

Four Generals and an Admiral:

The View from the Top

**Report of the Standing Senate Committee on
National Security and Defence**



Committee Members

Sen. Colin Kenny – Chair
Sen. David Tkachuk – Deputy Chair
Sen. Tommy Banks
Sen. Joseph A. Day
Sen. Grant Mitchell
Sen. Michael A. Meighen
Sen. Wilfred P. Moore
Sen. Nancy Ruth
Sen. Rod A. A. Zimmer

**Second Session
Thirty-ninth Parliament
2008**

Ce document est disponible en français

Available on the Parliamentary Internet:

<http://www.parl.gc.ca>

(Committee Business – Senate – 2nd Session, 39th Parliament)

For more information, please contact:

Committee website: www.sen-sec.ca

Clerk of the committee: defence@sen.parl.gc.ca

Toll free: 1-800-267-7362

Four Generals and an Admiral:

The View from the Top

**Report of the Standing Senate Committee on
National Security and Defence**

**Second Session
Thirty-ninth Parliament
2008**

Membership	i
Order of Reference	iii
An Interim Report on the State of the Military	1
The Brass Presented a Positive Front.....	3
General Says Forces Protected From Future Fuel Cost Hikes.....	4
Minority Governments Cannot Make Long-Term Commitments.....	4
General Says Money Not the Problem.....	5
Scrutinizing the Real Challenges Facing the Canadian Forces.....	7
Challenge # 1 – Budget.....	7
The Decrease That Pretends to Be an Increase	9
Defence Spending as a Percentage of Gross Domestic Product (GDP)	10
Blithe Spirits.....	11
Challenge # 2 – Personnel	12
Transformation Bloating Military Staff	13
More Project Managers Needed.....	15
Recruitment, Attrition and The Painful Legacy of the 1990s Reductions.....	16
Gender Issues	19
United Nations Security Council Resolution 1325.....	20
Challenge #3 – Equipment.....	22
Challenge # 4 – Excessive Infrastructure	23
Conclusion: When and How Much	25
Appendix A: Projections of Defence Spending as a Percentage of GDP	
Appendix B: List of Witnesses	

**THE STANDING SENATE COMMITTEE ON
NATIONAL SECURITY AND DEFENCE**

39TH PARLIAMENT, 2ND SESSION

The Honourable Colin Kenny
Chair

The Honourable David Tkachuk
Deputy Chair

and

The Honourable Senators:

Tommy Banks
Joseph A. Day
Michael A. Meighen
Grant Mitchell
Wilfred P. Moore
Nancy Ruth
Rod A.A. Zimmer

*The Honourable Marjory Lebreton, P.C. (or the Honourable Gerald Comeau)

*The Honourable Céline Hervieux-Payette, P.C.
(or the Honourable Claudette Tardif)

*Ex Officio Members

Other Senators who have participated in the work of the committee on this topic:

The Honourable Senators Munson and Stollery

Special Advisors to the Committee:

MGen (ret) Keith McDonald and Barry Denofsky

Library of Parliament Research Staff:

Melissa Radford, Maureen Shields and Jason Yung

Clerks of the Committee:

Shaila Anwar and Gaëtane Lemay

Extract from the *Journals of the Senate*, Tuesday, November 20, 2007:

The Honourable Senator Kenny moved, seconded by the Honourable Senator Banks:

That the Standing Senate Committee on National Security and Defence be authorized to examine and report on the national security policy of Canada. In particular, the committee shall be authorized to examine:

(a) the capability of the Department of National Defence to defend and protect the interests, people and territory of Canada and its ability to respond to and prevent a national emergency or attack, and the capability of the Department of Public Safety and Emergency Preparedness to carry out its mandate;

(b) the working relationships between the various agencies involved in intelligence gathering, and how they collect, coordinate, analyze and disseminate information and how these functions might be enhanced;

(c) the mechanisms to review the performance and activities of the various agencies involved in intelligence gathering; and

(d) the security of our borders and critical infrastructure;

That the papers and evidence received and taken and work accomplished by the committee on this subject since the beginning of the First session of the Thirty-seventh Parliament be referred to the committee; and

That the committee report to the Senate no later than March 31, 2009 and that the committee retain all powers necessary to publicize its findings until 90 days after the tabling of the final report.

The question being put on the motion, it was adopted.

Paul C. Bélisle

Clerk of the Senate

An Interim Report on the State of the Military

On June 2 and June 9 five of Canada's most senior military officers, led by Lieutenant General Walt Natynczyk, expressed their views on the state of the Canadian military before the Standing Senate Committee on National Security and Defence.

Lieutenant General Natynczyk's appointment as Chief of the Defence Staff was announced on June 5, just three days after he testified. The Committee also heard from four other officers senior enough to be considered for that top job:

- Lieutenant-General Michel Gauthier, Commander Canadian Expeditionary Force Command
- Vice-Admiral Drew Robertson, Commander of the Navy¹
- Lieutenant-General Andrew Leslie, Commander of the Land Force²
- Lieutenant-General Angus Watt, Commander of the Air Force³.

The Committee was anxious to hear from all five of these top officers in the wake of the release in May 2008 of the long awaited Canada First Defence Strategy by the Prime Minister and the Minister of National Defence.

The Committee was interested in what progress has been made in restructuring the Forces. General Hillier, General Natynczyk's predecessor, had initiated an ambitious plan to reorganize the Forces, and the Committee was eager to get some insights as to whether the "transformed" military structure constituted an improvement on the previous model and whether changes might be required to improve the current structure's effectiveness.

¹ Also known as Chief of the Maritime Staff, (CMS)

² Also known as Chief of the Land Staff, (CLS)

³ Also known as Chief of the Air Staff, (CAS)

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

The Committee was also interested in acquiring details on any budgetary problems facing the military. Committee members have repeatedly argued in recent years that Canada's military is seriously underfunded.

That case will be presented later in this report. It is based on two sets of assessments of what the Canadian Forces need to perform to the level Canadians require of their military: (a) the number-crunching the Committee has done on its own; and (b) the number-crunching that leaders of various branches of the military submitted to the Government earlier this year outlining their needs. The latter "needs lists" – three of which were leaked to the media after they were submitted – do document where Canada's military deficiencies lie and suggest that funding will have to be increased significantly or those weaknesses are going to be intensified.

Canadian Forces Funding to Erode

Members of the Committee are in general agreement that anyone who looks beyond occasional announcements of expensive equipment purchases, and beyond government promises of "stable" military funding into the future will find a most unpleasant reality: chronic underfunding that is going to get worse rather than better under current spending commitments.

