and maintenance, and prevent the waste, of all public and non-public property within the officer's control.

optimizing its financial resources and that in conducting those activities, they are, and are seen to be, conscientious and ethical in all respects. The 1999 Federal Budget marks the first time in the past several years that DND has not had to deal with additional funding reductions. Nevertheless, while the Department is still very much involved in implementing spending reductions associated with Defence Expenditures Reductions (DER) 94 and Program Reviews (PR) I and II,¹⁰ many decisions aimed at improving logistics support at the operational level have fallen short of their intended purpose, i.e., improvements to combat support effectiveness.

The subject of comptrollership and resource management will be approached by first providing a brief overview of the Defence funding situation since the early 1960s to highlight the emergence of the "commitment-capability gap." Next, the make-up of the Defence Budget will be explained in order to illustrate how capital funding plays a pivotal role in CF future capabilities which will be followed by a brief look at how the Department has tried to cope with reductions via re-engineering/downsizing. Finally, current shortfalls in procurement, information technology and existing resource management framework will be reviewed concluding with a recommendation that the CF needs a revitalized integrated logistics blueprint with an increased emphasis on comptrollership and resource management to support its warfighting strategy well into the next century.

¹⁰ Canadian Government. "1995 Budget Impact Statement" This initiative was designed to reduce government spending to balance the federal budget and to reduce the government's debt. For DND, Programme Review resulted in a reduction of defence spending from about \$12 billion a year in 1993-94 to about \$10.5 billion in 1996-97 [http://www.dnd.ca/eng/dp/Budget_Info/Budget95/Budget95.html].

Discussion

Resource Allocation- An Overview

The allocation of government resources is influenced by numerous factors and competing demands, with decisions made within the context of overall governmental priorities. Within DND, the budget represents the government's plan of action to execute its intended defence policy.¹¹ Since the early 1960s, the proportion of both government spending and Gross Domestic Product (GDP) devoted to Defence has steadily declined. As a result of this trend in recent years, Defence has accounted for only about 5.2 percent of federal spending and 1.2 percent of GDP, the latter figure being the second lowest in NATO.¹² This overall decline in the priority accorded to Defence by the Canadian Government during the last decade has had a serious impact in terms of personnel reductions and equipment procurement and maintenance. Moreover, the CF's operational capability has continued to decline in the last decade, and the government's unwillingness to deal with this decline, has made it obvious that the CF is no longer capable of handling the full spectrum of tasks as outlined in the last White Paper.¹³ This has created the current "commitment-capability gap" and has forced the CF into a situation in which difficult decisions have to be made that impact directly, and often adversely, on

¹¹ David B. Dewit and Leyton-Brown, *Canada's International Security Policy*, Scarborough, Ont; Prentice Hall Canada Inc. 1995 p.413.

¹² Department of National Defence, *Making Sense Out of Money*, 1998 edition p. 5 and p. 53. The 5.2 percent figure is lower than shown elsewhere due to accounting consolidations. The figure should be 7 percent. Updated projections have been provided in the 1999 budget.

¹³ Business Council on National Issues, *Canada's Defence Policy: Capabilities versus Commitments*. While prepared in 1984, many of the findings and recommendations regarding the shortfalls in CF Capability are still relevant today. Despite this and similar studies on shortfalls in CF capability, Mr. Eggleton, as recently as 19 Oct 99, insists that Canada is still able to meet all of its military commitments, despite the cutbacks. The question is do our allies believe that we are contributing our share of the defense burden?

"operational effectiveness."¹⁴

The Components of Defence Expenditures

While GDP defines the ultimate constraints on what the nation can afford for its Defence, in the absence of total war, the operational constraint is the total budget of the Federal Department.¹⁵ Generally, budgetary expenditures can be classified according to three major categories: personnel expenditures, operations and maintenance expenditures (O&M) and capital expenditures. Each type of expenditure is necessary in the production of military capability, but the proportions required for any particular capability vary. Air and Maritime capabilities, for example, tend to be capital-intensive while Land capabilities generally tend to be manpower intensive.¹⁶ Thus, the distribution of the defence budget in terms of these expenditure categories will depend upon the particular mix of capabilities and capability levels which the defence budget is expected to produce. For example, between 1964 and 1974, despite a precipitous decline in personnel, the share of defence budget allocated to personnel expenditures continued to rise. These opposite trends can be explained by the rapid pay increases for the forces over that period, particularly as a result of the 1964 decision to establish parity between armed forces and public service pay rates (Figure 1).¹⁷

¹⁴ National Post, Editorial, 20 October 1999, "U.S. academic wrong about our Forces, Eggleton insists." Mr. Eggleton is quoted as saying that he has been "assured" by the CF that it "can meet all" of its requirements including the provision of a brigade group for overseas commitments. He also stated that he has asked cabinet for more money in next year's budget [<http://bbs.cfc.dnd.ca/spotlight.en.html>].

¹⁵ David B. Dewit & Leyton-Brown, *Canada's International Security Policy*, Scarborough, Ont: Prentice Hall, 1995 p.417.

¹⁶ Ibid, p 419.

¹⁷ Ibid, p 420.

