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## **‘UNMILITARY PEOPLE’ AND DEFENCE PROCUREMENT: WHY CANADA SHOULD USE A RATIONAL APPROACH TO PROCURE MAJOR EQUIPMENT PLATFORMS**

Major K.K. Kennedy

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WHY CANADA SHOULD USE A RATIONAL APPROACH TO PROCURE MAJOR  
EQUIPMENT PLATFORMS**

By Major K.K. Kennedy  
Par le major K.K. Kennedy

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## LIST OF ABBREVIATIONS

ADM(Mat) – Assistant Deputy Minister (Material)

CAF – Canadian Air Force

CCV – Canadian Content Value

CDP – Concept Development Phase

CDS – Chief of Defence Staff

CF – Canadian Forces

CFDS – Canada First Defence Strategy

DITC – Department of Industry, Trade and Commerce

DND – Department of National Defence

DoD – Department of Defence (US)

DSS – Department of Supply and Services

IRB – Industrial Regional Benefits

JSF – Joint Strike Fighter

MDD – McDonnell Douglas

MND – Minister of National Defence

MOU – Memorandum of Understanding

MRCA - Multi-Role Combat Aircraft

NATO – North Atlantic Treaty Organization

NFA – New Fighter Aircraft

NFPS – New Fighter Procurement Secretariat

NORAD – North American Aerospace Defence Command

PSFD – Production, Sustainment and Follow-on Development

PWGSC – Public Works and Government Services Canada

RFP – Request for Proposal

SDD – System Development and Demonstration

SOR – Statement of Requirements

## ABSTRACT

On July 16<sup>th</sup> 2010, the Minister of National Defence, flanked by the Ministers of Public Works and Industry Canada, announced Canada was going to purchase 65 F-35 Lightning II aircraft. The selection of the F-35 was not the result of a typical drawn out defence procurement project, but rather it was a decision the government made for many reasons. In not conducting a proper procurement process, it appeared the government of Canada may be shifting its attitude towards defence procurement. Canada's change in attitude represented the previous rational approach, which was described as "how 'unmilitary people' shop for equipment" to a more military approach.

In 2012, the government overturned their previous decision and are currently analyzing options to replace the aging CF-18 fleet. The purpose of this paper is to argue that Canadians are an 'unmilitary people' when it comes to the procurement of major capital and when conducting acquisition programs for major platforms in the future, the government must approach the issue from a rational point of view and not let its desires overrun its logic. This paper will support this thesis by discussing the procurement process for major platforms, and by drawing conclusions from the case studies on the acquisition of the CF-18 Hornet and F-35 Lightning II.

## CHAPTER 1: INTRODUCTION

On July 16th, 2010, Canada appeared to be building upon its military successes in Afghanistan, when Minister of National Defence (MND), Peter MacKay, announced that Canada would be purchasing 65 F-35 Lightning II aircraft.<sup>1</sup> This seemed to indicate the Stephen Harper led Conservative Government wanted to follow through with the promises it made in the Canada First Defence Strategy (CFDS). It looked like Canada was heading towards becoming a more modern force with cutting-edge equipment. Was Canada's attitude towards defence procurement moving away from what, US Air Force LtCol Frank Boyd referred to as, the "phenomenon of how an 'unmilitary people' shop for military equipment,"<sup>2</sup> referring to the approach Canada used over 30 years ago when it purchased the CF-18 Hornet?

MND MacKay's announcement came two months after he stated, in the House of Commons, that the procurement of Canada's next fighter aircraft would be, "an open, competitive, transparent process."<sup>3</sup> By design, Canada's procurement process encourages competition and transparency. There are many stakeholders involved in a procurement process the size of one that would see the replacement of the CF-18, and the process is designed to ensure the items procured in the end offer the combined best value to all involved. The process follows logical steps, has appropriate authorization requirements and defines the roles of the key

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<sup>1</sup> Department of National Defence. "Canada's Next Generation Fighter Capability: The Joint Strike Fighter F-35 Lightning II." Last accessed 7 February, 2013. <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=3471>.

<sup>2</sup> Frank L. Boyd. "The Case of Canadian Fighter Acquisition: How an 'Unmilitary People' Shop for Military Equipment." *In The Acquisition of the CF-18: A Case Study*. (Ottawa, 1989), 4.

<sup>3</sup> House of Commons. Debate on Business of Supply Government Orders. 27 May, 2010. Last accessed 5 April, 2013. <http://openparliament.ca/debates/2010/5/27/#?page=18>.

stakeholders. The process includes departments like Public Works Government Services Canada (PWGSC), who is the contracting authority, ensuring the customer departments, such as the Department of National Defence (DND), adhere to the process. The process can be extremely long, bureaucratic, and may not deliver the end-product the customer wants, but it should deliver what the customer needs.

Canada purchased the Hornet by following all the policies that guide the procurement process. The New Fighter Aircraft (NFA) Program Office, which contained members from the three key stakeholder departments, was established to lead the program. Just over three years after it was established, the MND announced that Canada was going to acquire McDonnell Douglas F-18 Hornet. Although not viewed as the best aircraft available, the F-18 was deemed to be the one which presented the best value as it satisfied the military requirements and met the resource limitations the government imposed on the program office. The McDonnell Douglas bid also offered a substantive industrial benefits package to Canadians.

The F-18 Hornet purchase was a rational acquisition aligning well with Canada's attitude towards defence procurement; however, the Harper Government appeared to be taking a risk when it announced the acquisition of the F-35 without conducting a proper competition. The US-led Joint Strike Fighter (JSF) program allowed Canada to run its own competition if it wished. However, the Canadian government chose not to do so, signifying a potential attitude change towards defence procurement in Canada. The government appeared ready to take a risk, believing the benefits the JSF would bring Canada outweighed the inherent risks that came with it. These benefits included working with its allies in developing new technologies, the procurement of highly advanced, cost-effective and interoperable aircraft, the potential for

significant industrial and economic benefits, and the appearance that Canada was serious about national security. Additionally, the JSF program allowed the Harper Government to publicly cultivate public perception about its commitment to following through with its promises.

The purpose of this paper is to argue that Canadians are an ‘unmilitary people’ when it comes to the procurement of major capital, using Canada’s failed attempt to acquire the F-35 Lightning II as a primary example. Although the F-35 may be the fighter aircraft that is both the best aircraft available while also offering Canada the best value for its investment, Canada has shown that it is not willing to accept the level of risk inherent with this type of program. History has demonstrated that Canada is successful when it is rational and transparent in its approach to defence procurement, while the opposite is true when it does not during times of relative peace. When conducting acquisition programs for major platforms in the future, the government must approach the issue from a rational point of view and not let its desires overrun its logic, or else risk becoming politically vulnerable.

The paper will support this thesis by first introducing Canada’s procurement framework by discussing the steps a procurement program must follow, the elements of a procurement strategy, the major stakeholders in the process, and by identifying other influences on the process. The third chapter is a case study of Canada’s acquisition of the McDonnell Douglas (MDD) CF-18 Hornet. This case study is important because it demonstrates the successful acquisition of a major platform by adhering to the framework identified in the previous chapter. The paper will then explore the government’s recent actions taken in an attempt to replace the aging CF-18 fleet. This study is particularly relevant because the approach used to acquire new fighter aircraft contained a lot of risk which the government was willing to take. By comparing



the CF-18 and F-35 cases, the paper will demonstrate that Canadians are an ‘unmilitary people’ with regard to defence procurement, and that the government is extremely politically vulnerable when it does not follow its own guidelines.

## **CHAPTER 2: PROCUREMENT PROCESS**

The Canadian procurement process is designed to purchase equipment that delivers the best value and reduce risks to all stakeholders. There are many factors which influence the procurement of major capital, from the time a deficiency is identified within the Canadian Forces (CF) to when a solution is at its full operating capability. The process is very prescriptive and bureaucratic, with a view to ensuring the capital procured provides the best value and stakeholders are treated fairly. Given the prescriptiveness and bureaucracy there remain many options available to the decision makers, ranging from whether or not a process needs to be competitive to what level of Canadian Content Value (CCV) is considered fair. This chapter will discuss the Capital Approval Process, the options available when developing a Procurement Strategy, the major stakeholders involved in the process, and will identify other factors, such as politics and the lengths of the processes, present within the Canadian system. The reader will be provided with the framework required to understand the necessary factors within the process of acquiring major platforms such as Canada's next fighter jet.

### **CAPITAL APPROVAL PROCESS**

DND's Capital Approval Process is a highly structured, five phase process that must be conducted sequentially. Approval must be granted prior to the end of each phase, and once granted, the project can move to the next phase. All major capital acquisitions must follow this process, which is designed to ensure DND acquires the right equipment to satisfy its needs in accordance with government policy.

The Identification Phase is the first phase where a capability deficiency is identified along with possible solutions. The identified deficiency must be linked to a government mandate in order to proceed. A recent example would be linking the requirement for new fighter jets to the Canada First Defence Strategy (CFDS), which clearly states the need for Canada to procure 65 new fighter jets.<sup>4</sup> During this phase, there are several outputs, with the most notable being a draft Statement of Requirements (SOR) and a rough order of magnitude cost estimate. The Level One Commander, who in the case of fighter aircraft is the Commander of the Royal Canadian Air Force, is the approval authority required to move ahead and authorize the project manager to spend funds in order to analyze potential solutions.<sup>5</sup>

The second phase is the Options Analysis Phase, where potential solutions are analyzed. This phase focuses on conducting an assessment of anticipated costs, benefits, risks, and opportunities for each available option. It will also involve conducting market analysis, initiating research and development, examining industrial capabilities and considering a National Security Exemption.<sup>6</sup> Once the options are assessed, the SOR is further refined and an internal Senior Review Board is formed to oversee the project. Once an agreement in principle has been reached

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<sup>4</sup> Department of National Defence. *Canada First Defence Strategy*. (Ottawa: Canada Communications Group, 2008), 4.

<sup>5</sup> Elgin R Fetterly, “Arming Canada: Defence Procurement for the 21st Century” (doctor of philosophy thesis, Royal Military College of Canada, 2011), 230-231 and Alan S. Williams, *Reinventing Canadian Defence Procurement* (Kingston: Breakout Educational Network, 2006), 38.

<sup>6</sup> National Security Exemption is “The national security exception (NSE) provided for in the North America Free Trade Agreement, the World Trade Organization Agreement on Government Procurement, the Canada-Chile Free Trade Agreement and the Agreement on Internal Trade allow Canada to exclude a procurement from some or all of the obligations of the relevant trade agreement(s), where Canada considers it necessary to do so in order to protect its national security interests specified in the text of the NSE.” Source Public Works and Government Services Canada. “3.105. National Security Exemptions.” Last accessed 23 February 2013. <https://buyandsell.gc.ca/policy-and-guidelines/supply-manual/section/3/105>.

on the preferred option, a cost estimate and a life cycle of the equipment is developed. Approval to move to the next step is sought from the Minister or the Treasury Board (TB) if the project budget exceeds \$30 million.<sup>7</sup>

The third phase is the Definition Phase wherein the primary objective is the production of a final SOR and a substantive cost estimate for the preferred option. This phase involves the development of detailed system and component designs. The cost estimate in this phase will include all anticipated costs associated with the project, including equipment acquisition, personnel, operations, and maintenance. An understanding of how risk can impact project costs must also be studied and mitigating factors must be identified. This phase concludes with the approved expenditure authority from either the Minister or TB.<sup>8</sup>

The fourth phase is the Implementation Phase which comprises the delivery of capital equipment. Essentially, it is the phase in the process wherein the project produces the major capital to rectify the identified shortfall from the Problem Identification Phase. Although the Procurement Strategy will be explored during the earlier phases of the process, it will be finalized during this phase. Procurement Strategies will be explored in further detail later in this chapter. Therefore, this phase includes the acquisition and delivery of the equipment along with the training and infrastructure required to support it.<sup>9</sup>

The final phase in this process is the Close-Out Phase, which focuses on the closure of the project. This phase sees the procured capital reach its full operational capability, and

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<sup>7</sup> Fetterly, "Arming Canada...", 231 and Williams, *Reinventing Canadian Defence Procurement...*, 38-39.

<sup>8</sup> Fetterly, "Arming Canada...", 231-232 and Williams, *Reinventing Canadian Defence Procurement...*, 39.

<sup>9</sup> Fetterly, "Arming Canada...", 232 and Williams, *Reinventing Canadian Defence Procurement...*, 39.

includes closing contracts, archiving records, and producing a project completion report. The emphasis at the very end of this phase should be placed on recording lessons learned and identifying areas where the process can be improved.<sup>10</sup>

All of these phases cover the procurement process from start to finish. All must be executed in accordance with federal policies to increase the likelihood for a successful acquisition. A vital element of the procurement process is the selection and implementation of a Procurement Strategy.