Did we expect to hear this from the four generals and the admiral? Frankly, it would have been a surprise, particularly three days before the Prime Minister was to announce who General Hillier's successor would be. Government sources have made it clear to reputable Canadian journalists in recent months that the Prime Minister's Office was not pleased with General Hillier's outspokenness. So it would have been (a pleasant) surprise to have any of these officers acknowledge the funding problem.

Senior Canadian military brass is not expected to criticize their political bosses in public. The majority of our Committee's members may lament that fact, but with the tight reign the Prime Minister's Office keeps on politicians and civil servants generally, the chances of getting a candid appraisal of funding shortfalls were remote. Let the reader be the judge.

The Honourable Senator Tkachuk believes that what the Committee got from these senior officers over those two days of testimony *was* their best professional opinion rather than a message from the Prime Minister's Office.

The Brass Presented a Positive Front: It's a great Time to be in the Canadian Military!

The Committee heard nothing but positive testimony from all five senior officers about the improved state of the military, the high morale, the commitment from the Government to maintain reasonable funding levels, the impressive capital projects either in implementation or on the horizon, the challenging work that the Canadian Forces are doing, and the ability to conduct their government-assigned tasks. The gist of their message was that “it is a great time to be in the Canadian Military. “

However, Canadians have been hearing a very different story. They have been hearing that there are substantial funding shortages within the Canadian Forces and that extreme measures have been contemplated to mitigate the lack of resources provided to the various commands. Leaked “needs reports” from the Army, Navy and Air Force disseminated by the news media, which the Committee has seen, have suggested that none of the three branches have adequate funding to perform the roles expected of them in the coming years. Many defence analysts have gone on record as stating that Afghanistan is bleeding the remainder of the military dry when it comes to “reasonable funding levels” for the other missions and tasks.

The Committee had hoped to discuss these reports with the Commanders, but took Lieutenant General Natynczyk at his word when he said that it would be inappropriate to comment because the “business planning” process that these reports are part of had not been concluded – in other words, the Commanders had not been advised whether the gaps in funding identified in their reports would be filled. (DND has committed to providing the Committee with the copies of the final funding-authorization documents once the process is complete.)

The Commanders all stated that their concerns were being addressed, and that they were confident that they would receive all the funding they required to execute their assigned missions. The final allocations for this year had not been made, although they were expected by the end of June for the fiscal year 2008/09. Notwithstanding requests by the Committee for an update, the process had apparently not yet been completed at the time of writing of this report.

General Says Forces Protected From Future Fuel Cost Hikes

On the specific issue of the increased cost of fuel, Lieutenant General Natynczyk and the Commanders were unanimous that they had accounted for a significant increase in the price of fuel and had factored that increase into their plans. In fact, Lieutenant General Natynczyk went on to state that while the military expects fuel costs to rise over the next five years, there was adequate funding in the budget to address those increases. Increases in fuel costs, he said, would not have an impact on operations:

Senator Munson: You were saying no matter what the fuel costs – because Canadians are all getting whacked on fuel costs – ... you are saying no matter what the fuel costs, there will be no cuts?

Lieutenant General: Natynczyk: What I am saying is “in-year”, I can see that we have been able to address the pressures by the services in terms of what they are facing now for fuel...

...In terms of forever, I cannot make "forever" statements. I know my “in-year” and four years for sure, and those are the fuel costs. We have put that into our overall budgeting plan.⁴

Minority Governments Cannot Make Long-Term Commitments – Stable or Otherwise

The five senior officers presented a much rosier picture than has been mooted by many Canadian defence analysts, many of whom have expressed concern that Canada’s mission to Afghanistan is putting a severe budgetary and operational strain on the Forces, and that, to date, nothing in announced Government military budgeting is likely to reduce that strain.

⁴ Lieutenant General W. Natynczyk, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

According to Lieutenant General Natynczyk:

Together, Budgets 2005 and 2006 represent approximately a 30 percent increase to the defence services program over a period of six years. However, long-term planning and resource management are best accomplished within a stable and predictable funding environment. Budget 2008 addressed this requirement with a commitment to raise the automatic annual increase in defence funding from 1.5 to 2 percent, beginning in 2011-12. Over the next 20 years, this will provide National Defence with an additional \$12 billion in funding. This infusion of stable, predictable funding allows the department to plan beyond the next budget cycle to conduct a comprehensive examination of the defence portfolio and future requirements.

He also said:

. . . we have seen that defence funding in the next four to five years will increase at a greater rate than our capacity – particularly with regard to personnel, industry and the capital procurement approval process – to fully invest the available funds across the four components for military capacity: personnel, capital, infrastructure and operational readiness.

Is the General *really* saying that the Canadian Forces – known for their can-do capacity for innovation – don't have the dexterity to expand, even if they were given the funds to do so? Or should his words be interpreted to mean the Government will not *allow* him to expand? The General is known as a warrior, an innovator, and a superb organizer. And he couldn't find a way to grow the Forces in the next four or five years if he had the money? Hard to believe.

In fact, asked what major challenges would face the new Chief of the Defence Staff, Lieutenant General Natynczyk's answer wasn't about finding money or equipment, or winning the war in Afghanistan – it was about keeping the trust of the public back home.

General Says Money Not the Problem

Lieutenant General Natynczyk: We are riding a wave in Canada where Canadians can identify with those men and women who are in harm's way, representing them, be they at the point of the spear in

**FOUR GENERALS AND AN ADMIRAL:
THE VIEW FROM THE TOP**

Afghanistan, be they at 40,000 feet, or in the North Atlantic.⁵

While the Committee agrees that the Canadian Forces have won new respect among Canadians during General Hillier's tenure, we disagree with the rosy testimony we heard from these senior officers that other problems – most of which stem from inadequate financing – are under control. In fact there are significant challenges that must be overcome. These are challenges that our witnesses obviously had difficulty in addressing in public, but they are challenges that the Canadian public needs to be aware of.

After years of scraping by with insufficient funds, the Canadian Forces' senior leadership gives the impression that it is happy with the level of funding that has been announced. Has their experience driven their expectations so low that they no longer want to face the consequences of pushing for robust, capable, effective and expanded Canadian Forces that Canada's interests demand? Or are the political pressures to toe the Government's line so intense that nobody dares speak? Whatever the reason, a cone of silence seems to have dropped over public debate of this very important issue.

⁵ Lieutenant General Natynczyk, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

Scrutinizing the Real Challenges Facing the Canadian Forces

Challenge # 1 – Budget

Lieutenant General Natynczyk observed that the Canadian Forces budget has grown substantially over the past few years and that the Government commitment to an annual increase of 1.5 percent until 2011 and 2 percent from 2011/12 until 2031⁶ meant that the Canadian Forces was able to develop a long term plan based on “guaranteed” funding levels.