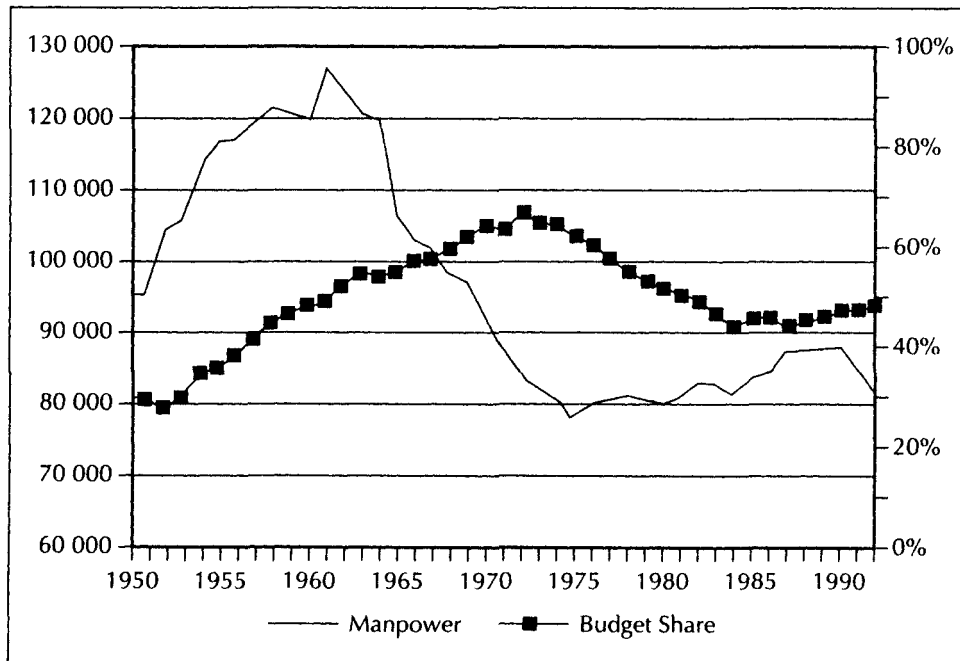


FIGURE 1 Regular Force Manpower Levels and Defence Budget Personnel Share 1950-1992

By 1972, personnel expenditures were taking almost two-thirds of the defence budget, leaving less and less room for other expenditures, particularly for capital equipment.¹⁸ One could conclude from this, that during periods of high rates of capital expenditures followed by low rates of capital expenditures, the average age of military assets will increase, thus becoming less militarily effective and increasingly expensive to operate and maintain. A case in point is the Mobile Support Equipment (MSE) fleet at 4 Wing Cold Lake in which the operation and maintenance costs of vehicles has exceeded the original costs of the fleet.¹⁹ Similarly, the reliability of the Sea Kings has been repeatedly called into question as they make unscheduled landings due to electrical, gearbox and engine troubles. Acquired between 1963 and 1969, these helicopters have

¹⁸ Douglas Bland, *Canada's National Defence*, Kingston: Queen's University, pp. 282-289.

¹⁹ Major Joseph Gillis, WTNO, 4 Wing Cold Lake, *Cost/Procurement Ratio-Major Equipment Vehicle Analysis & Review*. 20 Sep 99, p.2-4. (The report is in the possession of the author).

become "maintenance nightmares" as the airframes have become riddled with cracks and require over 30 hours of maintenance for each hour of flight, meaning they are available to fly about 40 percent of the time²⁰.

It is also important to recognize that current capital expenditures are largely "irrelevant" to "current" military capabilities, but greatly affect CF future capability. It often requires lead times of up to two decades to acquire assets, such as fighter aircraft, or ships, representing our capability.²¹ Once in the inventory, because of their high costs, they are likely to remain there until the end of their useful life or beyond, as is the case for much of the equipment that the CF operates.

The steep decline in the stock of military equipment that occurred between 1964 and 1973 coincided with a reduction in manpower from a 1964 level of just under 120,000 to a 1973 level of 78,000. This trend led to continuing dramatic erosion in a total military capability, as the rate of decline of effective equipment was even greater than the rate of decline in manpower. Much of the total military capability given up in the sixties and seventies had been regained in the early eighties. However, as defence budgets declined in the late 1980s, operating and maintenance costs took a larger and larger share of the defence budget, and once again began to displace the share available for capital. Until 1991-92, capital only received the funding residual after other requirements were satisfied; hence, in a period where other component costs (personnel & O&M) were

²⁰ Dean Beeby, The Halifax Herald Ltd. Nov 1, 1999, *Chopper Fuel Leak Stops Exercise* [http://www.herald.ns.ca/cgi-bin/home/display_story?1999/11/01+119.raw+Canada] p.1.

²¹ Dept of National Defence, *Shaping the Future of the Canadian Forces: A Strategy for 2020*, p 1.

rising quickly and the Department received only modest funding increases, less and less was available for capital.²² It would be reasonable to deduce that unless significant increases are made to the Defence budget, there will be continued pressures to realign the three categories discussed above.

Since it is highly unlikely that the total defence budget will see any significant increase in the foreseeable future, as witnessed by remarks made by Mr Eggleton at the NATO Defence Minister's Conference held in Toronto 22/23 September 1999, tough choices will have to be made. Specifically, when pressured by the U.S., which shouldered much of the military burden during the air war against Serbia, for increased spending by the NATO allies, Mr. Eggleton stated that he would try to "squeeze more out of the existing defence budget." However, he added, that he is already looking for "ways to do more with less" within the Armed Forces and he does not expect Ottawa will devote any more money to the military.²³ On 19 October 1999, Mr. Eggleton's position on funding for the CF had apparently changed, since it was reported in the "*National Post*" that he has "asked cabinet for more money in next year's budget." Mr. Eggleton also insisted that Canada is "still able to meet all of its military commitments, despite a new study that says it would be hard-pressed to do so because of cutbacks." Considering that the auditor-general and the military itself have said that "billions more dollars" worth of equipment are needed to replace the 1960s and 1970s vintage arms currently used, it is

²² Department of National Defence, *Making Sense Out of Dollars*, 1997 edition, p 30.