## PROCUREMENT STRATEGY

A Procurement Strategy is the term used to explain how major capital is to be procured by an arm of the Canadian government. This strategy details whether or not the purchase will be done utilizing a competitive or sole source process. It will also detail the CCV strategy, including the Industrial and Regional Benefits (IRB), along with how it meets national objectives.<sup>11</sup> Selection of a Procurement Strategy is done by PWGSC in order to alleviate the risk of having customer departments selecting their own strategy based on desires rather than needs.

### Types of Processes

When possible, the government will attempt to use a competitive process; however, there are many reasons to procure an item using sole-sourcing. Sole-sourcing involves a contract issued to a supplier without using a competitive selection process. In order to conduct a sole-

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<sup>10</sup> *Ibid.*

<sup>11</sup> Public Works and Government Services Canada. "Plan the Procurement Strategy." Last accessed 23 February 2013, <https://buyandsell.gc.ca/for-government/plan-the-procurement-strategy>.

source process, the project must meet one of the following criteria: the need is a pressing emergency where delay would be injurious to the public interest, the project budget is below \$100,000 and meets other specific criteria, the nature of the work would not be in the public interest to solicit bids, or only one person is capable of performing the work.<sup>12</sup>

Most frequently, when DND procures an item, it does so by using some variance of a competitive process. Within the framework of a competitive process, DND identifies a requirement, and potential suppliers have the opportunity to place bids in order to be awarded the contract. This process is significantly longer and more highly scrutinized for larger dollar value projects, such as the procurement of any major platform. The purpose of a competitive process is to obtain the best value for taxpayer dollars. There are three evaluation models which are used to determine best value.

First, is the Points-Price Ratio Model, which awards the contract to the bidder who has the highest points to dollar ratio. To qualify, a bidder must first meet all the minimum criteria and then is awarded additional points when their product exceeds the minimum criteria for designated criteria. An example would be awarding an aircraft more points if it flies faster than the base requirement. This method ensures the product meets the minimum criteria, and it is easy to communicate and defend expectations. However, it can create situations where DND would pay more for a solution than it would have because the more expensive option could potentially

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<sup>12</sup> Public Works and Government Services Canada. "Contracting Policy Notice 2007-04 - Non-Competitive Contracting." Last accessed 12 April 2013. [http://www.tbs-sct.gc.ca/pubs\\_pol/dcgpubs/ContPolNotices/2007/0920-eng.asp](http://www.tbs-sct.gc.ca/pubs_pol/dcgpubs/ContPolNotices/2007/0920-eng.asp).

have a better points-price ratio, even though the lower cost option would meet the minimum criteria. This could potentially lead to millions of dollars overspent to solve a capability gap.<sup>13</sup>

The second method is Weighting, a mathematical approach which is often used when there is a desire to put more emphasis on technical aspects of a bid over price. The method involves placing more weight or points on certain criteria, like speed or stealth, and less on others. It has the same limitation as the Points-Price Ratio, in that DND may overspend to procure a solution when there are less expensive alternatives which meet the minimum criteria.<sup>14</sup>

The final method is the Compliant Lowest Price Method. Simply, this is the approach which awards a contract to the supplier who offers the lowest price while meeting all the minimum requirements. This method may save DND from spending millions of dollars needlessly on equipment which exceeds the actual requirements. However, this approach does raise concerns, such as the need to have a very strong SOR because a potential solution would only have to reach a minimum standard and would not be recognized for exceeding them. This type of method is harder to communicate to the public because it appears as though DND is just buying the cheapest equipment rather than procuring that which has the best value.<sup>15</sup>

The former Assistant Deputy Minister (Material) (ADM(Mat)), Alan Williams, states that the Compliant Lowest Price should be used as the default approach,<sup>16</sup> which is understandable for low cost solutions or technologically simple ones. However, for larger dollar value projects

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<sup>13</sup> Williams, *Reinventing Canadian Defence Procurement...*, 45-46.

<sup>14</sup> *Ibid.*, 47.

<sup>15</sup> *Ibid.*, 46-47.

<sup>16</sup> *Ibid.*, 47.

or projects where there are many technical variables, either the Weighted or Points-Price Ratio methods should be applied as they allow the credit the performance of a bid more so than the price. This would include Canada's acquisition for their next fighter jet. Therefore, for the procurement of the next fighter it is important that the process be competitive and the evaluation method be well communicated, fair, and transparent. The Procurement Strategy would also include which type of source the government would contract.

### Types of Sources

There are four types of sources who can be utilized when procuring equipment for defence and security. These options each have their own strengths and weaknesses, ranging from compatibility with allies to IRBs. Each of these options has been used successfully but they must all be considered for use when conducting major capital programs.

The first option is for Canada to design and build a product at home. This option is possible when Canada satisfies the identified deficiency using domestic firms in the development and delivery of equipment. The only time Canada has used this approach for larger projects over the last 50 years is building its own Navy vessels, more precisely for the National Shipbuilding Procurement Strategy and the Canadian Patrol Frigate Project.<sup>17</sup> This approach has many benefits, such as limiting the security concerns associated with procuring from foreign firms and directly benefiting Canadian industry. However, the development of a major platform would

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<sup>17</sup> Public Works and Government Services Canada. *Canada First: Leveraging Defence Procurement Through Key Industrial Capabilities*. (Ottawa: Canada Communications Group, 2013), 36-37.



likely take longer, cost more, and the Canadian industry does not have the capacity or skill-set to meet all of the government's requirements.

The second option is to adapt existing products to Canada's needs. This option involves purchasing intellectual property from a foreign source and using it to develop a made-in-Canada solution. This process was used for the development of the Light Armoured Vehicles (LAV), wherein Canada licensed the required technology from a Swiss company<sup>18</sup> and had the LAV built by General Dynamics Land Systems. This process has many of the same benefits and weaknesses as Canada designing and building its own equipment. This option would speed up development time and ensure the end product meets the requirements; however, the technology is no longer solely Canadian, potentially causing security concerns.

The third option is to develop a product in an international partnership. This option will usually include the participation of the Canadian industries in the co-development of the equipment.<sup>19</sup> The JSF is one such program where Canada and many of its allies have partnered with the US in the development of a fifth generation fighter. There are many advantages, such as the end product possessing the latest technology while being compatible with Canada's allies. However, the disadvantages of this approach are that it would take time to develop and deliver a new product, it is hard to hold a competitive process for the product the partnership is producing with its competitors in a transparent manner and costs are often uncertain at the outset.

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<sup>18</sup> PWGSC. *Canada First: Leveraging Defence Procurement...*, 37.

<sup>19</sup> *Ibid.*, 38.

The final option is to acquire an existing product from abroad wherein the government decides to procure capital equipment which is already available, often referred to as either a Commercial Off-the-Shelf (COTS) or Military Off-the-Shelf (MOTS). This is the approach most frequently used when procuring major platforms, as the other three are used comparatively infrequently due to either a lack of industrial capacity or concerns over contract price and risk.<sup>20</sup> This approach has many advantages, such as quicker delivery time, price and ability to compare options available. Although equipment may be procured from a foreign company, there is still a requirement to ensure Canadian industry is supported in some manner, whether directly or indirectly.

#### Canadian Content

When choosing a Procurement Strategy, it is important that consideration be given to the impact the purchase has on the Canadian economy, more specifically the Canadian defence industry. This is often referred to as CCV.<sup>21</sup> According to Williams, the Government adds CCV in three ways.<sup>22</sup>

The first is through opportunity driven industrial development, which is where Canada enters into a partnership with another nation or firm in order to secure long-term benefits of having the privilege of its domestic companies having the opportunity to bid on contracts for the project. The JSF, or F-35, program is such a case where the Government has partnered with their

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<sup>20</sup> *Ibid.*

<sup>21</sup> Aaron Plamondon, *The Politics of Procurement: Military Acquisition in Canada and the Sea King Helicopter*, (Vancouver: UBC Press, 2010), 9.

<sup>22</sup> Williams, *Reinventing Canadian Defence Procurement...*, 51.

allies in the development of a new fighter jet, thus allowing Canadian firms to bid on the contracts.<sup>23</sup>

The second method is through “Canadian-only” programs, whereby the contract goes to a Canadian firm that is responsible to deliver the equipment required. This is a tactic usually used by a country to support certain industries it deems critical, and for highly sensitive weapon systems, such as nuclear arms. Canada does have a right to use a National Security Clause, which is contained in several of its international trade agreements, such as the North American Free Trade Agreement and the Agreement on International Trade. The clause allows Canada to abstain from following conventional trade regulations when Canada considers it necessary to do so in order to protect its national security interests.<sup>24</sup> The Government has directed that the procurement of munitions and shipbuilding be limited to Canadian firms.<sup>25</sup>

The third method to support Canadian industry is by ensuring the contracts contain IRBs. The IRB policy states that companies that enter into a contract must undertake business activities in Canada valued at 100 percent of the contract value.<sup>26</sup> The IRBs can be Direct IRBs, meaning they are a part of the production supporting the original contract or Indirect IRBs, which are not

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<sup>23</sup> *Ibid.*, 52.

<sup>24</sup> Public Works and Government Services Canada. “3.105. National Security Exemptions.” Last accessed 23 February 2013. <https://buyandsell.gc.ca/policy-and-guidelines/supply-manual/section/3/105>.

<sup>25</sup> Williams, *Reinventing Canadian Defence Procurement...*, 58.

<sup>26</sup> Industry Canada. “Industrial and Regional Benefits.” Last accessed 23 February 2013. [http://www.ic.gc.ca/eic/site/042.nsf/eng/h\\_00016.html](http://www.ic.gc.ca/eic/site/042.nsf/eng/h_00016.html).

associated with the original contract.<sup>27</sup> Currently, there are more than 60 defence and security procurements subject to IRBs with obligations in excess of \$20 Billion.<sup>28</sup>

Alan Williams stated that “Canada is unique among its western allies in requiring, through legislation, that defence-related goods and services be acquired through a competitive process.”<sup>29</sup> The competitive process should have a positive impact on all the stakeholders. The military should receive the best available equipment at the lowest cost which would satisfy taxpayers. A truly competitive process would also ensure the Canadian defence industry is kept on a level playing field with their international competitors. Politicians would also benefit as they could avoid attacks on their integrity and allegations of political influence.<sup>30</sup> Although a competitive process does not always deliver the best operational solution for the customer, it should deliver a solution that meets the customer’s needs while providing the best value when all the stakeholders’ desires are considered.

## STAKEHOLDERS

There are many different organizations which are stakeholders in the procurement process. These stakeholders vary in their level to influence over the process and how much they are influenced by the process. There are four distinct groups of stakeholders who have varying levels of interest in the process.

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<sup>27</sup> Williams, *Reinventing Canadian Defence Procurement...*, 65.

<sup>28</sup> Industry Canada. “Industrial and Regional Benefits.” Last accessed 23 February 2013. [http://www.ic.gc.ca/eic/site/042.nsf/eng/h\\_00016.html](http://www.ic.gc.ca/eic/site/042.nsf/eng/h_00016.html).

<sup>29</sup> Williams, *Reinventing Canadian Defence Procurement...*, 7.

<sup>30</sup> *Ibid.*

First there is DND and the CF, which are classified as internal stakeholders in government. They are the stakeholders who need to satisfy a capability gap and it is in their best interest to acquire the ‘best’ possible solution quickly and at the lowest possible price. DND/CF are responsible for initiating and managing acquisition projects, and defining project requirements. As the technical experts in the process, they prepare the SOR and evaluate the technical aspects of the bids against the requirements in the SOR. Once the equipment is purchased, they are responsible for receiving the equipment, quality assurance, and authorizing payment.<sup>31</sup> The responsibilities within DND and the CF are separated, as the CF and its elements are responsible for identifying their requirements and the ADM(Mat) is responsible to acquire the equipment needed to satisfy these requirements.<sup>32</sup>

The second group are classified as the External Stakeholders in Government and include any governmental organization which has an influence in the process, such as the Prime Minister’s Office (PMO), Cabinet, Privy Council Office, the Auditor General, PWGSC, the TB, Industry Canada, etc.<sup>33</sup> Although some of these organizations have a clearly defined role in the process, others such as the PMO and Cabinet have varying levels of interest based political implications of the individual processes. Organizations with defined roles and responsibilities include the TB, PWGSC, Industry Canada and the Office of the Auditor General of Canada.

The TB is a statutory committee of the Cabinet that is responsible for approving policies with regard to project management and contracting. When a project’s estimated cost exceeds the

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<sup>31</sup> Fetterly, “Arming Canada...”, 380.