It should be noted that while this Canada First “plan” was publicized in speeches and press releases, and outlined on the DND website, no official government document has yet appeared to nail down the details of how the strategy will be implemented. Very convenient.

Lieutenant General Natynczyk was adamant that there are sufficient funds within the Defence budget to address the large capital project outlay required over the next 25 years, grow the force, rebuild and repair defence infrastructure and complete transformation. He stated that the defence budget would grow by \$12 billion over the period 2011 to 2031.

The Chair: On the subject of the Canada First defence plan, the increases in your budget are 1.5 percent until 2011, and then for the next 10 years, 2 percent. If you do the calculations, we drop from 1.2 to 1.3 percent of GDP down to .87 percent of GDP. When you take a look at increases in inflation, and particularly military inflation, which appears to be higher than the Consumer Price Index, how will you afford to fund things down the road?

Lieutenant General Natynczyk: Senator, all I can say is that we have looked at the estimates we have in terms of those budgets allocated. We have looked at the major combat fleet replacements

⁶ The Canada First Defence Strategy which was published on the DND website after the testimony was taken outlined the Government commitment of funding until 2027/28 not 2031.

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

over that period of time and the essential combat capabilities. One of the things we had to do was to lay out over that period of time how we will afford those combat replacements in the numbers that were announced. Based upon the best budget information we have from our costers dealing with the acquisition people, we laid out a plan where it was achievable to meet those requirements over that period of time. [...]

The Chair: General, on this there is a paper coming forward at some point, and I must say that the committee struggles with these numbers. Can we arrange for further briefing on it to get an understanding of how the financing works into the future?

Lieutenant General Natynczyk: Absolutely. Again, my chief of program, Assistant Deputy Minister of Finance and Corporate Services, worked out our costing formulas into the future. We went through a rigorous process to ensure that right down to the individual person, the individual supply supporting that ship, that aircraft, that soldier battalion in the field has been costed from stem to stern.

The Chair: No one here has said you are wrong, but we are saying there is a degree of scepticism going forward that you are sufficiently funded, and we would like to, at some point over the next few weeks, arrange for someone to give us more briefing on that.

Lieutenant General Natynczyk: Absolutely.⁷

To date this has not happened.

The General appears satisfied with enough funding to *replace* the military's basic needs.

Again, we come back to funding. The problem is that the "guaranteed" increase in the DND budget will in fact be a decrease in any year that defence price inflation exceeds 1.5 percent (until 2011), and 2 percent thereafter. It is inconceivable that inflation on defence costs will come in under 2 percent over the next decade. This means that the "guaranteed *increases*" will almost surely be "guaranteed *decreases*."

⁷ Lieutenant General Natynczyk, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

Why isn't 2 percent enough? For a start, the Canadian Forces should be playing catch-up. Long years of underfunding by previous Progressive Conservative and Liberal governments, and now the current Government, calls for a surge in funding, not a diminution. With only the lowest-common-denominator funding required for *replacing* current equipment and personnel, there is nothing left for the growth and revitalization of the Canadian Forces that Canada needs and that this Government promised during the last election campaign. With this kind of minimalist funding, the Canadian military will remain over-stretched, with only enough capacity to sustain 1,000 troops on the battlefield in a single location, and no more. That equates to the same kind of overstretching of our military that Canadians have had to endure for more than two decades.

The Decrease That Pretends to Be an Increase

- How can a 2 percent annual *increase* lead to a real decrease in defence spending? Simply because there probably isn't an economist in the country who believes that Canada's inflation rate is going to be 2 percent or lower in the coming years. In the July 16 *Globe and Mail*, the Bank of Canada estimated that inflation will rise to above 4 percent early in the next year. That will mean that the Canadian Forces will suffer a spending cut of 2.5 percent in the first year of the Government's spending schedule.

Higher fuel prices, higher food prices and higher commodity prices are driving up inflation rates around the world, and Canada is no exception. Moreover, the inflation rate on defence purchases always runs higher than the normal inflation rate. Improvements in defence equipment are based on improvements in sophisticated high cost technology.

In short, 2 percent budgetary increases will become decreases in any year that the military's inflation rate is above 2 percent, and it is safe to predict that this will happen every year into the foreseeable future.

“Stable predictable funding” at the 2 percent level will mean diminished spending power for the Canadian Forces in any year that military costs rise more than 2 percent.

The truth is that there is no such thing as “stable, predictable funding” in a parliamentary democracy. The current government is in a minority position. It may

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

win the next federal election or it may not, but if it does not win – and win a majority – all of its funding guarantees go out the window.

Defence Spending as a Percentage of Gross Domestic Product (GDP)

One honest way of determining whether a government is increasing a country's defence funding appropriately is to measure that spending as a percentage of GDP. This means that, as a country, we tie our defence spending to the wealth we create. Wealth goes up – so does defence spending. Wealth goes down, the reverse.

Defence expenditures measured as a percentage of Canada's annual Gross Domestic Product will continue to plummet under this spending formula. Both the Committee and the Conference of Defence Associations estimate that the Defence Budget in 10 years could fall to as low .89 per cent of GDP⁸, less than half the NATO goal. The Conference of Defence Associations further estimated that it could plummet to .77 percent of GDP over 15 years – down to a little more than a third of the NATO target of 2 % of GDP agreed to by all member countries.

How will all the defence spending that the Government has announced fit into this shrinking budget? Lieutenant General Natynczyk stated that the five projects announced by the Prime Minister and the Minister of National Defence in early May 2008 could cost upwards of \$45-\$50 Billion. Or more.

The Government has already started running into trouble fitting big promises into small spending envelopes. It is encountering delays, uncertainties, cost overruns and/or refusals to bid on the Maritime Helicopter Project, the Joint Support Ship Project, the Halifax Class Modernization/Frigate Life Extension, the Uninhabited Aerial Vehicle Project, repair of the Cormorant tail rotor,, the replacement of the fixed-wing search and rescue fleet, replacements for the Aurora surveillance aircraft, the purchase of attack helicopters, the replacement of the destroyer fleet, the purchase of surveillance satellites, the purchase of new fighters and the replacement of all the equipment that will be worn out and left behind in Afghanistan.

Nor does there appear to be enough funding to increase the number of personnel in the Canadian Forces by the number the government originally promised (15,000,

⁸ Email from CDA, April 30, 2008.

since cut to 7,500), let alone the 25,000 additional personnel the Committee believes that the Canadian Forces really need.