²³ Editorial, News Tickers, 22 September 1999, *U.S. urges more money for tools of war*. [<http://www.canoe.com/National> Ticker/CANOE-wire.NATO-Meeting.html]. During the NATO Defence Minister's Conference held in Toronto 21-22 Sep 99, Mr Eggleton was quoted as saying that any increase support to NATO would have to be found internally to DND.

highly unlikely that the CF would receive sufficient funding to address the problem in the near future."²⁴ In any case, unless CF personnel become more efficient and effective resource managers, "the task of ensuring adequate levels of military forces, both for the immediate and longer-term future," will continue to be an enormous challenge.²⁵

The Challenge in the Current Fiscal Climate

Major cuts in Headquarters and support activities are meant to re-direct more resources to the combat forces and less to administrative overhead. As well, initiatives under the umbrella of Defence 2000 were to ensure the best possible use of resources at all levels of the organization. This included the delegation of decision-making authority, the empowerment of personnel, the streamlining of administrative procedures and the promotion of new and innovative ways of doing things; however, one must ask how well have we done and are we spending our funds wisely?

In responding to these queries, Office of the Auditor General (OAG) reports were used extensively to provide an independent and reliable source of information. The first comprehensive audit of the Department of National Defence was conducted in 1982. Since that time, OAG has examined almost all of the major functions of the Department, particularly management and support systems.²⁶ Major challenges remain in operations, management and modernization, and progress has been very slow in resolving known problems.²⁷ While the OAG had not looked directly at military operations, two areas that

²⁴ National Post Editorial, 20 October 1999, "U.S. academic wrong about our Forces, Eggleton insists." [<http://bbs.cfc.dnd.ca/spotlight.en.html>].

²⁵ *Defence Planning Guidance* (DPG 2000), p 1-3.

²⁶ *1984 AG Report*, Chapter 12, p12-1.

²⁷ *1994 AG Report*, Chapter 24, p 24-9 to p 244-11. Audits since 1982 can also be found on the OAG World Wide Web site at <http://www.oag-bvg.gc.ca>.

are critical to their successful conduct were examined: the systems that support operations, and the training and readiness of the CF to conduct assigned missions and tasks.²⁸ Support systems should be economical and efficient in peacetime, while maintaining the capability to move quickly and smoothly to a full wartime footing, otherwise why spend money on them? The OAG found that most of the Department's support systems contained "significant deficiencies" that would limit the Forces' ability to go to war. This capability was most vital during the Cold War preceding 1991, but problems remain largely uncorrected. In 1987, the OAG reported that the materiel support system was designed to meet peacetime objectives but would not be able to meet wartime requirements.²⁹ In 1990, a look at the human resource management functions of classification, conditions of service, and training were not compatible to force generation for wartime requirements. The cost of delivering training was about three times as high as that at provincial community colleges.³⁰ In 1990, an audit of medical support, called into question the Forces' ability to provide a complete and continuous system of medical support in wartime.³¹ In 1994, all three major support functions were re-assessed and it was found that many critical problems were still unresolved.³²

More recent audits imply that several problems still persist. For example, in response to the 1987 audit, DND stated that upgrading the Canadian Forces Supply System (CFSS) was "being developed and progressing as expeditiously as possible."³³

²⁸ *1984 AG Report*, Chapter 12, art 12.1-12.2

²⁹ *1987 AG Report*, Chapter 10, art 10.19

³⁰ *1990 AG Report*, Chapter 22, art 22.24 p. 523.

³¹ *Ibid.*, Chapter 23, art 23.21 pp. 543-544

³² *1994 AG Report*, p 24-9 to 24-11

³³ *1987 AG Report*, Chapter 15, arts 15.84-15.90

However, as reported by OAG in 1996 and 1997, the implementation contract was not signed until January 1995 and while completion was scheduled for Sept 1999, it was possible the date could slip another three to six months.³⁴ Implementation of the CFSS upgrade in the field is now expected to occur in the spring of 2001 and the supply system upgrade will only meet the sponsor's "minimum functional requirements" within the original funding ceiling of \$289 million.³⁵

As well as operating unsuitable support systems, the OAG observed that the CF face problems with their readiness to go to war. Exercises are not conducted and readiness is not being assessed. For example, deficiencies in collective training have been reported on numerous occasions and still remain in the Land Forces. In March 1999, the Commander, 1 Canadian Mechanized Brigade Group (1 CMBG) expressed concerns to his superior HQs over the very low allocations of field time to the soldiers of 1CMBG in order to maintain focus on combined arms training within the context of a general purpose combat capability. In his assessment to the Commander Land Force Western Area, the Commander stated that 1CMBG "must retain the focus on training within the combined arms team. To do any less, regardless of the type of operation the Brigade must perform, will degrade the soldiers' skill sets and, more importantly, place the soldier at great risk."³⁶ Stephen Biddle's analysis of the Gulf War convincingly argues that the "decay of today's combat skills would not only forfeit the ability to exploit current

³⁴ 1988 AG Report, Chapter 15, art. 15.84. The CFSS Upgrade has undergone a major upgrade that was suppose to be completed by 1995 at a cost of about \$250 million dollars. The project has incurred numerous delays and as of Oct 99, the CFSS Upgrade Project has yet be completed.