<sup>32</sup> Williams, *Reinventing Canadian Defence Procurement...*, 4.

<sup>33</sup> Fetterly, “Arming Canada...”, 380.

delegated financial authority of the Minister, they become the approving authority for the project and have the authority to allow exemptions from TB policies.<sup>34</sup> Cabinet approval is required when there are regional, economic, industrial or policy issues, or where costs are expected to exceed \$100 million on a project. Project managers must prove to Cabinet that the project fits within DND's mandate, while also providing costs estimates, timelines and the other courses of action available. The project managers are required to submit periodic reports to the TB in order to have funds released to them.<sup>35</sup>

PWGSC is the arm within the government that is responsible for contracting. With regard to the procurement of major platforms it manages the contracting process. This includes conducting market analysis, developing the procurement strategy for the projects, preparing bid documents, conducting tendering process, and finally, awarding the contracts.<sup>36</sup> PWGSC is the agency responsible for handling any legal challenges they may result from a process being run.<sup>37</sup>

Industry Canada is the department in the procurement process that is responsible to administer the IRB Policy. This policy links defence procurement with long-term industrial and regional development in Canada. The intent is to ensure "that socio-economic objectives are considered when a major defence acquisition is made".<sup>38</sup>

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<sup>34</sup> *Ibid.*

<sup>35</sup> Williams, *Reinventing Canadian Defence Procurement...*, 4.

<sup>36</sup> Fetterly, "Arming Canada...", 380.

<sup>37</sup> Williams, *Reinventing Canadian Defence Procurement...*, 4.

<sup>38</sup> Fetterly, "Arming Canada...", 380.

The Office of the Auditor General is an independent department of the government that is responsible to Parliament, to “hold the federal government accountable for its stewardship of public funds.”<sup>39</sup>

The third classification is the Stakeholders in Industry<sup>40</sup> which includes all suppliers, Canadian and foreign, who either directly or indirectly are potential suppliers to DND. These groups play a huge role in the process because they are the ones responsible for producing and delivering the procured capital equipment. A key constraint to any project is to ensure the capability required is actually achievable and affordable.

The final classification is External Governmental outside Canada<sup>41</sup> which includes our allies and treaty organizations, such as North Atlantic Treaty Organization (NATO), North American Aerospace Defence Command (NORAD) and the United Nations. These stakeholders need to operate alongside Canada on a routine basis and are therefore interested in Canada’s defence capabilities and interoperability with Canada.

## MAJOR STEPS IN THE PROCUREMENT PROCESS

Given the phases of the capital approval process and the factors behind a procurement strategy, Figure 2.1 demonstrates the flow of the procurement process. Once a customer department, such as DND, has finalized their requirements into a SOR, Industry Canada and DFAIT have evaluated trade and industrial benefits, and PWGSC has developed a procurement

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<sup>39</sup> Office of the Auditor General of Canada. “Welcome to the Office of the Auditor General of Canada.” Last accessed 23 February 2013. [http://www.oag-bvg.gc.ca/internet/English/admin\\_e\\_41.html](http://www.oag-bvg.gc.ca/internet/English/admin_e_41.html).

<sup>40</sup> Fetterly, “Arming Canada...”, 378.

<sup>41</sup> *Ibid.*

strategy a Request for Proposal (RFP) is developed. The RFP will detail the operational, contractual and trade requirements a bid must contain. It will also detail how the bids will be evaluated.

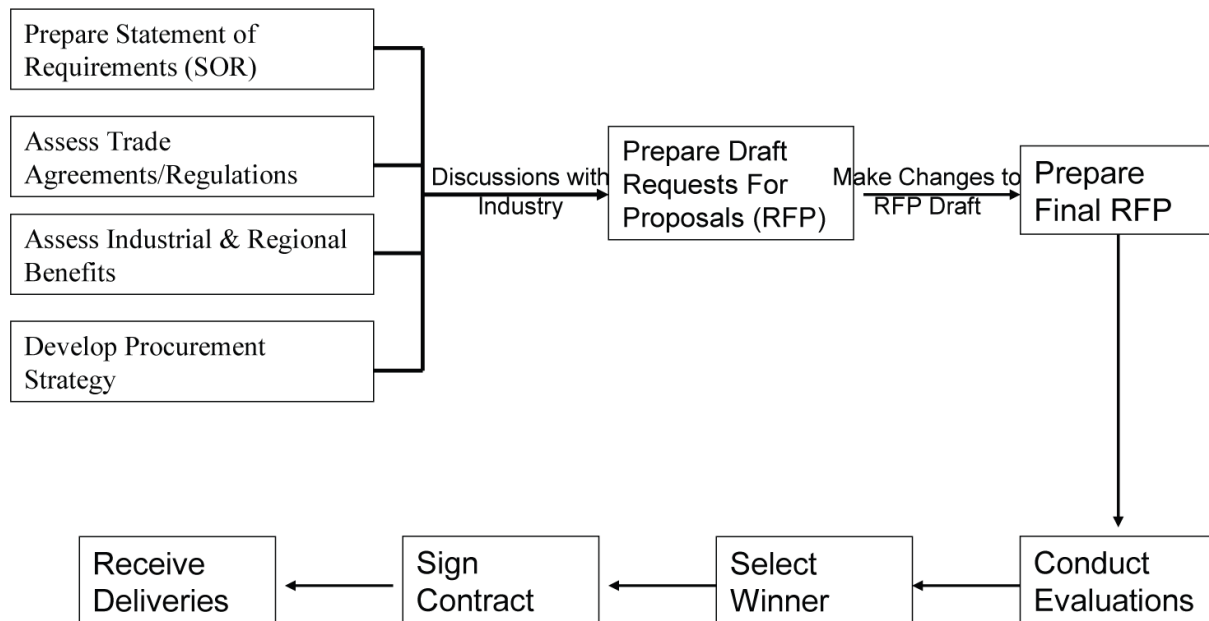


Figure 2.1- Major Steps in the Procurement Process

Source: Williams, *Reinventing Defence Procurement*, 38.

Once the bids are received from the firms attempting to be awarded the contract, an evaluation of all the options will be conducted. This evaluation will be based on the selected procurement strategy and will be made clear to the bidding firms in the RFP. Once the evaluation of options is complete, a winning bid will be selected. The firm that wins the contract will then be expected to produce the equipment in accordance with the contract.



## OTHER CONSIDERATIONS

There is large amount of ambiguity with regard to the roles and responsibilities amongst all the stakeholders that cause significant accountability concerns, especially those within DND, the CF, and the other stakeholders within the Government. A good example is that of the former MND, Gordon O'Connor, who on 12 February 2006 stated that he had three functions in procurement: ensure the requirements were valid, ensure process was fair, and then sign the contract. Although the first function is the responsibility of his department, the other two belong to PWGSC. Such lack of understanding of the process and overlap of perceived responsibility leads to needless delays and spending. Allan Williams states that “when you have two ministers accountable, you have no minister accountable.”<sup>42</sup>

Although the process takes logical steps in resolving a deficiency, one of the largest causes of dissatisfaction with regard to the procurement process is the time it takes from when a required capability is identified to when it is delivered to the CF. On 23 February 2006, Senator Colin Kenny, Chair of the Senate Standing Committee on National Security and Defence stated, “The time lag between identifying a need for a piece of equipment and delivery is so long that the equipment is obsolete when it arrives. The average time it takes to acquire a piece of major equipment, under the current system is 14 to 16 years.” The source of this estimate was the 2001 capital acquisition performance report.<sup>43</sup> The historical cycle time for procurement was 15.8 years according to the 2003 Capital Acquisition Performance Report, which also set a cycle time

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<sup>42</sup> Williams, *Reinventing Canadian Defence Procurement...*, 72.

<sup>43</sup> *Ibid.*, 95.

target of 9.25 years.<sup>44</sup> However, in 2011, the time it took to go through the process actually rose to 199 months, or more than 16.5 years.<sup>45</sup> For equipment as technology-based as fighter jets, the cycle must be kept to a minimum to avoid obsolescence, therefore there is some a certain degree of risk that must be accepted.

These are long processes which must be completed faster and have been completed faster when it was of operational imperative, such as the Leopard 2 and Chinook acquisitions during the war in Afghanistan. These were deemed acceptable risks given the operating environment and political importance of the mission in Afghanistan. Alternately, there have been projects such as the Sea King helicopter replacement which has been ongoing since 1978.<sup>46</sup> Much of the time delays stem from files working their way through the procurement process' bureaucracy. As stated earlier, files often sit needlessly with officials who do not understand their roles but there are also significant delays when files must wait until political decisions and announcements are made. Given the nature of the Canadian population, these decisions and announcements themselves will be sequenced in order to reduce risk or promote political platforms.

Any discussion of Canadian defence procurement would not be complete without considering the influence politics plays on the process. As Craig Stone wrote, “at the end of the day politics will always be an important part of defence procurement, in Canada and

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<sup>44</sup> Williams, *Reinventing Canadian Defence Procurement...*, 37-38.

<sup>45</sup> David Pugliese. “Delays in Purchasing for Canadian Military at Record Levels Under Conservatives.” *Ottawa Citizen*, 17 February 2013. Last accessed 23 February 2013.  
<http://www.ottawacitizen.com/technology/Delays+purchasing+Canadian+military+record+levels+under+Conservatives/7978257/story.html#ixzz2Ll0l6uq9>.

<sup>46</sup> Williams, *Reinventing Canadian Defence Procurement...*, 43.

elsewhere.”<sup>47</sup> Aaron Plamondon argues, “the longer a defence project goes on in Canada, the more politically vulnerable it becomes.”<sup>48</sup> This was the case for arguably Canada’s most famous defence acquisition difficulties, the Avro Arrow and the Sea King replacement. The Sea King replacement has many examples of politics affecting the project such as in 1993 when the New Ship-borne Aircraft project and the EH-101 contract were cancelled about six hours after Jean Chretien’s government took power. Chretien stated that this was done to avoid further contract costs, but he did so without conducting a study on the repercussions of cancelling the project. Chretien also stated, “I always made it clear, for a long time, that I would scrap this program” and therefore wanted to give the impression he was a man of his word.<sup>49</sup> Politics play a huge role especially when elections are near or the cost of a project is high. Due to the size of a fighter program, their dollar value and the time it takes to conduct a full procurement process, they can, and most likely will, be a significant factor during at least one election.

## CONCLUSION

In summary, the process in place to acquire major platforms is intended to provide the best value for all involved. This does not solely mean the lowest cost to the end user, but it also entails the benefits to Canadian industry while meeting other political goals. The approval process is established in a logical sequence with the appropriate approval authorities placed within each phase. However, obtaining these approvals often causes significant delays due either to ambiguity between departments over authority or political pressures. With major projects,

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<sup>47</sup> Craig Stone. “Defence Procurement and the Need for Disciplined Capital Investment.” *The Public Management of Defence in Canada*. (Toronto: Breakout Educational Network, 2009), 98.

<sup>48</sup> Plamondon, *The Politics of Procurement...*, 29.

<sup>49</sup> *Ibid.*, 136.

there are millions, if not billions, of dollars at stake and the more money that is involved, the increased level of scrutiny the project will be under. Ideally, if a project follows the appropriate steps and is competed fairly, it will move along quickly and be cost effective. However, history demonstrates that this is rarely the case for projects within Canada, except for projects which carried significantly favourable public opinion. It is apparent that there will always be issues which arise with major capital projects, such as the JSF Project, but minimizing these issues will lead to the successful delivery of a solution in the most timely and cost-effective manner.

### CHAPTER 3: ACQUISITION OF THE CF-18 HORNETS

Relating to Canada's procurement of the CF-18 Hornets, LtCol Frank Boyd Jr stated, "the New Fighter Acquisition (NFA) case was one of the more rational procurement decisions in the not-always-rational recent history of Canadian aircraft acquisition."<sup>50</sup> Although the NFA program did have its share of issues, the overall case should be looked upon as a model for the future acquisition of any major platforms.

The Government approached the issue of replacing its aging fighter aircraft fleets effectively. First, the Government established clear objectives which were stated in the NFA's Request for Proposal (RFP):

Although the need to satisfy the military requirement is the prime consideration, the Canadian Government's objective is the most cost effective program from the standpoint of achieving adequate operational effectiveness, minimizing program risk and life cycle cost and maximizing the industrial benefit to Canada.<sup>51</sup>

In order to achieve these objectives, they created a suitable Program Office, staffed by all the key departments, and gave the Program Office clear limitations.

This chapter will review Canada's acquisition of the McDonnell Douglas (MDD) F-18 Hornet in the late 1970s, arguing that it was rational defence procurement decision which limited political risk. The chapter will identify the requirement for new aircraft, the program office, the process used to acquire the new aircraft, and will conclude by presenting the key lessons observed for this case study.