Blithe Spirits

So why did four generals and an admiral say they are happy with a guarantee that isn't really a guarantee, and that carries a percentage that is so low that the spending power of the Canadian Forces is almost surely going to decline, as is the military budget as a percentage of government spending? A two percent increase is ludicrous, as any government accountant must be well aware. A two percent increase *over and above* inflation would at least be an honest gesture. But even that won't come close to meeting the NATO target.

Perhaps the Government will come through with additional funding to cover skyrocketing fuel costs, when fuel accounts for such a major component of military spending.

Perhaps some magical way will be found to cover the funding gap outlined in the needs reports of the Navy, Army and Air Force. Lieutenant General Natynczyk is hopeful that budgetary funds that lapsed last year and may lapse this year because of slow purchasing procedures can somehow be used to cover the shortfalls. To receive substantial lapsed funding on a regular basis would require a change in government policy.⁹

There is, of course, a third "perhaps." Perhaps the Government will finally acknowledge that a 1.5 percent "guarantee" of increased funding that will shift to 2 percent in 2011 amounts to a budget cut for the Canadian Forces.

At this point, however, there hasn't been the slightest hint from the Government that any of these adjustments are in the works.

⁹ Lieutenant General Natynczyk, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

Challenge # 2 – Personnel

The Committee agrees with testimony from these senior officers that the men and women of the Canadian Forces are doing outstanding work on behalf of Canadians. Their dedication and ability is not in question. The problem is that there are not enough of them. The pay and benefits shortfalls of the 1990s have largely been addressed. Nonetheless, the Forces Reduction Program (FRP) and limited recruiting during the 1990s have produced a shortage in trained and experienced personnel. So something has to be done.

Senator Zimmer: What keeps you awake at night?

Lieutenant General Natynczyk: People. I worry about having the right person, at the right time, with the right skill set and the right training to do his or her job. We are learning about the demographics. Our recruiting dropped in the 1990s. We have a few generations of military members reaching their 20-, 25- and 30-year windows. Yet, those who we should have hired in the 1990s are not right there providing them that bench strength.¹⁰

All three services are hollowed out at the core, short of the kinds of experienced non-commissioned officers and the mid-level officers needed in the training system who can take on complex staff issues from planning to project management. This shortage has been exacerbated by additional demand for “experienced personnel” to fill positions in the new headquarters organizations created by General Hillier’s vision of a transformed Canadian Forces.

Given the concerns over lack of staff – or “bench strength,” as Lieutenant General Natynczyk calls it – it is impossible to understand how the Government could announce a plan, with great fanfare, to increase regular forces by 15,000 and reserves by 10,000 in 2006, then in November 2007 very quietly make the decision to “reprofile” the Canadian Forces by reducing the 15,000 regulars increase to 7,500 and reducing the 10,000 reservists increase to 1,000 and delay the whole process by another year. No wonder Lieutenant General Natynczyk lies awake worrying about lack of bench strength.

¹⁰ Lieutenant General Natynczyk, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

This Committee has been on the record for seven years that the Canadian Forces needs 90,000 personnel simply to meet the kinds of demands that respective governments have made of it – let alone take on new tasks.

Transformation Bloating Military Staff

General Hillier's transformation plan introduced a function-based command structure to the Forces. Previously, the Forces featured a Chief of Defence Staff, a Deputy Chief of Defence staff in charge of all domestic and foreign operations, and a Vice-Chief of Defence Staff who handled long-term planning and internal issues.

The new system called for a Chief of Defence Staff, General Hillier, and four new commands reporting to him: Canada Command, Canadian Expeditionary Forces Command, Canadian Operational Support Command and Canadian Special Operations Forces Command¹¹, each with its own bureaucracy. Those bureaucracies have inhaled top personnel that could have been commanding and training. General Hillier's staff itself grew to more than 100 personnel, and gained a reputation for micromanaging¹² in the other jurisdictions.

For the most part, all of the Commanders endorsed the “transformed headquarters” as a logical method to address operations. Creating two different commands responsible for operations was deemed to be an effective method of dividing and managing missions. Lieutenant General Gauthier, the Commander of Canadian Expeditionary Command (CEFCOM) responsible for all Canadian Forces missions outside Canada, stated that he was continually challenging his staff to find better ways to execute their planning and coordination tasks. He stated that the command was still in transition and some responsibilities had been transferred to different parts of the Canadian Forces as they were not strictly related to “overseas

¹¹ Canada Command is responsible for military operations within Canada, Canadian Expeditionary Forces Command is responsible for military operations outside Canada Canadian Operational Support Command delivers national-level operational support to Canadian Forces missions at home and abroad; and Canadian Special Operations Forces Command provides agile, high-readiness Special Operations Forces capable of operating across the spectrum of conflict at home and abroad.

¹² Lieutenant General R.R. Crabbe (retired), Vice Admiral L.G. Mason (retired)' Lieutenant General F.R. Sutherland (retired), “*A Report on the Validation of the Transformed Canadian Forces Command Structure*,” 31 January 2007.

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

missions.” As a force employer, he did not encounter the personnel, training and infrastructure challenges facing the force generators.

The Force Generators, (Commanders of the Navy, Army and Air Force), while supportive of the new command structure, were less enthusiastic about the requirement to provide experienced officers and senior non-commissioned officers to populate the new commands. This requirement left them short of experience in a myriad of areas of responsibility – from training, to planning, to project management.

A report¹³ on the new command structure, prepared for the Chief of Defence Staff (CDS) by three former senior officers, criticized the redundancy in the new structure, but suggested that now was not the time to make significant changes to the present transformed command headquarters. The feeling was that there are too many diverse tasks facing the Canadian Forces at the present time. Lieutenant General Gauthier stated that the organizational structure continues to be a contentious topic among Commanders and senior National Defence Headquarters staff:

Lieutenant General Gauthier: The last time we got together as operational Commanders, together with force generators with the VCDS, CDS, Chief of Force Development and others and looked at how we were doing and whether or not we were on the right track, was certainly within the last three months, looking ahead out past the 2010 Olympics.

Senator Meighen: What was the answer?

Lieutenant General Gauthier: The answer was, we are on the right course. At this stage, there is not a strong appetite to make dramatic changes one way or the other. We are immersed in a challenge in Afghanistan. We are immersed in another challenge, which is to prepare for domestic challenges on a day-to-day basis as well as longer-term, with major events coming up in 2010.

¹³ Lieutenant General R.R. Crabbe (retired), Vice Admiral L.G. Mason (retired), Lieutenant General F.R. Sutherland (retired), “*A Report on the Validation of the Transformed Canadian Forces Command Structure*,” 31 January 2007.