³⁵ PMO CFSS Overview, *Status of CF Supply Systems Upgrade (CFSSU)*, 21 Oct 1999.

³⁶ Col. Andrew Leslie, *Impact Assessment on Reduction of 1 CMBG, FY 99/00*, 3000-1 (Comd) 23 Nov 1998. The Comd, 1CMBG expressed his concerns to the Comd/Land Force Western Area, over the very low allocations of field time to his soldiers and its potential impact on operational effectiveness.

technological advantages against less-skilled opponents, but, would also enable future challengers to turn the tables by acquiring better technology themselves and using it to its full potential" against inadequately skilled coalitions. He cautions that "one should be wary of proposals to protect modernization funding at the expense of training and readiness as a less-skilled military is more dangerous than less-advanced technology."³⁷

The OAG conducted another audit in 1996 to assess the progress being made to improve support productivity across the Department. They found that little had changed either in "departmental culture" or in the "efficiency of support services." While the introduction of Business Planning into DND/CF had increased the awareness of the financial implications of decisions and has led to a certain level of accountability within the Department, the tools required to measure the resources by activity or to measure successes were still not available. Specifically, managers have no cost or performance information available to help them make business decisions after several years of business planning and activity-based costing development.³⁸ I would contend that delays in providing cost and performance information were primarily due to the increased operational tempo in the CF during the last several years, as well as the increased effort placed on rolling out the new Financial Managerial Accounting System (FMAS) throughout the Department in FY 97/98. As a result, personnel resources were not available to dedicate the required effort to implement these new cost and performance initiatives.

³⁷ Stephen Biddle, *Victory Misunderstood, What the Gulf War Tells Us about the Future of Conflict*, *International Security*, 21 No.2 (Fall 1996), p177.

³⁸ 1994 AG Report, Chapter 24, Art 24.53 & Art 24.58

Other initiatives aimed at reducing Departmental costs included the adoption of the Alternative Service Delivery (ASD) program. The ASD program was launched in July 1995 to review all non-core activities and to decide on the most cost-effective delivery options for providing support services for the military mission. Managers were provided a methodology whereby a program, activity, function or service "where through competition, business case evaluations demonstrate potential for increased cost effectiveness, non-core activities currently conducted 'in-house' could be transferred completely to Canadian industry, or shared with private industry until various partnership arrangements, where practical to do so."³⁹

Since adoption of this methodology, military units and agencies necessary to support operations have been disbanded and their functions either dropped, or shifted to the civilian sector. While claims of "up to 20 percent" savings have been made over the costs of some operations, there are no detailed facts or figures available to show that this level of savings have been achieved. Interestingly, in the opinion of the Conference of Defence Associations, the processes of re-engineering and Alternative Service Delivery (ASD) have gone "beyond prudent limits in terms of providing operational administrative and logistics support to the Canadian Forces." In their view, this is the area where "absence of depth and sustainment capability is most evident in the Canadian military establishment."⁴⁰ The Audit of 1995 concluded that equipment deficiencies and shortages continue to limit the capabilities available to implement the 1994 Defence

³⁹ Department of National Defence. *The Costing Handbook (First Edition)* p 78-79.

⁴⁰ Canada. Conference of Defence Associations, *A Strategic Assessment, Canada's Response To The New Challenges of International Security*, Ottawa:1999, p. 28

White Paper. OAG observations and findings on the three environmental services were as follows:⁴¹

Navy. Gaps exist in strategic surveillance due to a lack of shipborne helicopters and only a very limited capability to exert national will in the demanding Arctic environment due to a lack of submarines.

Army. The army has not kept pace with technology to modernize its equipment, thus leaving it vulnerable to threats in low-level to mid-level operations. Its infantry and armor could be detected, engaged and defeated long before it was known that an enemy was present. Similarly, Canadian artillery could not fire effectively because of limitations on its ability to locate and identify targets.

Air Force. The Air Force faces "a serious risk of obsolescence and capability degradation in a number of key areas" as reported in the National Defence 1997-98 Estimates. Deficiencies in strategic air-to-air refueling and shortfalls in rotary wing assets have placed serious limitations on its ability to support the navy and army.

A review of forecast capital funding also confirmed that unless significant adjustments were made, capital spending could "decline to a very low level."⁴² The OAG analysis found that in the worst case, capital expenditures could drop as low as 9 to 12 percent of the defence budget by 2012-13.⁴³ At the current trend of \$1.4 billion a year on capital and considering that current capital demands for the next five years represent \$11 billion, there would be a shortfall of approximately \$4 billion. Accordingly, the CF

⁴¹ Canadian Government, 1998 AG Report, Chap 3, art 3.26 to 3.41 [<http://www.oagbvg.gc.ca/domino/reports.nsf/html/9803.ce.html>]

⁴² Ibid, p7.