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<sup>50</sup> Boyd. "The Politics of Canadian Defence Procurement: The New Fighter Aircraft Decision."..., 137.

<sup>51</sup> Department of Supply and Services. *Request for Proposal for the Canadian Forces New Fighter Aircraft: Volume I Introduction and Summary*. (Ottawa, 1977), 1.

## REQUIREMENT FOR FIGHTERS

As the DND publication describing the CF-18 stated that “It is not practicable for Canada to defend itself alone,”<sup>52</sup> and therefore, the Canadian Air Force (CAF) had to be a member of collective defence arrangements with like-minded partners. This was the case for Canada’s inclusion in NATO and NORAD. At the time, it was clear that both alliances required certain capabilities from the participating nations in order to be ready for their perspective threats.<sup>53</sup> Being a member of these alliances allowed Canada to rely on its allies, mostly the US, for international defence, leaving Canada to spend ‘just enough’ on defence. ‘Just enough’ to keep their allies and other stakeholders satisfied.

Canada’s fighter fleet was on the decline and was no longer ‘just enough.’ There was a significant NATO requirement for Canada to acquire fighter aircraft as the Warsaw Pact posed a significant threat. Canada’s requirement for tactical fighter aircraft in Europe was based solely on their commitment to the NATO alliance. Fighter aircraft were a key element to a modern balanced force, and was an area where Canada had significant expertise. A strong fighter aircraft force was a capability required if Canada were ever involved in a major conflict with its NATO partners.<sup>54</sup>

The Soviet threat was not only present in Europe, as there were fears of them attacking North America, which was one of the main factors in the requirement for the creation of NORAD. The NORAD partnership required the CAF to contribute to the deterrent value of the

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<sup>52</sup> Department of National Defence. *CF-18 Fighter Aircraft*. (Ottawa, 1988), 4.

<sup>53</sup> *Ibid.*

<sup>54</sup> *Ibid.*, 4-5.

US's retaliatory force. The CAF was also counted on to limit the damage which a bomber attack could cause within North America. Therefore the requirements of NORAD also meant that the CAF would require a modern fighter aircraft fleet.<sup>55</sup>

While the CAF had its requirements to fulfill with its allies, it also had some key tasks assigned to it by the Government on the domestic front. These tasks stemmed from their responsibility to provide control and surveillance over Canadian Airspace. Besides its responsibilities within NORAD, the CAF was also charged with non-military strategic control and surveillance of its airspace in terms of trans-Atlantic, trans-Pacific, and inter-continental air traffic. Therefore, when government needs dictated, the CAF required the capability to provide surveillance over its airspace and the ability to deploy armed interdictors in order to exert control as required.<sup>56</sup>

In 1975, the Trudeau Government's Defense Structure Review was released and it confirmed the roles of the CF previously stated in the 1971 White Paper. The roles were the surveillance of Canadian territory and coastlines (protecting Canadian sovereignty), defending North America in co-operation with the US, fulfilling agreed upon NATO commitments, and performing international peacekeeping roles as Canada deemed fit.

Given its commitments to its allies and the tasks assigned to it by the Government, the CAF required a fleet of modern fighter aircraft. The requirements placed upon the CAF were very diverse and raised the issue of whether or not Canada needed to maintain a mixed fleet or

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<sup>55</sup> *Ibid.*, 5.

<sup>56</sup> *Ibid.*

procure a sole multi-purpose aircraft. Consideration also needed to be given towards how advanced the next Canadian fighter needed to be. The next section will describe the requirement to procure new aircraft to meet the tasks listed above due to the aging aircraft Canada possessed at the time.

The NFA program was one of many programs which originated in the late 1970s due to the “belated political recognition of the sorry state of the Canadian Armed Forces during the mid-1970s.”<sup>57</sup> The CF suffered a long period of neglect and downsizing during the 1960s and 1970s which saw most of its major fleets aging rapidly and becoming obsolete. By 1975, the fear of having an obsolete force compounded with pressures from NATO allies obliged the Government to undertake a major defence modernization.<sup>58</sup> This degree of degradation links to Canada’s ‘unmilitary’ approach to defence procurement when not at war. The government allowed the degradation to reach the point where it became politically vulnerable for the Government not to do something to repair the fleet. This defence modernization had a significant impact on the CAF, particularly its fighter capability. The CAF’s fighter capability prior to defence modernization came in the form of the CF-104 Star fighters, CF-101 Voodoos, and to a lesser extent, the CF-5 Freedom Fighters.

The Star fighters were Canada’s main tactical fighter aircraft contribution to NATO. This fleet was aging rapidly and was the oldest aircraft in NATO. Canada was having a difficult time meeting the requirements of NATO with these older aircraft, which averaged 45 maintenance hours for each hour in the air. Of the 239 originally purchased, by the time the NFA decision was

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<sup>57</sup> Boyd. "The Politics of Canadian Defence Procurement: The New Fighter Aircraft Decision." ..., 139.

<sup>58</sup> *Ibid.*



made, the Canadian fleet was well below 100 aircraft. Half were lost to crashes, others cannibalized for spare parts and 40 were sold as surplus to Denmark and Norway.<sup>59</sup> In 1976, the Canadian Air Commander, Lieutenant-General William A. Carr stated that “[at the current attrition rate] it would be impossible to maintain our commitment to NATO beyond 1982.”<sup>60</sup>

The CF-101 Voodoo fleet was in a similar state of disrepair. By 1975, the operational fleet had been reduced to 36 aircraft. In 1972, Canada and the US conducted a ‘swap’ in order to extend the life of the Canadian fleet, as Canada exchanged its remaining 56 Voodoos for 66 USAF replacements which had fewer flying hours on them.<sup>61</sup> The Voodoos were primarily used in support of Canada’s commitment to NORAD and to its domestic sovereignty tasks.

With the state of the Star fighters and Voodoos, the CAF was in dire need to procure replacement aircraft, as these aircraft could no longer fill the role for which they were intended. Although the need for new fighter aircraft was apparent by the mid-1970s, there was no project office with the authority to investigate new options, which led to several missed opportunities to acquire other aircraft, often at a lower price.

### Missed Opportunities

Notwithstanding the pressure from allies, the state of the fighters and the confirmation of its tasks, the Government would defer the decision to acquire new fighter aircraft for another two years. Critics have suggested that this decision to defer for two years resulted in several missed

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<sup>59</sup> *Ibid.*

<sup>60</sup> *Ibid.*

<sup>61</sup> *Ibid.*

opportunities to procure other aircraft that later became competitors during the NFA.<sup>62</sup> These missed opportunities included participation in and acquisition of the European multi-role combat aircraft (MRCA) project which eventually produced the Tornado, two opportunities to purchase F-14 Tomcat variants and one option to purchase the F-15 Eagle.

The MRCA is a particularly interesting case because Canada initiated the idea of a consortium with six other NATO members to develop the MRCA. However, when it came time to invest capital in the project to conduct feasibility studies and develop prototypes, Canada withdrew and forfeited the chance to share in the potentially large industrial benefits the project would have to offer. When the Tornado later became a competitor in the NFA, Vice Air Marshall Cameron stated “If we had stayed in with the Europeans, we would have been building planes for the rest of Europe...now we might be buying them and the Europeans won’t give us the domestic production deals the Americans would.”<sup>63</sup> The case of the MRCA is also particularly interesting as the current F-35 Lightning II program is also a consortium, which has caused the current Government some issues which will be discussed in the fourth chapter of this paper.

In 1975, Canada reportedly turned down offers to purchase F-14s and F-15s. There were reports that Canada twice declined to purchase Grumman F-14 Tomcats at a fraction of the cost they would be offered during the NFA. However, it has been speculated that the deal fell through due to the Government’s insistence that Grumman partner with Canadair and deHavilland. The F-15 Eagle also saw an offer fail, as McDonnell Douglas (MDD) offered to sell 120 to Canada for \$1.5 Billion and merge with Canadair and deHavilland. Although the F-15

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<sup>62</sup> *Ibid.*

<sup>63</sup> *Ibid.*, 140.

was the preferred aircraft amongst pilots and the offer had the support of the Industry Minister, Cabinet would ultimately reject the offer.<sup>64</sup> The F-15 was a good example of a customer wanting the best equipment but seeing it denied in order to conduct a proper procurement process.

Although Canada would miss these opportunities, the government knew it had to purchase a new fleet of fighter aircraft, and on 17 March, 1977 it formally established the NFA.<sup>65</sup>

#### NEW FIGHTER ACQUISITION PROGRAM

In March 1977, the Cabinet approved the recommendations of a Memorandum to Cabinet with regard to the New Fighter Aircraft for the CF. This authorized DND to proceed with the acquisition of new multi-purpose fighter aircraft and was the first step in replacing the aging CF-104, CF-101, and CF-5 fleets with new modern fighters. The authorization came with several limitations: the new fighters would be “off-the-shelf” in order to limit escalating costs, DND was to acquire between 130 and 150 new aircraft, and the total cost of the project was capped at \$2.34 Billion over 10 years to include the cost of test equipment, weapons, trainers, and any other non-recurring costs.<sup>66</sup> These limitations actually gave the project a workable framework; by limiting the variables and the inherent risk with a project of this magnitude, it enabled the project to meet realistic goals in a timely manner while producing a viable solution.

The NFA Program Office was formally established on 7 April 1977 and included experts from the DND, the Department of Supply and Services (DSS), and the Department of Industry,

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<sup>64</sup> *Ibid.*, 147.

<sup>65</sup> Department of National Defence. *CF-18 Fighter Aircraft...*, 6.

<sup>66</sup> Department of Supply and Services. *Request for Proposal for the Canadian Forces New Fighter Aircraft: Volume I Introduction and Summary*. (Ottawa, 1977), 2.

Trade and Commerce (DITC).<sup>67</sup> Although the Program Office had become its own entity, with three equal partners, each involved department maintained its own interests and each gauged the program in terms of its potential to further those interests. Michael Atkinson and Kim Nossal argued that much of the success of the NFA was due to the competing interests of all the department's involved.<sup>68</sup>

For their part, DND was the customer who had a capability gap they needed to satisfy. Although many within DND would argue over the actual requirements, the overall intention was to acquire the 'best' aircraft available for the CAF. The main points of discussion were the desire to buy the 'best' aircraft vs. the best value aircraft, and the decision on whether to buy a single multi-purpose aircraft or a mixed fleet.

DND's top management and some of its lower leaders' priorities did not mirror each other. For instance, within Air Command there was a desire to acquire the 'best' fighters no matter the cost in relation to its competitors, while DND senior leadership would not endorse the 'best' fighter if that meant purchasing fewer than 130 or spending more than \$2.34 Billion.<sup>69</sup> At the time, senior leaders within DND were in the midst of replacing much of the department's older equipment, including the long-range patrol aircraft, main battle tanks, and patrol frigates. This new wave of spending was due to the Trudeau Government's November 1975 commitment to provide DND with a capital budget which was supposed to grow in real terms until 1982. Without a commitment past 1982, DND needed to be seen as responsible budget managers by

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<sup>67</sup> Department of National Defence. *CF-18 Fighter Aircraft...*, 6.

<sup>68</sup> Michael M. Atkinson and Kim Richard Nossal. "Bureaucratic Politics and the New Fighter Aircraft Decisions." *Canadian Public Administration* 24, no. 4 (Winter 1981): 561.

<sup>69</sup> Atkinson and Nossal. "Bureaucratic Politics...", 546.

Cabinet and the Treasury Board. In order to accomplish this goal, they set forth a defined pattern of capital expenditures to replace their aging fleets and there was no appetite at the senior level to deviate from it.<sup>70</sup>

The NFA Program Director, Brigadier General Mason, discussed the three times one versus two topic in his article referring to the debates over choosing multiple platforms vs. a sole multi-purpose aircraft, of having one vs. two engines and should it have a crew of one or two.<sup>71</sup> Although the latter two debates would be decided during the evaluation phase, the debate over the number of platforms was answered by the MND who on 18 March 1977, stated the “acquisition of a single multi-purpose aircraft is considered the most promising and most cost-effective approach” as it would reduce costs, training, and simplify maintenance.<sup>72</sup>

DSS, a precursor to PWGSC, was responsible for the quality of the final contract and to ensure Cabinet’s intentions were reflected. DSS had the complex task of negotiating provisions to cover production, delivery, cash flow, and industrial benefits. They needed to satisfy DND’s operational requirements while remaining consistent with Cabinet directives. In order to achieve this they required considerable control over the actual negotiating process.<sup>73</sup>

DITC, the precursor to Industry Canada, was responsible for evaluating the industrial benefits packages for each submitted proposal. Their objectives were to offset the cost of the

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<sup>70</sup> *Ibid.*, 545.