I cannot speak for the new Chief of the Defence Staff and I cannot speak for the minister, either, but I would not expect there to be dramatic changes between now and the 2010 Olympics.¹⁴

More Project Managers Needed

Another part of the personnel challenge is finding qualified project managers to work on the large number of capital projects already contracted and announced by the Government. The Canadian Forces have come through a period during which there were very few major crown projects, so they lost some of their capacity and capability to manage large projects. If the announced projects are approved, then the Canadian Forces will be required to manage a large number of major crown projects simultaneously. The Air Force and the Navy are facing a number of projects with an inadequate number of experienced and qualified project managers.

As Vice Admiral Robertson stated:

I have a challenge to find the number of people that the materiel group will need to manage the project teams, and that is something I will be working on over the next couple of years. It will mean restructuring some of what we do inside the maritime staff and inside the Navy as well. I will also need help from the vice chief in terms of freeing up people with particular skills to (be) able to turn to this capitalization.¹⁵

The Question: The fundamental question is why are we spending \$18 billion a year on a “newly transformed” Canadian Forces that can only sustain 1,000 soldiers in combat on a continuous basis?

Clearly, transformation has done nothing to solve this problem, and many would argue that the new, enlarged staff it created has taken away the very people that should be being used by the force generators to train new recruits or to work as project managers to obtain new equipment.

¹⁴ Lieutenant General M. Gauthier, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

¹⁵ Vice Admiral Drew Robertson, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

Recruitment, Attrition and The Painful Legacy of the 1990s Reductions

Between Afghanistan and the new system, the Canadian military is short-staffed in places in which it most needs key personnel. The Navy is approximately one ship's company short of personnel on each coast. Even this is based on the assumption that we have a Navy that is the right size. In previous reports we have talked about Canada's changing demographics and the growing importance of the Asia-Pacific theatre, which is dominated by naval power.

As it takes 10 to 15 years to design and build a ship, Canada must start now to ensure that we have the Navy we need. The cost of failing to do this will be paid over the next two decades when we will have to do without the command-and-control and air defence capabilities of destroyers. The planned 15 surface combatants and four submarines will clearly be insufficient to protect Canada and further its interests. A forward-looking government should be examining a continuous shipbuilding program involving twice that number – providing both valuable manufacturing jobs and security for the country.¹⁶

To man these vessels the Navy will need to fill existing vacancies and then recruit for the future.

While Admiral Robertson was asked only about personnel, and not capital projects, he – more than anyone – knows about the need to balance the Navy between the Atlantic and Pacific coast, and expanding it to meet the challenges hurtling toward Canada from the Asia-Pacific.

Vice Admiral Robertson, Chief of the Maritime Staff, addressed his personnel shortages during his testimony:

Senator Meighen: Welcome, Vice-Admiral Robertson. I want to ask you about shortages, not so much in relation to the challenges you face with respect to the capital projects, design and that sort (of) business, but the more traditional shortages. We were told that the Army is

¹⁶ The Committee is reviewing its previous recommendation (#27) expressed in its 2006 report "The Government's Number One Job" which stated "The Government aggressively pursue the recapitalization of the Navy and Coast Guard fleets as quickly as possible, wherever the most cost-effective solutions can be acquired"

missing a whole middle management sector, the senior non-commissioned officers and the people who do the training. Are you faced with a similar type of shortage in the Navy?

Vice Admiral Robertson: We have some issues that are common across the Canadian Forces and others that are quite different. The common issue for all is that the force reduction program of the 1990s was done over a very short period of time and a relatively narrow group of people left. As a result, we have quite a distortion in the ideal age curve for the Canadian Forces. The age profile with the lowest number of people is coming to the point at which they can elect retirement and receive appropriate benefits. The decision making is in their hands at that point.

The challenge would be a Navy that is under strength by about 400 people now, which is close to two ship's companies, although that may be aggregating it improperly.¹⁷

The Army's operational capacity has not grown to any extent in the past five years, in spite of a number of increases in Army intake.

Lieutenant General Leslie, Chief of the Land Staff, addressed his personnel issues as follows:

Senator Meighen: I am sorry, but why is it not running at 100 percent? Is it because it is not big enough; is it because there is not enough money; is it because there are not enough people?

Lieutenant General Leslie: The main issue for the Army is junior and senior NCOs, non-commissioned officers, the core and backbone of any Army, are leaving.

Senator Meighen: They are leaving.

Lieutenant General Leslie: However, we are placing additional demands on them. Because of demographics they are leaving, but thankfully many are choosing to stay when they could get moderately well-paying jobs. I was going to say great-paying jobs, but I do not

¹⁷ Vice Admiral Drew Robertson, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

want to encourage other senior NCOs to leave. They are staying out of a sense of duty and trying to pass on their hard-earned experience to the folks coming behind them.

The Army right now is short 1,000 master corporals, which is the base level leadership.¹⁸

“The great paying jobs” Lieutenant General Leslie was referring to for senior NCOs is clearly a coded request for more money. Of course, there are other factors such as too many months away from home that disrupt and sometimes destroy families. But pay, retention packages and bonuses would obviously assist in solving the General’s personnel problems. Too many key people – still under the age of 50 – are retiring to take their pensions and to go to better-paying jobs.

The Air Force is short of pilots and experienced technicians, with a total strength of approximately 11,670 trained and qualified regular Air Force members and 2,300 reservists¹⁹.

Lieutenant General Watt, Chief of the Air Staff, addressed his personnel shortages as follows:

Senator Zimmer: Currently you need to attract, train and retain people. You indicated that years ago you were giving them buy-outs. Why was that? Did you have a saturation of pilots at that time?

Lieutenant General Watt: In the mid-1990s, we had to rapidly downsize the Canadian Forces. As a result, we had the FRP, the force reduction program, which targeted certain occupations that were over strength based on the revised need for the Canadian Forces after the downsizing.

At that time, the pilot occupation was over strength because the Air Force was being downsized. By the rules of the day, pilots were included in that forced reduction program and were given bonuses to

¹⁸ Lieutenant General Andrew Leslie, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

¹⁹ Lieutenant General Angus Watt, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

leave. We paid people to get out and quickly overshot our target, went well below it and have never recovered.²⁰

A number of “mitigation” strategies have been developed by the various services, such as reviews of training courses, increased use of simulation, and computer-based training. But the gap in experienced personnel persists and bold steps must be taken to solve this problem. Governments and the Canadian Forces have known it was coming for a decade, and our leaders – Liberal and Conservative - have all ducked.