⁴³ Considering desired capital expenditures should be in the range of 23%, a drop in expenditures to this level would have a very significant impact on the CF ability to meet even its minimum defence commitments.

must either double the amount of capital funding for equipment modernization, assuming the budget remains constant, or conduct a major restructuring which invariably has an impact on personnel. As stated earlier, the production of military capabilities depends not on capital investment in a particular year, but on the total investment over numerous years. Hence, neglecting capital expenditures in any given year will have implications for reduced military capabilities over the long term. Based on foregoing findings and overall assessment, it would be difficult to deduce that DND/CF have yet met the "challenge."

Measuring Resource Management Effectiveness at The Operational Level

The practice of comptrollership in the CF is doctrinally rooted with the principle of war "Economy of Effort" in terms of the economic, effective and efficient use of resources and administration (in that logistics is a critical aspect of administration and entails all essential elements of support necessary to facilitate the conduct of operations).⁴⁴

A review of operational level doctrine suggests that financial accountability for deployed operations is not clearly defined and resource management/comptroller doctrine at the operational level of war is lacking. In fact, it would appear that many of the current systems and controls that are in place are designed for a peacetime environment. In July 1998, the Deputy Chief of the Defence Staff (DCDS) in a letter to operational commanders highlighted the need for "increased accountability" while on deployed

⁴⁴ Col. Bob Smith, A discussion paper on the future requirement for "Finance" officers as prepared for the Logistics Officers Training Writing Board. p 1-7.

operations. About \$8 million dollars worth of write-off applications were processed through his office, representing write-offs generated by DCDS-controlled deployed CF operations during the period 1995-1997 inclusive. Of this amount, only \$3.1 million dollars could be attributed to either operational or legitimate administrative losses. The remaining \$4.9 million dollars in losses, were attributed to "a clear breakdown in accountability."⁴⁵

Noticeably absent from Canadian doctrine is a debate on authority, responsibility and accountability and the detailed responsibility of a commander's staff to assist him in carrying out these components of command. This shortcoming, as it applies to resource management, may account for the losses of resources while participating in peace support operations and could therefore, contribute to losses while on combat operations.⁴⁶

To assess how well deployed units perform in the area of resource management, one would have to examine, in detail, areas deployed contracting support and host nation support (HNS) negotiations, the efficiency of pay support to the troops and the indigenous labor force and control and internal review processes for NPF functions. While these all relate to fundamental resource/financial areas, it is suggested that a more relevant measure of resource management effectiveness would be to assess the readiness and sustainability of forces while in theatre as is being proposed for the U. S. Army. This would involve more than listing the available resources and an appraisal of their

⁴⁵ LGen. R. R.Crabbe, *Accountability On Deployed Operations*, 1450-1 (DCDS) 13 July 1998, p1.

⁴⁶ Major Dave Erickson, *Resource Management In Operations - A Case For A Comptroller At Operational Level Headquarters*. Toronto, Canadian Forces College, 1997. P 7.

condition. A readiness and sustainability measure must be "output related" and "time-conscious" in that it must measure the time that a unit can respond to its assigned mission. From a resource management perspective, this would afford commanders an excellent tool for improving the requirements determination process by forcing commanders to cost each type of output. In addition to resource requirement issues, other management concerns can be addressed including the allocation and distribution of existing resources and the evaluation of alternative support structures.⁴⁷

Ameliorating the Situation- A Logistician's Perspective

As the old adage goes "If you're not part of the solution, then you're part of the problem". 'Support' provided to the fighting units to feed the troops, maintain equipment, replenish ammunition, care for and evacuate the wounded and bring forward replacement people and for equipment lost in battle functions consumes 46 percent⁴⁸ of the National Defence Budget each year. Accordingly, logistics (small L)⁴⁹ must play a significant role in addressing this resource situation. If the support fails or is inadequate, the capability of the fighting units will quickly diminish as equipment becomes inoperable, battle losses reduce the size of the troop formation and essential combat supplies dwindle.⁵⁰ To this end, it is proposed that DND/CF's long term integrated logistics blueprint to serve its war-fighting strategy, must consist of progressive and cost-effective procurement

⁴⁷ Robert Shishko and Robert M. Paulson, *Relating Resources to the Readiness and Sustainability of Combined Units* (Office of the Assistant Secretary of Defense (Manpower, Reserve Affairs, and Logistics) III Rand Corp 1981. P v-vi.

⁴⁸ *1996 AG Report*, p34-7

⁴⁹ A-LM-031-000/AG-000, *A Handbook On CF Logistics Branch*. When referring to the Logistics Branch and its component disciplines, it is written with a capital letter and often referred to as "Big L" logistics. When logistics include those functions such as administration and combat service support, it is commonly referred to as small "L" logistics p.1-6

⁵⁰ *1987 AG Report*, Chap 10 art 10.1

practices, improved information technology, metric and performance measurement methods, and a responsive and responsible financial framework as outlined hereunder.

Procurement Practices. The Defence Program Management System (DPMS) is the mechanism used by the Department of National Defence to define and procure equipment for the CF. While work is underway to simplify the process, the current structure is cumbersome, overly bureaucratic and often characterized by an over-abundance of paperwork, committees and over-stringent regulations. In 1992, an audit of procurement by OAG concluded that government procurement policy was not being followed including industrial development initiatives in DND capital projects.⁵¹ A similar audit in 1994 reviewed the overall management system, termed a "basic building block." The report found "significant problems in each of the building blocks."⁵² It went on to state that "Departmental documentation indicates that, during the 1993-94 planning period... the existing policy development system did not provide sufficient guidance on the types of conflict the Canadian Forces should be prepared for. Accordingly, they had difficulty in defining the forces that would meet Canada's needs."⁵³ As part of the 1994 audit, a review of previous audits was completed. They highlight one common recurring criticism, specifically a "lack of strategic direction, especially the lack of complete and approved force structure plans."⁵⁴ "A Strategy for 2020" addresses some of these

⁵¹ 1992 AG Report, Chap 17 Art 17.3 p 411.