<sup>71</sup> P.D. Manson. “Managing the New Fighter Aircraft Program.” *Canadian Defence Quarterly* 7, no. 4 (Spring 1978): 12.

<sup>72</sup> John Gellner. “The Fight for the New Fighter: An Analysis of the Various Factors that will Influence Canada’s Biggest-Ever Weapons Buy, the \$2.34 Billion New Fighter Aircraft Program.” *Canadian Aviation* (December 1977): 18.

<sup>73</sup> Atkinson and Nossal. “Bureaucratic Politics...”, 547.

NFA with a substantial industrial benefits package, indicate the evaluation criteria by which the packages would be evaluated, and to operate as a promotional tool for Canadian industry.<sup>74</sup> The three areas where industrial benefits would be considered were: benefits for the Canadian aerospace sector (including those directly related to the NFA), benefits in non-aerospace defence equipment, and benefits not related to defence or aerospace.<sup>75</sup>

With the NFA Program Office established and the departments working together in the acquisition of a new fighter aircraft, there would be no more missed opportunities, and the actual acquisition process was ready to begin. This process would see the different departments looking at the options through their own lenses. These differing perspectives allowed for a more broad analysis of the issue, and ensured the decisions were the best for Canada.

#### Original Contenders

There were seven aircraft originally considered as contenders for the NFA. These contenders were the Panavia Tornado, Dassault-Breguet Mirage 2000, Grumman F-14 Tomcat, MDDF-15 Eagle and F-18 Hornet, General Dynamics F-16 Fighting Falcon, and the Northrop F-18 Cobra.<sup>76</sup> These aircraft were to be evaluated against six fundamental criteria which were: operational effectiveness, technical adequacy, support effectiveness, cost, risk, and industrial

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<sup>74</sup> *Ibid.*, 548-549.

<sup>75</sup> Department of Supply and Services. *Request for Proposal for the Canadian Forces New Fighter Aircraft: Volume IV Industrial Benefits*. (Ottawa, 1977), 4-6.

<sup>76</sup> The Northrop F-18 Cobra was an earlier version of the F-18 Hornet which Northrop had designed prior to combining with McDonnell Douglas in further developing the aircraft.

benefits.<sup>77</sup> A team of approximately 180 experts, mainly from DND but including members from DSS and DITC, conducted the evaluations.<sup>78</sup>

Shortly after the program began, most of the competitors were eliminated. The Mirage 2000 was eliminated because it could not meet the required delivery timelines. The Northrop F-18 was eliminated as there was an unacceptable degree of risk surrounding the program, as the NFA staff was uncomfortable with the lack of success Northrop had had in securing orders from other nations, thus creating overall program and price uncertainty. Although the DITC found Northrop's industrial benefits package appealing, DND and DSS found it was too risky. The F-14 Tomcat, F-15 Eagle, and the Tornado, whose large price was compounded by its weaker industrial benefits package, were all eliminated due to their price tag not meeting the limitations set forth by cabinet.<sup>79</sup>

The final 'short list' included the two lowest-cost and lowest-risk options; the McDonnell Douglas F-18 Hornet and the General Dynamics F-16 Fighting Falcon. The recommendation of the 'short list' was accepted by cabinet on 23 November 1978.<sup>80</sup> The imposition to submit a short list ensured the industrial benefits packages for both bids would become the determining factor in selection. However, the final decision between the two bids was further delayed as two federal elections postponed the final decision by over a year.<sup>81</sup>

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<sup>77</sup> Manson. "Managing the New Fighter Aircraft Program."..., 14.

<sup>78</sup> *Ibid.*, 15.

<sup>79</sup> Boyd. "The Politics of Canadian Defence Procurement: The New Fighter Aircraft Decision."..., 146.

<sup>80</sup> Atkinson and Nossal. "Bureaucratic Politics..." , 554.

<sup>81</sup> Boyd. "The Politics of Canadian Defence Procurement: The New Fighter Aircraft Decision."..., 146-147.

## Industrial Benefits and Politics

At the outset of the NFA, DITC never viewed the program as vital to its interests. Although it was an important project for both DND and DSS, it was one of many competing programs DITC was managing at the time. This was evident in many ways, with the most obvious sign being the number of dedicated staff assigned to the program; the DITC only dedicated two officials full-time while DND and DSS had twenty-five and eighteen personnel respectively. This led to their senior member DITC of the NFA to be solely a functional head and subordinate within the NFA Program Office.<sup>82</sup> This occurred despite the fact that DITC had a very broad mandate which often contrasted with the other department's interests and thus required a strong presence to force their interests. The lack of dedicated focus by the DITC led to an ambiguous RFP, as it did not provide a detailed relationship between quality and quantity of the required IRBs.<sup>83</sup> This ambiguity caused dissatisfaction amongst the bidding firms and led companies to submit proposals which were not commensurate with each other and thus hard to compare, causing additional delays.

When final negotiations began between the program and the final two competitors, the DITC representatives within the program lacked direction and authority from their senior management. This forced them to contact Ottawa from the negotiation sites whenever any questions arose. Even when negotiations seemed to be completed and the group returned to Ottawa, many of DITC priorities had changed as DITC senior management was not satisfied

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<sup>82</sup> Atkinson and Nossal. "Bureaucratic Politics...", 551.

<sup>83</sup> *Ibid.*, 549.



with the overall industrial benefits packages being offered.<sup>84</sup> In the fall of 1979, DITC mandated that the industrial benefits articles be significantly renegotiated, which caused serious conflict between the departments. This would potentially cause delays, leading the MND, Allan MacKinnon, to estimate that each additional day of delay in signing the final contract would add \$1 Million to the cost of the program.<sup>85</sup> When the final two contracts were forwarded to the Privy Council Office, most of DITC's objections had been satisfied.<sup>86</sup>

On the eve of the final decision from Cabinet, federal and provincial politics entered the discussion. The federal election of February 1980, where the Liberal's regained power, renewed the debate over the NFA. Although the MDD and General Dynamics both had significant industrial benefits packages, it appeared as though they each favoured one region of Canada over another. MDD took advantage of its Canadian subsidiary's connections with the Government of Ontario and General Dynamics focused on its link to the Quebec government. The debate over regional benefits eventually became part of the referendum debate in Quebec. General Dynamics used abrasive tactics as a desperate attempt to win the contract, as they were already aware that the F-18 Hornet had won the NFA competition.<sup>87</sup> On 9 April 1980, the MND, Gilles Lamontagne, met with the Quebec Caucus and refuted General Dynamics claims with regard to their loftier IRB package, thus sufficiently diffusing the debate, allowing the government to officially announce the winning bid the following day.

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<sup>84</sup> *Ibid.*, 555.

<sup>85</sup> *Ibid.*, 556.

<sup>86</sup> *Ibid.*, 559-560.

<sup>87</sup> Boyd. "The Politics of Canadian Defence Procurement: The New Fighter Aircraft Decision."..., 148.

On 10 April 1980, Gilles Lamontagne announced the selection of the MDD F-18 Hornet as the winner of the NFA competition. TB approved the contract that was signed by DSS and MDD on 16 April 1980.<sup>88</sup> In the end, the NFA Program delivered a highly capable major equipment platform which satisfied the interests of all the actively involved departments. The program also satisfied all the Cabinet's imposed limitations, as they procured 138 "off-the-shelf" F-18 Hornets on budget. In October 1982, CAF received the delivery of the first of the 138 aircraft, with the final delivery taking place in September 1988.<sup>89</sup> The Minister of DITC, Herb Gray, would later publicize the IRB packages from both firms, demonstrating the MDD offer included \$3.3 Billion in offsets within Canada and specifically \$1.6 Billion in Quebec vice the \$1.5 Billion GD had offered to Quebec.<sup>90</sup>

## CONCLUSION

The 1971 Defence White Paper stated that "it is not possible simply to state 'defence requirements,' and call that the defence budget. There is no obvious level of defence expenditures in Canada" and "the Canadian Government believes a judgement must be made on proposed defence activities in relation to other Governmental programs."<sup>91</sup> These statements support the approach Canada took to acquire its new fighter aircraft. Canada used its judgement in assessing its needs in relation to the resources available and moved forward accordingly. Boyd referred to Canada's defence procurement as "the product of rational governmental choices made

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<sup>88</sup> Department of National Defence. *CF-18 Fighter Aircraft...*, 7.

<sup>89</sup> *Ibid.*

<sup>90</sup> Boyd. "The Politics of Canadian Defence Procurement: The New Fighter Aircraft Decision."..., 148.

<sup>91</sup> Department of National Defence. *Defence in the 70s*. White Paper on Defence. (Ottawa: Information Canada, 1971), 41.

on the grounds of calculations about national strategic objectives and doctrines.”<sup>92</sup> This was the case for the NFA, as the Government identified a critical vulnerability in the status of their fighter aircraft and developed a rational plan to solve it. Although there were delays in getting the program started for many reasons, once they initiated the plan, it was considered sound.

The first lesson observed was the creation of the NFA Program Office. Creating a separate organization and staffing it with members of the three interested departments within the government, allowed the NFA to focus on the problem at hand while having the partner departments, who have competing interests, close. Although there were issues with the level of interest from DITC, having the three main departments working together as equal partners in order to balance the interests of the three departments is an effective way of operating a major program. This allows the key members within each department to fully grasp the interests of the competing departments while also reducing the time delays due to the bureaucracy of sharing files amongst non-grouped departments. This type of organization to run a major program is logical and should be utilized for major programs in the future.

The second lesson observed was the limitations the Government imposed onto the NFA. As was the case with the NFA, these limitations must be achievable. Limitations and expectations must be clearly defined and communicated to all interested parties. These limitations eliminated the aircraft of choice for the CAF, the F-15, but delivered a suitable option in the end. The Hornet met the CAF’s operational needs, while also delivering the required number of airframes, on budget and on time. Although this may not be the preferred approach for

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<sup>92</sup> Boyd. “The Case of Canadian Fighter Acquisition: How an ‘Unmilitary People’ Shop for Military Equipment.”..., 4.

the military to take, it is a rational approach given the competing needs the government must satisfy.

The third lesson from the acquisition of the CF-18 is how well the competition process evolved. This was a fair and transparent process. For the most part it gave the bidding firms clear expectations and eliminated those who could not meet them. Although most of the competitors were American firms and this program was designed in part to satisfy our NORAD requirements, there was no favour given to the American firms over international ones. When the expectations with regard to IRBs were finally decided, the remaining two companies were given the same opportunities to make their proposals. In the end, the Government would disclose the IRBs from the two firms demonstrating boundless transparency.

As stated in the opening of this chapter, the NFA was a rational procurement decision. With the state of the CAF's fighter aircraft meeting the end of their useful lives in the mid-1970s, there was a need to replace them to satisfy Canada's commitments to NATO and NORAD, and also to satisfy their domestic needs. The NFA was successful for many reasons. The idea of grouping the three main stakeholders together enabled the program to work more effectively together, understand the others' interests, and reduce time spent on useless bureaucracy. Having the Government set clear expectations and limitations for the program, allowed the program to find a reasonable solution fairly quickly. These limitations, coupled with the transparency demonstrated by the Government with regard to the process also reduced the political risk inherent with a program of this magnitude.

This process truly demonstrated how 'unmilitary people' conduct defence procurement, as the approach taken limited most possible risks. Canada did not acquire what the military

viewed as the best fighter aircraft but the best fighter aircraft given limited resources. DND needed this procurement process to deliver a suitable platform in a timely manner as there were several other fleets of equipment that needed to be replaced, not unlike what Canada is currently facing.

## CHAPTER 4: POTENTIAL ACQUISITION OF THE F-35 LIGHTNING II

The JSF was initially a US initiative which sought to produce a low-cost, next generation multi-purpose fighter for several of its armed services. It opened the door for international participation in order to lower costs and strengthen its alliances. Canada officially became involved in the JSF program in 1997<sup>93</sup> and since that time there has been debate in Canada over this controversial initiative. The F-35 has been marred by controversy due to ongoing production delays and increased costs. These problems were compounded by the Government's lack of transparency and poor strategic communication throughout the process.

This chapter will argue that the Government decided to accept a high level of political risk in order to acquire the F-35 without conducting a proper procurement process for several reasons. This chapter will begin by discussing the origins of the JSF program and Canada's involvement. It will then explore the factors which led the Government to make the decision to procure the F-35s, which became a key reason for the 2010 non-confidence vote in parliament. The chapter will conclude by exploring where the Government is currently headed with the program and discuss many of the lessons observed from this case study.