The Army is initiating a “fast track” system to promotion through “battlefield promotion” criteria and applying a higher factor to “operational field experience” to accelerate promotion to master corporal this year, and then using the same “operational field experience criteria” to address more senior ranks in upcoming years. Under the circumstances this is one of a number of strategies that must be taken to dig out of the hole the Army is in.

Gender Issues

The Committee heard testimony that the military is increasing its efforts to recruit and integrate women into all trades in the military.

Senator Mitchell: I think the military has made a great deal of progress in integrating women. I notice that you have a woman officer with you here today. She is not from the Air Force, though.

In particular, given the pressures of personnel and so on, what is the percentage of your personnel who are women? Is there some opportunity to attract more women to this career? Are you taking steps in that regard?

Lieutenant General Watt: The Air Force has 18 percent women, which is one of the highest in the Canadian Forces in the regular force, and 28 percent of our reservists are women. We have women at every level and in every occupation, pilot, maintainers, engineers ...

²⁰ Lieutenant General Angus Watt, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

at every level in the Air Force; we welcome females and enable their success.²¹

Lieutenant General Watt provided the Committee with a recent example of the Air Force adapting its policies to provide airwomen with equal opportunities. According to Lieutenant General Watt, in the last four years, the Air Force has developed a “world class system” that has redefined anthropometric standards, which “define for air crew the length of various limbs on your body to ensure that you can fit into cockpits.”²² Previous standards dated back to the 1940s. According to Watt, “this modernization allows for a greater proportion of females, who tend to be a bit smaller, to now qualify for air crew.”²³

However, there is room for improvement. Unfortunately, efforts to recruit women into the Canadian Forces are not consistent across all services. Vice Admiral Robertson did mention that he would like to see an increase in the recruitment of women, as well as Francophones. In terms of female sailors, he has seen the numbers drop over the last few years, a trend that he is concerned about. According to Vice Admiral Robertson, he is looking for “the best talent we can bring through the door.”²⁴

The Committee notes that each Force Generator highlighted its concerns about recruitment including the need to recruit from all sectors of Canadian society. The Commanders would like to see a Canadian Forces that is representative of today’s Canada and the Committee is supportive of this commitment.

United Nations Security Council Resolution 1325

The Committee was disappointed that not all the Commanders knew about United Nations Security Council Resolution 1325 on women, peace and security, or about the training provided by the Canadian Forces to its deploying members based on the Resolution. Resolution 1325 is the first resolution ever passed by the Security

²¹ Lieutenant General Angus Watt, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

²² Lieutenant General Angus Watt, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

²³ Lieutenant General Angus Watt, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

²⁴ Vice Admiral Drew Robertson, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, and 2nd Session.

Council that specifically addresses the impact of war on women, and women's contributions to conflict resolution and sustainable peace.²⁵

Senator Nancy Ruth: One's perspective is a function of where we sit, and here I sit as a woman on this Committee. My interest is a question about training, particularly about something known as resolution 1325. Resolution 1325 is the United Nations Security Council resolution, which Canada was part of drafting and accepting, on women, peace and security. It is of great concern to me that soldiers know about this before they go overseas.

Can you tell me a bit about how that feeds into your curriculum and what kind of training soldiers get in that?

Lieutenant General Leslie: Senator, I am not aware, and I apologize for that, of any specific training which is based on United Nations Security Council resolution 1325.²⁶

The Committee understands that not all members of the Canadian Forces would have the opportunity to engage with local women while on deployments. The Navy, for example, mainly interdicts and boards suspicious vessels on the high seas where they confront mainly male pirates or conduct search and rescue operations where men and women are treated equally. However, the Committee remains concerned about military personnel who are on the ground, participating in stabilization missions overseas, and Canada's obligation in upholding UNSCR 1325. Lieutenant General Gauthier did shed some light on this issue:

Lieutenant General Gauthier: The most important aspect of applying these resolutions and there are any number of Security Council resolutions that apply is to ensure our personnel are properly trained prior to going overseas.

I am informed by the Army that all of our personnel deployed on missions abroad receive specific pre-deployment training on the protection of women, children and other vulnerable populations. The

²⁵ Security Council Resolution 1325 was passed unanimously on 31 October 2000 .For more information on this resolution see: <http://www.peacewomen.org/un/sc/1325.html>

²⁶ Lieutenant General Andrew Leslie, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 2, 2008, 39th Parliament, 2nd Session.

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

curriculum for this training is given at Kingston at the Peace Support Training Centre, and it is regularly updated.²⁷

Although the Committee acknowledges and encourages this type of pre-deployment training, we are also interested in the follow-through. The Committee is interested in knowing whether or not this training is useful and effective in practical terms, as well as whether or not this training is having an impact on the ground. Lieutenant General Gauthier told the Committee that he would ask these questions on his next visits to Canadian missions overseas²⁸. The Committee acknowledges Lieutenant General Gauthier's support on this issue and looks forward to hearing of his findings.

Challenge #3 – Equipment

The five senior officers all expressed delight with the announced capital acquisition plans. They have already conducted their planning on the assumption that old time-expired platforms will be replaced in a timely way with new, more capable platforms.

They should be more wary. This assumption has repeatedly failed to bear fruit as governments continue to encounter difficulties with estimating, contracting and getting delivery on time. The current problems with the Joint Support Ship and Halifax-Class life extension and managing contracts such as the submarine project and maritime helicopter project are two examples that have almost become the rule. Late arrival of new equipment means that more funds are required to maintain and extend the life of existing equipment.

To fit with the “plan”, a number of actions have already been taken to extend the present life expectancy of major equipment operated by the Canadian Forces. For example, the number of CF 18s being flown has been reduced from 79 to mid- to

²⁷ Lieutenant General M. Gauthier, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

²⁸ Lieutenant General M. Gauthier, *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, 2nd Session.

upper-60s to ensure the aircraft will last until 2017, when the new fighter is expected to come on line. Similar limitations have been placed on the Aurora aircraft.²⁹

Even with these attempts to mitigate the problem, there will be a gap in capability due to the retirement of fleets prior to being replaced. One such example is the “area air defence capability” and command-and-control capability of the Navy. With the retirement of the destroyers, the Canadian fleet will lose the ability to conduct area air defence³⁰ until a replacement comes online in the 2020-to-2030 timeframe. There may be similar problems with submarines, C-130Js Hercules aircraft, and other platforms.

Challenge # 4 – Excessive Infrastructure

DND owns huge amounts of infrastructure spread out across the country. A lot of the infrastructure is in bad shape. Maintaining excess infrastructure drains funds from operations.