⁵² 1994 AG Report, 24-22 & 24.18. The building blocks referred to include: the policy and program development system that gives general direction to NDHQ and the CF; the committee system at NDHQ, through which important resource allocation decisions are made; supporting systems that provide decision makers with essential information on cost and military performance; and, information used to make decisions throughout major headquarters.

⁵³ 1994 AG Report, Art. 24-13.

⁵⁴ Ibid, Art. 24-10

shortfalls; however, the document falls short on the detail necessary to accomplish the ambitious strategies set out therein. Specifically, the immediate challenge is to successfully address the capital funding issue as certain capabilities of the CF are becoming "marginalized because equipment is, or will soon, be obsolete."⁵⁵ As well, force structures are not compatible with the nature of future operations; hence, there is also a requirement to re-examine some of the planned capital purchases to ensure that they are in concert with future CF roles and affordability. For example, one could question the rationale behind the Department's decision to acquire Britain's four surplus Upholder-class submarines and interpret it as an example of DND's determination to direct resources to maintain non-essential capabilities. It could be argued that Canada has no overriding requirement for submarines, with the advent of the post-Cold War. Moreover, the cost of acquiring them in addition to basing, operating, modifying to Canadian standards, and eventually upgrading these vessels could, over the life expectancy of these boats, run into the billions.

In these times of shrinking budgets, one must ask whether the CF can continue to equip itself for the full range of high-intensity warfare in the air, on land or at sea? While these decisions are political in nature, they invariably impact on the availability of logistics resources necessary to create combat forces and to sustain their operations in low to mid-level intensity conflicts. In simpler terms, it will cost billions to maintain

Information Management/Information Technology (IM/IT). In an environment where the Department is under constant pressure to provide improved capability with fewer resources, implementing successful IT can make a difference in force availability and operational capability. Whether enabling rapid response to unexpected situations worldwide or applying new practices for business improvement, the application of IT and the management of change are critical. With reduced budgets and the need to use scarce, trained military staff to their best effect, information technology should be used to automate methodical tasks in essential activities, giving key staff more accurate information and more time to concentrate on strategic priorities.

In 1994, the AG reported that military command and control information systems used to maneuver forces in the field had not been developed in a coordinated way and that sea, land and air systems had little capability to communicate with each other. As well, existing Land Force systems had limited capability for survival on the battlefield.⁵⁶ Notwithstanding these observations of the AG, this deficiency also violates one of the basic principles of Communication and Information System as applied to operations, namely, interoperability.⁵⁷ The interoperability of C2 systems is germane to mission success i.e., commanders must have the communication facilities to enable them to function effectively under a wide variety of conditions to accomplish the mission. From a logistics perspective, this must include acquiring interoperable systems not only within and between CF land, sea and air fighting forces, but also in close coordination with their allies.

⁵⁶ 1994 AG Report, Chap 25, p 25-5

⁵⁷ B-GG-005-004/AF-000, CF Operations, p 31-1 to 31-3

On the financial side of IM/IT, the Financial Management Accounting System (FMAS) has been a contentious issue in the CF. It appears that the system was launched ahead of complementary systems and without an associated management improvement program or built-in redundancies by holding onto the previous system (FIS MK111) until all the "bugs" were worked out. A further cause of disenchantment is that the information now provided does not represent the total costs of the expenses incurred by cost centers (formerly known as responsibility centers). Consequently, FMAS is inadequate for informed decision-making and inconsistent with the concept of responsibility accounting. Under these circumstances, the operational commander has little idea of the financial impact of his decision making, and senior levels of management are severely constrained in the use of real performance indicators based on cost. To address this shortfall, it is important that an Activity Based Costing (ABC), a tool of choice in an increasing number of organizations for business planning, performance measurement and continuous improvement, be integrated with FMAS and utilized throughout the Department as soon as possible. Activity Based Costing was developed in the private sector as a means of capturing the "full" cost of activities or services since many decisions were being made based on arbitrary cost allocations. Once developed and implemented by various companies, they soon realized that when ABC becomes a part of the critical management systems, it represents a powerful tool for continuously re-thinking and improving products, services and processes.⁵⁸ If introduced on a CF wide basis, ABC will make dramatic changes possible by ensuring commanders know on what activities their

⁵⁸ Joseph A. Ness and Thomas G. Cucuzza, *Tapping the Full Potential of ABC (Activity Based Costing)*. Harvard Business Review Vol. 73, No 4, July- August 1995, P 138.

resources are being spent, which, in turn, will allow specific questions to be asked about activities, thus enabling them to explore changes that will enhance efficiency and free up funds for the next campaign or operation.