### REQUIREMENT TO REPLACE THE CF-18

The previous chapter of this paper discussed the procurement of the CF-18 Hornets, and now, approximately 30 years, later Canada is investigating replacing them. The Hornets had an

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<sup>93</sup> Department of National Defence. "Canada's Next Generation Fighter Capability: The Joint Strike Fighter F-35 Lightning II." Last accessed 7 February, 2013. <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=3471>.

original life expectancy to 2003 but after a modernization plan in 2000, their life expectancy was extended to 2017-2020.<sup>94</sup> Of the original 138 Hornets purchased, the fleet is down to 103, due to accidents and retirements. Of that 103, only 79 were processed through the 2000 modernization and considered operational.<sup>95</sup> Therefore, Canada's fighter aircraft capability is at 60 percent of what it was envisioned to be only 30 years ago and by 2020, without a replacement or extension plan, that capability risks declining to zero.

The 1971 White Paper on Defence clearly defined the CAF's tasks. It provided direction from the Government on what exactly the CAF's responsibilities were with regard to NORAD, NATO, and domestic operations. This White Paper gave senior military leaders in Canada clear direction and allowed them to develop solutions to satisfy the demands placed upon them. The Government's latest publication, the CFDS, does not offer the same standard of direction. The CFDS gives very broad tasks and leaves it up to the DND to develop solutions which will hopefully satisfy current and future demands placed upon it.

Although CFDS does not give any assigned CAF tasks, there are many implied tasks throughout. The CFDS assigns DND six core missions, which include conducting daily domestic and continental operations, supporting major international events in Canada, responding to major terrorist attacks, support civilian authorities during a crisis in Canada, conducting international

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<sup>94</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets." *Report of the Auditor General of Canada to the House of Commons*. (Ottawa: Canada Communications Group, 2012), 1.

<sup>95</sup> Defense Industry Daily staff. "Canada Preparing to Replace its CF-18 Hornets." *Defence Industry Daily*. 4 March 2013. Last accessed 6 April, 2013. <http://www.defenseindustrydaily.com/canada-preparing-to-replace-its-cf-18-hornets-05739/>.

operations for an extended period of time and responding to crisis around the world.<sup>96</sup> On the domestic and continental front, fighter aircraft capability will continue to play a major role within NORAD and its requirements in the Arctic will definitely rise due to its changing environment. Although the major threat of the Warsaw Pact evaporated with the end of the Cold War, there is still a requirement to conduct sovereignty operations such as surveillance of Canada's coastlines. Canada has used its fighter capability on expeditionary operations on three occasions since the Cold War ended: in the first Gulf War, Kosovo, and Libya. Therefore, there still is a need for an expeditionary fighter aircraft capability.

Without clear tasks, how does Canada decide how many aircraft are needed, and what their minimum requirements are? Canada had originally intended on procuring 80 F-35s, but in 2008 Prime Minister Harper stated that Canada would be buying only 65, as "the new fighters will have significantly greater capacity than existing fighters."<sup>97</sup> Later in December 2011, the Associate MND, Julian Fantino, told a reporter that it was possible that Canada would buy fewer than 65, although the CDS, General Natynczyk, had stated in November that "sixty-five is the minimal operational requirement for us."<sup>98</sup> The operational requirements for the next fighter aircraft for Canada was also unclear as there was an Operational Requirements Concept Document produced in June 2006,<sup>99</sup> the actual SOR was not produced until June 2010.<sup>100</sup>

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<sup>96</sup> Department of National Defence. *Canada First Defence Strategy*..., 10.

<sup>97</sup> "Canada to Buy Fewer F-35 Fighters Than Thought." *Reuters*, 12 May 2008. Last accessed 6 April 2013. <http://www.reuters.com/article/2008/05/12/canada-military-idUSN1231405420080512>.

<sup>98</sup> Berthiaume, Lee. "Canada may Wind Up Buying Fewer New Stealth Fighters." *Postmedia News*, Dec 12, 2011. Last accessed 6 April 2013. <http://search.proquest.com/docview/910928650?accountid=9867>.

<sup>99</sup> Department of National Defence. *Operational Requirements Concept Document (ORCD) for The Next Generation Fighter Capability (NGFC)*. 22 June 2006.



Although there are many reasons Canada became a partner in the JSF, the need to replace the aging CF-18 fleet was not one of them at the time.<sup>101</sup> The JSF program attracted Canada as it offered many benefits such as an inside track on the F-35 if that was the aircraft Canada would procure in the future and the opportunities it offered to the Canadian aerospace industry. Participation, however, came at a significant risk that increased with each additional memorandum of understanding (MOU) Canada would sign with the US.

## JOINT STRIKE FIGHTER PROGRAM

Through the mid-1980s to mid-1990s the US DoD established many different programs in order to develop different fighter aircraft to meet all their needs. Most of these programs were eventually cancelled, except for the Advanced Short Take-Off/Vertical Landing (ASTOVL) program.<sup>102</sup> The ASTOVL program would merge with the Joint Advanced Strike Technology (JAST) program, which was established to mature the technologies that could be used in future fighter aircraft.<sup>103</sup> The program would eventually be renamed the JSF program.<sup>104</sup> The JSF is the US DoD's largest ever development and procurement project, and is intended to produce an affordable multi-role fighter aircraft.<sup>105</sup>

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<sup>100</sup> Alan S. Williams. *Canada, Democracy and the F-35*. (Kingston: Defence Management Studies Program, 2012), 27.

<sup>101</sup> Williams. *Canada, Democracy and the F-35*., 7.

<sup>102</sup> F-35 Lightning II Program. "History." Last accessed on 6 April, 2013. [http://www.jsf.mil/history/his\\_prejast.htm](http://www.jsf.mil/history/his_prejast.htm).

<sup>103</sup> F-35 Lightning II Program. "History." Last accessed on 6 April, 2013. [http://www.jsf.mil/history/his\\_jast.htm](http://www.jsf.mil/history/his_jast.htm).

<sup>104</sup> F-35 Lightning II Program. "History." Last accessed on 6 April, 2013. [http://www.jsf.mil/history/his\\_jsf.htm](http://www.jsf.mil/history/his_jsf.htm).

<sup>105</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets."..., 5.

Canada became a partner in the JSF in 1997. Alongside Canada and the US, there are eight other partners.<sup>106</sup> All nations participating in the JSF are not considered equal, however, as levels of partnership are ranked according to amount of dollars invested, with larger investments increasing the weight of opinions regarding decisions on development, requirements, and access to technologies. Based on their level of investment, the US is the lead nation with the UK as the only level I partner, the Netherlands and Italy are level II partners with Canada and the remainder being level III partners. Therefore, although Canada is a partner, its opinion does not hold much weight when key decisions are being made. However, the JSF does offer its partners some attractive features, such as the ability of their industry bidding on contracts to support the program, the opportunity to buy the aircraft at a lower price point, input in decision-making, accessibility to some of the technologies developed, and part of the global sustainment strategy.<sup>107</sup>

The overall JSF program is divided into three phases; Concept Development (CDP) 1997-2001, System Development and Demonstration (SDD) 2001 to 2018, and Production, Sustainment and Follow-on Development (PSFD) 2006 to 2051. Prior to the start of each phase, partner nations were required to sign a MOU with the US, which formalized their participation and financial contributions.<sup>108</sup>

Prior to the CDP, the JSF program had already conducted a Concept Design phase from 1994 to 1996 with Lockheed Martin, Boeing, and MDD submitting their designs for the new

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<sup>106</sup> *Ibid.*, 2.

<sup>107</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets."..., 6-7.

<sup>108</sup> *Ibid.*, 6.

aircraft. On 16 November 1996, the US chose Lockheed Martin and Boeing as the two finalists to carry-on to the CDP.<sup>109</sup> The CDP took nearly five years, which included thousands of meetings and several test flights of aircraft with both companies. In the end, the US and UK selected the group led by Lockheed Martin to be the company that would eventually produce the JSF. Their selection was announced on 26 October 2001.<sup>110</sup>

The JSF program, not unlike any other large defence procurement, has run into several problems. The program has seen cost increases and schedule delays which have both impacted the program and its partners. The total developmental funding has risen by 64 percent since the SSD has begun<sup>111</sup> and the fly-away cost per aircraft has risen from US \$49.9 Million in October 2001 to US \$84.9 Million in December 2009.<sup>112</sup> There have been three significant changes to the estimated delivery dates of the Canadian variant. At the beginning of the SSD, the expected first operational aircraft delivery was expected in 2008 with a full-rate of production by 2012. As of April 2010, those milestones were expected to be attained in 2010 and 2016 respectively.<sup>113</sup>

#### Canada's Participation in JSF

The JSF represents Canada's largest defence procurement project ever. Canada has participated in the JSF since they signed their first MOU on 2 January 1998, committing US \$10 Million and becoming an observer of its management innovations. This initiative did not

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<sup>109</sup> Williams. *Canada, Democracy and the F-35...*, 2.

<sup>110</sup> *Ibid.*, 1.

<sup>111</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets." ..., 7.

<sup>112</sup> *Ibid.*, 8.

<sup>113</sup> *Ibid.*

represent intent to procure the JSF but was essentially getting Canadian industry's foot in the door. The ADM(Mat), Allan Williams, stated that the real decision facing Canada was whether or not to take part in the SDD.<sup>114</sup>

Eventually Canada did decide to participate in the SDD, as Williams signed the second MOU on 7 February 2002, committing US \$100 Million over 10 years from DND's budget while Industry Canada distributed an additional US \$50 Million to Canadian industry. Important to note, prior to signing this MOU, there was a MOU signed in early 2001 between DND, Industry Canada, the Department of Foreign Affairs and International Trade (DFAIT), and the Canadian Commercial Corporation. The MOU clearly defined each department's roles and responsibilities with regard to this portfolio.<sup>115</sup> The decision to sign the 2002 MOU with the US was not a selection of the JSF to replace the CF-18, but rather, by signing it gave Canada information that would help it evaluate the JSF as a potential replacement for the Hornets. Signing this MOU would also help interoperability between Canada and its allies, give DND insight into the most current best practices and leave the door open to recuperate research and development expenses should Canada procure the JSF. That said, initially Canadian industry was skeptical, as they did not fully believe there would be a significant number of contracts truly open to them. Williams said that it was not until late 2001 that the Canadian industry was fully on board.<sup>116</sup>

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<sup>114</sup> Williams. *Canada, Democracy and the F-35...*, 7.

<sup>115</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets."..., 14.

<sup>116</sup> Williams. *Canada, Democracy and the F-35...*, 7-8.

On 11 December 2006, the Deputy MND Ward Elcock, signed the third MOU<sup>117</sup> committing up to US \$551 Million over 40 years should Canada remain a partner. The third MOU represents Canada's acceptance of the F-35 procurement regime with the potential benefit of royalties on sales to non-partner nations.<sup>118</sup> The amount to be paid was based on the number of aircraft planned to be purchased which, at the time, was 80. Although their initial plan was to purchase 80 aircraft, the overall investment cost will go down if they decide to buy less. Canada will most likely not be the only country to change their quantity. This MOU also had clauses which allowed countries, such as Canada, to conduct the procurement in accordance with national regulations. One such clause was 3.2.1.1.1 which reads "Actual procurement of JSF Air Vehicles by Participants will be subject to the Participants' national laws and regulations and the outcome of the Participants' national procurement decision-making process."<sup>119</sup> This gives Canada the right to run a complete competition. To date, Denmark is the only country which has chosen to use these clauses and is currently running their own competition to select their next fighter aircraft.<sup>120</sup> Section 19 of the MOU deals with withdrawals and amendments, allowing all involved partners to pull out from the JSF project without penalties, stipulating, however, that countries that withdraw would still be responsible to pay for their fair share of expenses incurred to date.<sup>121</sup>

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<sup>117</sup> *Ibid.*, 7.

<sup>118</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets." ..., 11.

<sup>119</sup> Williams. *Canada, Democracy and the F-35...*, 9.

<sup>120</sup> Danish Minister of National Defence. "Valget af nyt kampfly starter igen." 3 March 2013. Last accessed 12 April 2013. <http://www.fmn.dk/nyheder/Pages/Valgetafnytkampflystarterigen.aspx>.

<sup>121</sup> Williams. *Canada, Democracy and the F-35...*, 9.