When DND buys new equipment, that equipment often requires new infrastructure, so infrastructure costs continue to rise, and the military scrambles to find purses to steal from. A large part of the additional infrastructure in Trenton to support C17 operations, for instance, was not bankrolled from capital project funds, but shunted over from an Air Force budget that had already been struggling to meet demands.

One hopes that the solution will be found in the Canada First Defence Strategy, since it has announced that infrastructure improvement will be a high priority item in future DND budgets. In fact, the Strategy states that a new “National Portfolio Management Plan” is being developed that will result in:

- 25 percent of infrastructure being replaced or refurbished in the next 10 years
- 50 percent being replaced over the next 20 years.³¹

²⁹ On 18 December 2007, the Minister of National Defence announced that only 10 of the Aurora aircraft fleet would complete core structural upgrades. Flying rates are being reduced to extend the life of the aircraft to 2020.

³⁰ Vice Admiral Drew Robertson *Proceedings of the Standing Senate Committee on National Security and Defence*, Hearing Transcript, June 9, 2008, 39th Parliament, and 2nd Session.

³¹ DND technical briefing on Canada First Defence Strategy 14 May 2008

**FOUR GENERALS AND AN ADMIRAL:
THE VIEW FROM THE TOP**

That seems to be the idea, but then no detailed plan has been forthcoming, so it is hard to tell whether the numbers support the promises.

When will the Government tell us what infrastructure will be eliminated? The Canadian Forces are riddled with redundant infrastructure from coast to coast to coast, and it is time for the Government to make the tough decisions required to reduce the waste.

Conclusion: When and How Much

The Committee admires the positive attitude of the senior officers who appeared before us on June 2 and June 9. It is clear that they are all enthusiastically addressing their challenges to provide the best “defence product” for the Canadian taxpayer that is possible given their funding levels. Canadians should be proud of the many ways the Canadian Forces find of making do within impossible budgets and unnecessary infrastructure burdens.

That having been said, budgets have been too tight under both Liberal and Conservative governments over the past two decades to give Canadians a reasonable level of protection at home and to allow them to contribute to a more stable world abroad.

Not only is current funding too low, it is not cost-effective. Current funding barely allows Canada to field a fighting force of 1,000 in any given off shore theatre – the current theatre being Afghanistan. There isn't enough funding to go into any other theatre whatever the need might be to do that. And in the case of Afghanistan, it isn't enough for Canadian Forces alone to secure the Kandahar Province area.

It is clear to everyone that the Canadian Forces are desperately short of personnel. This is largely outside of the Forces' control. More funding to assist in mounting an aggressive recruiting program, streamline intake processes and expand training capability are critical to the much-needed expansion of the Canadian Forces.

The Committee's issues are not with the Forces and those who command them. Our issues continue to revolve around a shortfall in the funding level of the Forces, and timely approval of major capital projects. It is one thing to announce that a project is part of a plan, but if there is no overall plan put forward for the public to assess, then how can anybody decide whether it will really be feasible to do a number of different things within a specified spending envelope?

We applaud the announcement of the Canada First Defence Strategy. But it is not enough to *announce* a strategy – if there is really any thoughtful planning behind this strategy it needs to be spelled out. Photo ops aren't enough on these important

FOUR GENERALS AND AN ADMIRAL: THE VIEW FROM THE TOP

issues. Canadians need to see the nuts and bolts of the Strategy to determine whether its various parts fit together.

The five military leaders who appeared before the Committee are highly decorated, combat-experienced men who have demonstrated outstanding managerial abilities and risen to the very peak of their profession. The Prime Minister was indeed privileged to have such excellent people from whom to choose a new Chief of Defence Staff. Any of the five would have been up to the job. They are men of intelligence, courage and integrity. But they need the tools to do the job.

The Committee has the following observations based on seven years of testimony examining Canada's military policy, and its reaction to the announcement of the Canada First Defence Plan.

- The Committee notes that all Commanders (other than the force employers) acknowledged that they have significant personnel shortage issues that must be addressed immediately.
- The Committee notes that experienced leadership is in short supply for operations. There are too many capable operational people involved in bureaucratic staff duplication.
- The Committee notes that specialized trades are at a premium, both because trades people have reached retirement age, and the resource-based economic boom in Canada is poaching qualified personnel. The Forces are going to have to forge a plan to deal with this: no modern military can operate without adequate skilled trades' people.
- The Committee notes that the Canadian Forces will experience significant challenges in finding the "project management" personnel needed to manage the large number of capital projects coming on line. Finding military project managers for upcoming major acquisitions will create staff shortages in the Navy, Air Force and to a lesser extent, the Army.
- DND has too much infrastructure and needs direction from the Government to divest itself of anything it doesn't need.
- While recognizing increases in military spending by the previous and current governments, nothing the Committee heard convinced us that 1.5 percent and 2 percent increases in funding are going to increase the capacity of the

Canadian Forces, when inflation – particularly in the area of military spending – is almost certainly going to exceed these numbers.

- The Committee believes that a “major review” of the organizational structure of the Canadian Forces should be conducted immediately to validate and/or reorganize the Canadian Forces’ headquarters structure.

**APPENDIX A:
PROJECTIONS OF DEFENCE SPENDING AS A PERCENTAGE OF GDP**

Conference of Defence Associations Calculations

1. To establish the 2008/09 Baseline

Statscan shows the Canadian 2007 GDP at \$1.536 trillion,
Treasury Board shows the "Total Departmental Spending" (ME) for FY 2007/8 at \$18.619 billion

By calculation defence spending/GDP (ME/GDP) for 2007 is 1.21%

Conference Board predicts 2008 GDP growth at 3.5% Nominal (1.7% Real and 1.8% inflation)

By calculation GDP 2008 is \$1.589 trillion

Treasury Board shows ME at \$19.508 billion

By calculation ME/GDP for 2008 is 1.23%

Conference Board predicts 2009 GDP growth at 4.3% Nominal (2.4% real and 1.9% inflation)

By calculation GDP 2009 is \$1.68 trillion

Treasury Board shows ME at \$20.057 billion

By calculation ME/GDP is 1.21%

2. To Project forward to 2027/28 (end point CFDS)

Three growth scenarios:

a. Nominal 3.1% (Real 1%, Inflation 2.1%, which is the inflation assumption in CFDS, which is consistent with the BofC target rates of 1-3%)

b. Nominal 4.1% (Real 2%, inflation 2.1%)

c. Nominal 5.1% (Real 3%, inflation 2.1%)