Performance Measurement. The overall goal of Performance Management is to define a high-level performance measurement framework that identifies the most critical areas for senior management teams to monitor. While it is geared to assessing the capacity and readiness of the Department to meet its obligations and the ongoing effectiveness of the Department's use of resources, the system is not yet fully developed. Furthermore, the performance measures that enable decision-makers to judge how well the CF are operating and where improvements are required are still lacking. As one unnamed Command has reported "The absence of a credible performance measurement system remains a major impediment to the capability planning process."⁵⁹ Once developed, performance measurement systems need to be cascaded throughout the Department/CF so that all resource managers and Commanders have the tools for assessing performance and assisting in continuous improvements within their area of operations.

At the operational level, the performance measurement framework would provide a mechanism for assessing unit capacity and readiness to meet its operational obligations as well as a means of evaluating unit effectiveness in terms of resource management. An important aspect of performance measurement is benchmarking⁶⁰ which implies a need to

⁵⁹ 1998 AG Report Chap 3, art 3.73

⁶⁰ APQC White Paper for Senior Management, *Benchmarking: Leveraging Best-Practices Strategies*, p 1. [<http://www.apqc.org/free/whitepapers/bmksm/>].

conduct a constant evaluation of our processes to ensure that they are achieving optimum capability. It presumes that most processes can be improved upon and that worthwhile models may be found in other organizations. The methodology of benchmarking can be applied to both military core and non-core functions. The logic behind benchmarking is that someone, somewhere in the world, can do a better job on specific activities. The key is to find these improved management practices and to adopt them to the CF.

Benchmarking allows decision-makers to consider viable alternatives based on objective criteria and best practices in industry or government.⁶¹ Commanders are accountable for resources and their use. Part of that accountability involves continuous improvement in performance and results achieved.

Responsive and Responsible Financial Services. The Management Review Team in 1992/93 found that financial management in the Department needed to be improved and reoriented to the provision of a management information service for users and away from its restrictive role which appeared designed to exercise control.⁶² This was confirmed by an OAG in 1996, which concluded that financial information did not meet the needs of managers at all levels. At the root of the problem were two basic difficulties. First, managerial responsibility was inadequately divided and delegated for accounting purposes in that it did not correspond closely enough to the activities which are components of the broad Departmental programs. Second, financial accounting and

⁶¹ Department of National Defence, *Alternative Service Delivery at Department of National Defence: Participation of Defence Personnel in the Program*, [http://www.vcds.dnd.ca/vcds/dgrms/asd/details_e.asp] p.4

⁶² Resource control is a key process within NDHQ yet there is lack of precision in the process as the defence planning and force development process overlaps with policy formulation on one side and with program control on the other. It is an added problem that there is no logical basis for allocation of scarce resources to the competing requirements of the capability components.

financial information, even in respect to situations in which managerial responsibility is well delineated, were not geared to the needs of those who manage.⁶³ This serious accounting difficulty reflects the Department's inability to allocate, with any precision, the cost of programs. The principal reason is that the operational units of the Forces necessarily plan and carry out their missions on the basis of tasks which can, and often do, contribute simultaneously to a number of activities. Thus the costs cannot be related at present in any but an arbitrary way to the activities specified by the Department. While a great deal of progress appears to have been made on control issues and the devolution of financial authority and accountability, there is still a need for more effective correlation between activities upon which plans are based and activities described in the Estimates and the tasks performed at the operating level.⁶⁴ To achieve this, it is necessary to re-define the activity structure and define the information in a different form.

As part of a financial framework, the Auditor General, in his 1994 Annual Report, also identified the application of comptrollership as an issue to be addressed within the Government of Canada. In more specific terms, the AG recommended that departments and agencies avail themselves of the best practices in comptrollership of other countries, such as Australia and New Zealand, to incur savings by adopting simpler delivery mechanisms and initiating upgrades to the quality of financial and operational information in Canadian programs.⁶⁵ Fundamentally, comptrollership in the government

⁶³ 1996 AG Report Chapter 34, Art 34.42-34-54.

⁶⁴ Ibid. Art.34.46

⁶⁵ Consulting and Audit Canada, *Comptrollership, Survey of Best Practices* [<http://www.tbs-sct.gc.ca/Pubs-pol/dcgpubs/TBM>] p 2.

has focused on financial controls and accounting, and has been primarily regarded as the domain of functional specialists. Helping management to ensure that spending is within approved levels and for authorized purposes, and that revenue collections are properly processed, has been the "stock in trade" of comptrollership. Many of the fundamental conditions and assumptions of the past no longer apply. Comptrollership is a management and leadership responsibility. It is a set of principles underpinned by a guiding philosophy that describes how management wishes to carry out the stewardship dimension of its responsibilities to the institution and its governing body. Accordingly, it must be embedded, in some measure, in every management and leadership activity.⁶⁶

Decision-makers at all levels must inculcate comptrollership in their management thinking and as an integrated function within their operation- it is using resources to deliver defence capabilities in a manner which are clearly effective, efficient and ethical.⁶⁷ Moreover, within a defence context, comptrollership is that part of the resource management framework which assists in delivering defence capabilities in the most effective and efficient manner with due regard to probity. It must, therefore, pervade all resource management decisions. Its objectives encompass improving planning, allocating and spending decisions, while at the same time ensuring resource utilization and results achieved are properly recorded, tracked, assessed and reported.

Comptrollership provides that part of the resource management framework required by

⁶⁶ Canada, Treasury Board, *Report of the Independent Review Panel on Modernization of Comptrollership in the Government of Canada* looks at comptrollership, its character, underlying assumptions, and key stages of evolution. Emphasis is place on the nature and role of modern comptrollership to ensure that is relevant, robust and responsive to changing condition and risks p 1-6.