Canada's participation in the JSF was based primarily on two things: first, the potential to buy the same state-of-the-art fighter aircraft our allies were procuring and second, to support Canada's aerospace industry. As the project moved along and Canada continued to support it, the economic benefits the Canadian industry was receiving were outstanding. Reports indicate that seventy-two companies in Canada secured contracts with the JSF Program, totalling US \$438 Million as of the summer of 2012.<sup>122</sup> If Canada remains in the program and purchases the F-35, there are identified opportunities of up to US \$9.328 Billion for a total of US \$9.766 Billion in contracts awarded to Canadian companies.<sup>123</sup> There are also other opportunities which may arise and see Canadian industry benefit even more, including the sustainment of the aircraft.<sup>124</sup> The issue with this type of IRB is that it does not meet the Canadian procurement criteria for IRBs, in that it is not guaranteed as the Lockheed Martin group sub-contracts to firms from partnering nations which offer the best value. The Government's IRB Policy seeks to ensure that defence procurement guarantees contracts for Canadian firms, often equivalent to the total value of the acquisition. Although the JSF may offer better IRBs, they are not guaranteed.

Although Canada had been involved in the JSF program since 1997, it was never obliged to purchase the F-35. Canada had the right, and actually intended to conduct a proper procurement process to include a competition. In early 2010, this is the route Canada appeared to be heading down until it was surprisingly announced that Canada would purchase 65 F-35s.

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<sup>122</sup> Canada. Industry Canada. *Canadian Industrial Participation in the F-35 Joint Strike Fighter Program*. (Ottawa: Canada Communication Group, 2012), 4.

<sup>123</sup> *Ibid.*

<sup>124</sup> *Ibid.*

## DECISION TO PROCURE F-35s

On 16 July 2010, MND Peter MacKay, flanked by the Industry Minister Tony Clement and Public Works Minister Rona Ambrose, announced that Canada planned to purchase 65 F-35 Lightning II fighter aircraft at a cost of \$9 Billion.<sup>125</sup> Delivery of the new aircraft was to start in 2016, just before the CF-18's were set to be retired. Although this announcement was a welcome one to many, namely DND and its allies, it did raise many eyebrows. There were numerous concerns coming from several different stakeholders in the process. These concerns raised questions such as, does Canada really need advanced aircraft? Can Canada afford it? Is it the best value? What process was used to determine that it was the aircraft that best met Canada's needs given its finite resources?

The announcement came less than two months after the MND stated in the House of Commons that “the next generation fighter, again, will be an open, competitive, transparent process that will see us receive the best capability, to provide that capability to the best pilots in the world.”<sup>126</sup> He would further say “obviously we want to get the best value, the best aircraft, and we have already embarked upon investments to ensure that happens” and “the next generation fighter aircraft does not preclude a competition.”<sup>127</sup> MacKay's comments clearly indicate his intent to conduct a fair, open, transparent, and low-risk competition to ensure Canada

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<sup>125</sup> Department of Defence. “Government Of Canada Strengthens Sovereignty While Generating Significant Economic Benefits.” Last accessed 6 April, 2013. <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?id=3472>.

<sup>126</sup> House of Commons. Debate on Business of Supply Government Orders. 27 May, 2010. Last accessed 5 April, 2013. <http://openparliament.ca/debates/2010/5/27/#?page=18>.

<sup>127</sup> House of Commons. Debate on Business of Supply Government Orders. 27 May, 2010. Last accessed 5 April, 2013. <http://openparliament.ca/debates/2010/5/27/#?page=24>.

acquired the next generation fighter aircraft that offers the best value. As stated earlier, Canada had the right under their MOU with the US to conduct their own decision-making process in accordance with Canadian laws and policies.

Prior to Minister MacKay's announcement, DND had already been working on the portfolio for several years. In 2008, in response to the release of the CFDS, DND identified 14 mandatory capabilities the CF-18's replacement would require. With these mandatory capabilities in hand, they conducted an options analysis of three fighter aircraft, including the F-35. While all three aircraft met the entire set of minimum mandatory capabilities, DND believed that the F-35 was the best value, as it provided "exceptional capability at the lowest cost and unparalleled benefits for the Canadian aerospace industry." However, there was no documentation presented to the Office of the Auditor General to support these claims.<sup>128</sup> DND recommended the F-35 be the next fighter aircraft to the MND and other departments based on their options analysis and pressure from industry. It was also noted that DND recommended that Canada commit to sole-sourcing the purchase based on having already signed 2006 MOU provisions and thus believing that a fair competition would be "exceedingly difficult" due to Canada's ongoing partnership in the JSF.<sup>129</sup> However, at the time, the decision to procure the F-35s was put on hold.

Two main ingredients for a purchase of this magnitude were missing, whether it is sole-sourced or competed acquisition, that being PWGSC involvement and a formal SOR being produced ahead of time. As stated in chapter two of this paper, PWGSC are the governmental

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<sup>128</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets."..., 22.

<sup>129</sup> *Ibid.*, 22-23.



department responsible for contracting and the approval authority in setting a Procurement Strategy. PWGSC is key in enabling customer departments in ensuring government procurement regulations are adhered to. The SOR is an essential document in substantiating the requirement that a procurement strategy not be of a competitive nature, as it gives the government and potential suppliers a framework of capabilities that must be met. If only one firm can meet them, then it is perfectly plausible to enter into a sole-source contract. Although these two ingredients were missing in 2008, they were included in the early 2010 resurgence of DND's attempt to procure a new fighter aircraft.

By early 2010, the Next Generation Fighter Capability Project within DND had officially been established and resurrected the process in order to obtain a government decision on the acquisition of a new fighter aircraft to replace the CF-18. At the time, the project office was conducting a new options analysis phase and, for the first time, PWGSC was actively involved in the decision-making process.<sup>130</sup> This process would also see many issues arise from DND's insistence that the F-35 was the aircraft it wanted. Twice DND attempted to use exceptions from government contract regulations in order to support the sole-source procurement of the F-35. The first argument, which was supported by PWGSC but not inter-departmentally, was "the nature of the work is such that it would not be in the public interest to solicit bids."<sup>131</sup> This was based on the 2008 options analysis and on DND's argument that it required a fifth generation fighter aircraft.

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<sup>130</sup> *Ibid.*, 23.

<sup>131</sup> *Ibid.*

The second attempt used the “only one person [that is, contractor(s)] is capable of performing the contract.” This exception required substantiation in terms of a SOR, which DND did not provide to PWGSC until after Minister MacKay’s announcement. Nonetheless, PWGSC supported DND, because DND provided PWGSC with a letter supporting this exception. By this time, DND and PWGSC had already signed the required decision-making documents.<sup>132</sup> Further documents indicated that DND had planned to hold a competition later in 2010 in anticipation of a 2012 contract award and 2015-2016 delivery.<sup>133</sup>

The fact that DND planned to conduct a competition would lead one to believe that the actual decision made by the government was based on DND’s initial recommendation to sole-source the acquisition. However, at the press conference when the announcement was made on 16 July 2010, the Public Works Minister stated that it was not a sole source and in fact it was a competition. The competition she claimed the decision was based on was “a lengthy and intense competition was completed in 2001 for the building of the F-35.”<sup>134</sup> At a 15 September 2010 Standing Committee of National Defence, Ministers Clement and MacKay claimed the 2001 JSF competition that selected Lockheed Martin’s F-35 was also the same one where Canada decided which aircraft met its future military requirements.<sup>135</sup> In his book, Allan Williams argued that their statements were false for two reasons. The first was that Canada was not included in the

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<sup>132</sup> *Ibid.*, 24.

<sup>133</sup> David Pugliese. "Air Force Expected Competition on Fighter-Jet Contract: Documents." *Postmedia News*, Sep 19, 2010, <http://search.proquest.com/docview/848548252?accountid=9867>.

<sup>134</sup> Department of Defence. “Government Of Canada Strengthens Sovereignty While Generating Significant Economic Benefits.”...

<sup>135</sup> House of Commons. 40th Parliament, 3rd Session: Standing Committee on National Defence. *Minutes of Proceedings and Evidence*, Wednesday, 15 September, 2010. Last accessed 6 April 2013. <http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=4653433&Language=E&Mode=1#Int-3263732>.

decision-making process that selected Lockheed Martin but rather that it was only the US and UK, as Canada was only considered an informed partner. Second, Canada did not have a formal SOR until 2010, so they could not have ensured the F-35 met their requirements. He went on further to state that in 2001, Canada was not even considering the replacement of the CF-18 as they were conducting life-extension on them at that time.<sup>136</sup> That said, why did the government make the announcement in July 2010? The answer is most likely a combination of several factors, including improving foreign relations, increasing military prestige and interoperability with allies, creating industrial benefits in order to help stimulate the economy, and to deliver on the promises set forward in the 2008 CFDS.

#### OUTCOMES OF THE DECISION

The backlash the Harper Government received from all sides due to this decision was significant. Criticism came from Lockheed Martin's competitors, defence critics, defence procurement critics, and politicians from opposing parties. Two of Lockheed Martin's competitors made complaints about the process before a parliamentary committee on 4 November 2010, because they felt they were not given a fair chance to earn the right to be selected as the suppliers of Canada's next fighter aircraft. Boeing officials stated that "Canadian officials have not received the full complement of Super Hornet performance data from the U.S. navy, including those about the new Super Hornet's stealth characteristics." While Dassault officials said "the last contact [Dassault] had with the Canadian government and air force was on [Feb. 22, 2006] when [they] received a delegation of a couple of officers for a couple of

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<sup>136</sup> Williams. *Canada, Democracy and the F-35...*, 29

hours.”<sup>137</sup> Then on 7 December 2010, Eurofighter and Saab officials visited parliament with similar objections. However, the Government stood fast on their decision, as a spokesman for the MND stated in an email, ““The F35 is the only available aircraft that meets the Canadian Forces requirements.”<sup>138</sup>

The debate continued and was one of the major reasons behind the vote of non-confidence in the Harper Government on 26 March 2011. Liberal Party leader Michael Ignatieff’s motion that was supported by the other opposition parties, declared “the government to be in contempt of Parliament for withholding information related to the cost of Conservative crime legislation and the purchase of 65 fighter jets.”<sup>139</sup> After the vote of non-confidence, a federal election was held. During the campaign for that election, the Liberal Party’s policy document stated that they would “immediately cancel the mismanaged \$30 billion sole-source deal for F-35 stealth fighter jets” and “when Canada purchases new fighter planes, we will have a transparent, competitive process to procure equipment that best meets our needs, achieves best value for money, secures maximum industrial benefits, and fits a realistic budget.”<sup>140</sup> The New Democratic Party had a similar approach but added that they would draft a new Defence White

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<sup>137</sup> “Aviation Companies Decry F-35 Purchase.” *CBC News*, 5 November 2010. Last accessed 6 April 2013. <http://www.cbc.ca/news/canada/story/2010/11/05/-new-fighter-purchase-complaints.html>.

<sup>138</sup> Bryn Weese. “Fighter Jet Manufacturers Pitch Planes to Parliament.” *Toronto Sun*. 7 December 2010. Last accessed 6 April 2013. <http://www.torontosun.com/news/canada/2010/12/07/16464096.html>.

<sup>139</sup> Gloria Galloway, Jane Taber and Daniel Leblanc. “Election Looms as Opposition Stacks Deck Against Harper Tories.” *The Globe and Mail*. 23 March, 2011. Last accessed 6 April, 2013. <http://www.theglobeandmail.com/news/politics/election-looms-as-opposition-stacks-deck-against-harper-tories/article1952874/>.

<sup>140</sup> Liberal Party of Canada. *Your Family. Your Future. Your Canada*. (Ottawa, 2011), 85.

Paper within twelve months, “redefining [the] military’s role, its priorities and needs.”<sup>141</sup>

However, the Harper administration remained determined to acquire the F-35 and saw it as “a necessary and responsible investment to re-equip Canada’s air force and to strengthen Canadian sovereignty.”<sup>142</sup> In the end, Stephen Harper’s Conservatives won the election with a majority government.

Although the F-35 acquisition remained in the news, the debate quieted down until it was reignited by the Office of the Auditor General of Canada’s spring 2012 report, titled “Replacing Canada’s Fighter Jets.” The Auditor General’s report examined the process of acquiring the F-35 from its inception up until the report was published and ultimately found that DND took the appropriate steps in the management of the JSF Program in the development of the F-35 with its partners.<sup>143</sup> The report also found that DND and Industry Canada performed very well in managing industrial participation and securing opportunities for Canadian companies.<sup>144</sup> However, the report was not as favourable towards DND and PWGSC’s roles in the decision to procure the F-35.<sup>145</sup> It concluded that DND did not provided the required documentation in a timely manner and that steps in the procurement process, discussed in Chapter 1, were often taken out of sequence.<sup>146</sup> The report also charged PWGSC with not fully carrying out its function

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<sup>141</sup> New Democratic Party of Canada. *Giving Your Family a Break: Practical First Steps*. (Ottawa, 2011), 21.