ME/GDP 2027/28 by calculation

a. 1.13% (Nominal GDP growth 3.1%)

b. 0.95% (Nominal GDP growth 4.1%)

c. 0.80% (Nominal GDP growth 5.1%)

APPENDIX A:
PROJECTIONS OF DEFENCE SPENDING AS A PERCENTAGE OF GDP

3. Spreadsheet with Calculations:

GDP 3.1%	GDP 4.1%	Year	GDP 5.1%	ME	ME/GDP 3.1	ME/GDP 4.1	ME/GDP 5.1
1.65774E+12	1.65774E+12	2009	1.65774E+12	2.0057E+10	1.21%	1.21%	1.21%
1.70913E+12	1.7257E+12	2010	1.74228E+12	2.0598E+10	1.21%	1.19%	1.18%
1.76211E+12	1.79646E+12	2011	1.83114E+12	2.1154E+10	1.20%	1.18%	1.16%
1.81674E+12	1.87011E+12	2012	1.92453E+12	2.1726E+10	1.20%	1.16%	1.13%
1.87305E+12	1.94679E+12	2013	2.02268E+12	2.2312E+10	1.19%	1.15%	1.10%
1.93112E+12	2.02661E+12	2014	2.12583E+12	2.2915E+10	1.19%	1.13%	1.08%
1.99098E+12	2.1097E+12	2015	2.23425E+12	2.3533E+10	1.18%	1.12%	1.05%
2.0527E+12	2.19619E+12	2016	2.3482E+12	2.4169E+10	1.18%	1.10%	1.03%
2.11634E+12	2.28624E+12	2017	2.46796E+12	2.4821E+10	1.17%	1.09%	1.01%
2.18194E+12	2.37997E+12	2018	2.59382E+12	2.5491E+10	1.17%	1.07%	0.98%
2.24959E+12	2.47755E+12	2019	2.72611E+12	2.618E+10	1.16%	1.06%	0.96%
2.31932E+12	2.57913E+12	2020	2.86514E+12	2.6887E+10	1.16%	1.04%	0.94%
2.39122E+12	2.68488E+12	2021	3.01126E+12	2.7612E+10	1.15%	1.03%	0.92%
2.46535E+12	2.79496E+12	2022	3.16484E+12	2.8358E+10	1.15%	1.01%	0.90%
2.54177E+12	2.90955E+12	2023	3.32624E+12	2.9124E+10	1.15%	1.00%	0.88%
2.62057E+12	3.02884E+12	2024	3.49588E+12	2.991E+10	1.14%	0.99%	0.86%
2.70181E+12	3.15303E+12	2025	3.67417E+12	3.0718E+10	1.14%	0.97%	0.84%
2.78556E+12	3.2823E+12	2026	3.86155E+12	3.1547E+10	1.13%	0.96%	0.82%
2.87192E+12	3.41687E+12	2027	4.05849E+12	3.2399E+10	1.13%	0.95%	0.80%

4. There is a minor discrepancy between the CFDS and Treasury Board numbers for "Total Defence Spending" which gets a bit bigger at the 2027 end. I attribute that to be the consequence of the Treasury Board figures being published before the CFDS figures. I don't view it as material for this level of analysis (Brian MacDonald, Conference of Defence Associations).

5. References:

Statscan: <http://www40.statcan.ca/101/cst01/econ04.htm>

Treasury Board: http://www.tbs-sct.gc.ca/rpp/2008-2009/inst/dnd/dnd01-eng.asp#sec1f_e

Conference Board: <http://www.conferenceboard.ca/budget/>

**APPENDIX A:
PROJECTIONS OF DEFENCE SPENDING AS A PERCENTAGE OF GDP**

Comment from the Economics Division – Library of Parliament

The Parliamentary Information and Research Service was asked to review the assumptions underlying the calculation of the defence spending to GDP ratio presented by Col. (Ret.) Brian MacDonald of the Conference of Defence Associations.

The proposed calculations depend on expectations about the future trend of two variables: Canadian defence spending and GDP. The defence spending figure for fiscal year 2009-2010 comes from the *Department of National Defence: 2008-2009 Report on Plans and Priorities*. Funding figures from 2010-2011 onwards are based on increasing the 2009-2010 figure by the spending growth committed to in the *Canada First Defence Strategy*. The strategy says that defence funding will increase by a long-run average of 2.7% per year from 2008-2009 to 2027-2028, although the growth rate will vary from year to year. Because the strategy does not provide detailed year by year expenditures, the calculation ignores variations in the growth rate and assumes it will remain constant at 2.7% per year. This assumption will affect the calculation of the defence spending to GDP ratio.

To determine 2009 GDP, Statistics Canada data for 2007 GDP was increased by the Conference Board of Canada's estimates of nominal GDP growth in 2008 (3.5%) and 2009 (4.3%). Long-run estimates of GDP growth are more difficult to predict than short-run estimates. For this reason, the calculations consider three long-run growth rate scenarios: low (3.1% per year nominal growth), medium (4.1% per year nominal growth), and high (5.1% year nominal growth) for GDP growth from 2010 to 2027. These growth rates are then applied to the 2009 GDP estimate.

The assumptions underlying these calculations are one out of many sets of possible reasonable assumptions. Numerous organizations produce economic forecasts and any one of these could be used in place of the Conference Board's estimates. Similarly the long-run growth rate estimates could be increased or decreased. The federal government has committed to augment the defence budget by \$1.8 billion in 2010-2011 and then increase it by 2% per year until 2027-2028. This means that long-run defence spending growth will average 2.7% per year over the next 20 years. However, this method will produce different defence spending estimates for

APPENDIX A:

PROJECTIONS OF DEFENCE SPENDING AS A PERCENTAGE OF GDP

the years between 2008-2009 and 2027-2028 than a method assuming a constant 2.7% annual increase in defence spending. Therefore, it is worth noting that the calculations are sensitive to the assumptions chosen, and any change in the assumptions may affect the results.

**APPENDIX B:
LIST OF WITNESSES**

Agency and Spokesperson	Date
<p><i>Department of National Defence:</i></p> <ul style="list-style-type: none">• Lieutenant-General W. J. Natynczyk, Vice Chief of the Defence Staff• Lieutenant-General A.B. Leslie, Chief of the Land Staff• Chief Warrant Officer Wayne Ford, Army Sergeant Major	June 2, 2008
<p><i>Department of National Defence:</i></p> <ul style="list-style-type: none">• Lieutenant-General J.C.M. Gauthier, Commander, Canadian Expeditionary Force Command• Vice-Admiral Drew Robertson, Chief of the Maritime Staff• Lieutenant-General W. Angus Watt, Chief of the Air Staff	June 9, 2008