⁶⁷ Effective is having to do with the extent to which objectives are met while efficient relates to maximizing output for given input, or minimizing input for given output.

managers and commanders to control resources effectively and to meet accountability requirements. It is essential to achieving operational objectives while fulfilling departmental responsibilities.

The Comptroller General of Canada has identified and espoused the basic tenets of comptrollership. The Department of National Defence has developed these basic tenets into five core pillars of comptrollership. The pillars involve having integrated business processes that ensure the financial implications of decisions are understood before they are taken and that risks are properly managed. As well, financial transactions must be properly tracked and accounted for and the comptroller's objective commentary and independent advice encouraged and utilized. Finally, it is important that measures are in place to protect against fraud, financial negligence and violation of financial rules.⁶⁸

What does this mean for commanders? Commanders must make well-informed choices when allocating and consuming scarce resources. As well, they must apply financial and option analysis to their operational plans, just as they must identify and assess operational risks when formulating those plans. They must understand the risks and costs associated with mounting operations as well as the cost of acquisition, operation, storage, maintenance, overhead, environmental impact and disposal of goods and services.⁶⁹

Comptrollership and resource management practices must cascade down throughout the organization from Environmental Chiefs of Staff and Group Principals to

⁶⁸ Department of National Defence, *ADM (Fin CS) Resource Manager's Guide*, p 18.

⁶⁹ *Report of the Independent Review Panel of Modernization of Comptrollership in the Government of Canada*. P. 1-6

operational commanders if the CF is to get the "biggest bang" for the buck. Commanders need the right information at the right time and at the right place to make plans and assess the results. Comptrollers can assist by designing, establishing and maintaining information systems which integrate financial, materiel, human resource and non-financial program information and which is linked to departmental outputs and results in a way that corresponds to the Departmental accountability framework. Comptrollers can also assist managers and commanders by delivering the required financial information, analysis, risk assessment and advice to support the decision making process. Comptrollers can contribute additional information to help commanders make informed choices among proposals competing for the same scarce dollars. It is in the best interest of commanders to use departmental resources to achieve their operational objectives to ensure that resource allocation decisions are optimized, resources are effectively controlled and reports to internal and external authorities include both the decisions made, and the results achieved.⁷⁰

Conclusion

Commanders must discard their old notions that resource management and comptrollership are the domain and responsibility of someone else and begin to view these areas as an essential part of their responsibilities. This will come about when leaders at all levels from the CDS down to the Squadron Commanding Officer, accept

⁷⁰ The Defence Management Committee endorsed the formation of a Comptrollership Council to formulate and disseminate comptrollership guidance from a senior perspective. The Council has been in place for approximately 2 years. It serves as a catalyst for communicating comptrollership practices and continuous financial improvement activities throughout the Department of National Defence. The Comptrollership Council meets at least quarterly and its impact on decision making at NDHQ appears good.

and adopt Comptrollership/resource management attitudes and values, and place greater emphasis on them in the support of their decisions with meaningful information and analysis.

The Comptroller General of Canada insists that "we must adopt a culture that moves from being rules-based to being value-based... from focusing on inputs to focusing on outcomes and outputs. The bottom line is that management must seize the ground of value for money."⁷¹ In a military context, cultural change will not happen by itself. It will demand an extraordinary high level of senior management support and endorsement, from the CDS down by placing greater emphasis on comptrollership and sound resource management.

To preserve the future modernization and readiness of our Forces, thereby averting the operational paralysis of the CF, future systems must provide reliable, flexible, cost-effective and prompt logistic support, information and procurement services to the warfighters while achieving a lean infrastructure. Within this system, there is a need for real-time information on materiel and logistics support capabilities. As well, greater use must be made of performance measurement methods. The CF must also further explore the use of process re-engineering and investment, to reduce the operational and support cost burden on defence resources, without further reducing readiness.

⁷¹ Colin J. Potts, *Optimum*, Vol. 28 No. 2, 1998, *Straws in The Wind, Modern Comptrollership: a new era of public service reform*. p. 46.

Unless radical changes occur in the way that the CF manages its limited resources, the degradation in CF operational capability will continue. Accordingly, to ensure the continued and effective support of CF warfighting forces, there is a need for the DND/CF to adopt a comprehensive approach to planning, management and comptrollership which focuses on operational requirements and getting the "best value" for its money. Furthermore, comptrollership and resource management must be included in developmental training and its importance, as a skill-set, be highlighted in the Chief of The Defence Staff's (CDS) letter to General/Flag officers. This goal could also be achieved by creating a culture that recognizes and promotes those personnel who exemplify the values of accountability, efficiency, and stewardship. At the operational level, training must be designed to improve the commanders' ability to understand financial tools and systems to enable them to better achieve their "operational" objectives and harness the best potential out of CF resources.

The Departmental acquisition process must also be re-engineered to streamline the procurement process and that greater emphasis be placed on purchasing commercial off the shelf (COTS) products and weapon systems, thus significantly reducing acquisition time for departmentally approved projects. This is also increasingly more important as procurement responsibilities are devolved to operational commanders. As well, a mechanism must be created immediately, to prioritize and sustain the Capital Program. Finally, DND/CF management information systems need to be integrated and continuously improved to keep abreast with the latest technology.

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