<sup>142</sup> Conservative Party of Canada. *Here for Canada*. (Ottawa, 2011), 16.

<sup>143</sup> Office of the Auditor General of Canada. "Chapter 2: Replacing Canada's Fighter Jets." ..., 2.

<sup>144</sup> *Ibid.*

<sup>145</sup> *Ibid.*, 2-3.

<sup>146</sup> *Ibid.*, 2.

as the Government's procurement authority, as it endorsed DND recommendations without the required documentation.

There are four other significant points that can be added to the report which had a large influence on the outcome of the process. The first point is DND's degraded procurement power. As Philippe Lagasse points out, Canada's defence procurement was in a vulnerable spot during the past decade due to the significant budget cuts announced back in 1994. These cuts significantly affected the rate that Canada procured major equipment fleets. He links this vulnerability with two consequences which affected this process. One is the fact that Canada's major fleets all needed to be replaced simultaneously and the other is that there were a remarkably reduced number of experienced procurement program managers available at the time.<sup>147</sup> Therefore, conducting the amount of defence procurement defined in the CFDS will come with a significant level of risk.

The second is the time factor. With regard to time in this case, there are many issues like the time when other departments should have become involved in the program, the life-cycle of the aging CF-18 fleet, and when decisions were being made. There is no doubt that PWGSC should have been part of this process earlier. PWGSC should have played a prominent role in signing the Phase III MOU because, although it allowed Canada to run their own process, if the F-35 was chosen, it dictated production and delivery timelines, and IRBs. The timing of the JSF program and the life-cycle of the CF-18 did not align well. With the CF-18 still being a viable

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<sup>147</sup> Philippe Lagasse. "Recaptalizing the Canadian Forces' Major Fleets: Assessing Lingering Controversies and Challenges." *Strategic Studies Working Group Papers, Canadian Defence & Foreign Affairs Institute and Canadian International Council* (2012), 4.

fighter aircraft and going through some modernization, initiating JSF program would have facilitated decision-making if it had begun a few years earlier. Canada could have looked at the option of replacing the CF-18 earlier rather than modernizing its aging fleet. The JSF program and Canada's involvement in it began between the two 'sweet spots' which led to minimal interest from anybody outside DND.

Canada had little control over the time issue and due to the evolution of the JSF program, it needed to make a decision quickly. The government and DND wanted the F-35 to be Canada's next fighter aircraft and seemed to have manipulated the process and stakeholders to meet that objective. The Government should never been seen as manipulating or influencing the process in any way. There are policies and mechanisms in place to ensure the process is conducted fairly in order to achieve best value and thus limiting political risk. The Auditor General's report discusses the sequencing of the process being manipulated, but it does not fully explain why the decision was made in 2010, months after stating that a process would take place, leading to the next issue, strategic communications and transparency.

The Government and its departments conducted a very poor public affairs campaign with regard to the JSF program. Although DND and Industry Canada did an outstanding job in connection with the industrial benefits the program offered Canadians, the rest of the communications concerning the JSF lacked clarity, timeliness, and substance. Granting Minister MacKay's messaging from May to September 2010 was the low-point, the ever increasing costs have become an even more significant issue. This has caught the attention of the media, and coupled with the government and DND's inability to produce accurate figures has raised concerns over the rest of the program as a result. Compounding these issues was the complete

lack of documentation surrounding the procurement project. A program of this magnitude needs a good strategic communications plan, along with transparency, and supporting documentation.

Even after this issue helped cause an election and continued to be a focal point of debate in parliament and in the media, the Conservative government appeared to stay the course. However, the Auditor General's report was the final straw and it caused the Government to press the pause button on the JSF. While the purchase was on pause, the government put together a plan to rectify the situation.

#### THE "RESET"

In response to the Auditor General's report, the Government launched its Seven-Point Action Plan in order to fulfill or exceed concerns raised by the report. The seven points of the Government's plan are as follows:

1. The funding envelope allocated for the acquisition of the F-35 will be frozen.
2. The Government of Canada will immediately establish a new F-35 Secretariat within the Department of Public Works and Government Services Canada. The Secretariat will play the lead coordinating role as the Government moves to replace Canada's CF-18 fleet. A committee of Deputy Ministers will be established to provide oversight of the F-35 Secretariat.
3. The Department of National Defence, through the F-35 Secretariat, will provide annual updates to Parliament. These updates will be tabled within a maximum of 60 days from receipt of annual costing forecasts from the Joint Strike Fighter program office, beginning in 2012. The Department of National Defence will also provide technical briefings as needed through the F-35 Secretariat on the performance schedule and costs.
4. The Department of National Defence will continue to evaluate options to sustain a Canadian Forces fighter capability well into the 21st century.
5. Prior to project approval, Treasury Board Secretariat will first commission an independent review of DND's acquisition and sustainment project assumptions and potential costs for the F-35, which will be made public.



6. Treasury Board Secretariat will also review the acquisition and sustainment costs of the F-35 and ensure full compliance with procurement policies prior to approving the project.
7. Industry Canada, through the F-35 Secretariat, will continue identifying opportunities for Canadian Industry to participate in the F-35 Joint Strike Fighter global supply chain, as well as other potential benefits for Canada in sustainment, testing, and training, and will provide updates to Parliament explaining the benefits.<sup>148</sup>

This plan was not considered a “reset” at the time, but rather an attempt to conduct a complete review of the process which led to the 2010 decision to procure 65 F-35. It was an attempt to fix the problems which were identified and reduce the risks going forward.

The Seven-Point Action Plan is a way for the government to analyze the process and ensure it meets Canadian objectives while following policies. The keys to this plan are the freezing of funds in order to allow a comprehensive procurement strategy and review to be conducted, the establishment of a secretariat to manage the plan, and the direction to departments to continuously review their portions of the plan and report back to parliament. This approach will rectify most of the issues which presented themselves. The tasks have been given to four separate, yet interrelated, stakeholders going forward with this portfolio.

Established in June 2012, the National Fighter Procurement Secretariat (NFPS) is responsible for the coordination and implementation of the Seven-Point Action Plan. They are tasked with ensuring due diligence, third party oversight, and open communications.<sup>149</sup> This is the route the Government has taken with the procurement of naval vessels, as they have created

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<sup>148</sup> Public Works and Government Services Canada. “National Fighter Procurement Secretariat (NFPS): NFPS Governance Terms of Reference.” Last accessed 6 April 2013. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/mandat-tor-eng.html>.

<sup>149</sup> Public Works and Government Services Canada. “National Fighter Procurement Secretariat (NFPS): Frequently Asked Questions.” Last accessed 6 April 2013. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/snacfaq-nfpsfaq-eng.html>.

the National Shipbuilding Strategy Secretariat.<sup>150</sup> This approach allows for governmental oversight on the progress of the program while having a sole organization to direct queries through. Although organized a little differently than the NFPS, there have been recommendations by experts in the field of Defence procurement such as Williams and Fetterly, who have argued for a separate department which would look after large scale defence procurement projects.<sup>151</sup> But as Craig Stone points out that although there are benefits to this approach, it “will [...] not solve most of the underlying reasons for why major acquisitions become problematic” and “politics will always be a critical factor regardless of whether or not there is a single agency.”<sup>152</sup> The solution may not be the creation of a separate department but independence is required for the group leading the purchase of any major platform, as was the case for the NFA.

The TB received two tasks in the seven-point plan. First it must hire an independent party to conduct a review of DND’s acquisition and sustainment project assumptions and potential costs for the F-35. This was accomplished when KPMG, an independent firm, who presented their findings in November 2012 confirming expected IRBs. The second task to ensure compliance of the procurement process with policies and regulations will be completed by an independent firm once the project seeks approval to procure a solution.<sup>153</sup> The goal of the reports

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<sup>150</sup> *Ibid.*

<sup>151</sup> Fetterly, “Arming Canada...”, 429 and Williams, *Reinventing Canadian Defence Procurement...*, 74.

<sup>152</sup> Craig Stone. “A Separate Defence Procurement Agency: Will it Actually Make a Difference?” *Strategic Studies Working Group Papers* (February 2012). Last accessed 6 April 2013. <http://www.opencanada.org/wp-content/uploads/2012/02/SSWG-Paper-Craig-Stone-February-20121.pdf>.

<sup>153</sup> Public Works and Government Services Canada. “National Fighter Procurement Secretariat (NFPS): Seven-Point Plan: Status Report National Fighter Procurement Secretariat.” Last accessed 6 April 2013. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/spr-eng.html>.

and independent reviews is to promote transparency, which was lacking prior to the Auditor General's 2012 report.

DND will continue to play a large role within the procurement of the next fighter aircraft. The essential tasks for DND within the seven-step process will be to develop a new SOR based on the needs of Canada, continue to evaluate available options, and produce annual reports to Parliament. For their part, Industry Canada is tasked to continue to develop economic opportunities for Canadian firms with regard to the JSF Project.

The Auditor General, in response to the government of Canada's seven-point plan and its initial progress, stated that he was satisfied with the progress to date on the plan. He also said that "[the work to date] has been a serious and sincere effort to critically review the process that had been followed to this point, do a thorough analysis and chart the proper path forward."<sup>154</sup>

## CONCLUSION

Unlike the acquisition of the CF-18 Hornets, which was a relatively successful process, the F-35 process was highly disjointed. The approach used may have been more successful if there was a substantial requirement for it in a current theatre, but there is not. This factor, combined with the ever-growing cost of the project coming out of a recession did not bode well for the project. Most of the lessons observed identified earlier from the CF-18 Case Study could have helped the F-35 acquisition if applied prior to the 2010 decision.

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<sup>154</sup> Public Works and Government Services Canada. "National Fighter Procurement Secretariat (NFPS): Quotes." Last accessed 6 April 2013. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/citations-quotes-eng.html>.

The first lesson is that Canada is not a nation which should conduct defence procurement solely on needs and wants, especially during a period of relative peace. Although there is support for the military across the country, there is also a fixed set of resources the government has available to satisfy everyone's needs. The procurement process detailed in the second chapter applies to all departments within Canada and should not be circumvented unless required to meet a critical and immediate need. The process can be sped up to a certain extent if necessary, but doing so should be approached with caution to ensure Canadian resources are spent rationally in the best interest of Canadians.

The second lesson observed in the F-35 case was the need to establish an organization, whether it be a new department or simply a secretariat, to oversee a procurement program of this magnitude. Although effective for the NFA, the lesson was not carried forward to this acquisition process. In this case, an organization should have been established prior to Canada signing the 2006 MOU and definitely prior to the decision to procure the F-35s. Either way, PWGSC should have been included in the decision to sign the MOU. This organization would have helped in ensuring PWGSC was providing the proper oversight, while also ensuring DND followed the proper steps in the acquisition process, limiting the government's involvement and political risk.

The third lesson is linked to the responsibilities the recommended organization above would have to ensure the process is conducted in a proper manner. The process is governed by the laws and policies, and must be adhered to. The decision to procure 65 F-35s was not a decision that needed to be made immediately or urgently. The stakeholders involved had plenty of time and opportunity to go through the proper sequence of steps. As pointed out in the Auditor General's report, there were often no supporting documentation drafted for recommendations

made and decisions taken. PWGSC should have been the voice of reason and halted the process or raised concerns, but unfortunately did not. DND, as the customer, pursued their interests in this case and there was no independent oversight.

The fourth lesson is that the government and its departments should not interfere or manipulate the process in any way. With regard to the F-35, it appeared as though the government, along with DND, had decided on the F-35 being the next fighter aircraft well before any decision was announced. The Government should remain unbiased and only interject when it is absolutely necessary.

Fifth, when conducting a large procurement, the government and its departments need to be transparent and have a strategic communications plan. The Harper Government is a centrally controlled government that usually maintains a very controlled communications strategy. In this case, it appeared they were on track by messaging that they were going to hold a competition but then suddenly they announced that Canada would acquire 65 F-35s. Once the debate began over cost overruns and production delays, they went into survival mode as they had little concrete information on which to defend their actions to date. It was not only the government which failed in this area, as DND has also lost face in the process and do not appear able to manage large acquisitions. Neither had the information required to support their decisions or recommendations. Without concrete information and a solid communications plan, any major issue arising from the project, or an argument from the opposition parties, can injure the credibility of the government and cause the governing party and the program significant risk.

The final lesson observed which requires further study, is Canada's involvement in consortium acquisitions with partner nations. Although there are many benefits to this type of

agreement, such as increased economies of scale, lower acquisition cost, interoperability with allies and potential for good IRBs, there are also many disadvantages like the level of risk assumed and applying Canadian procurement policies correctly. If consortiums are the direction Canada and its allies are heading with regard to major platform development and acquisition, there must be significant work done to see if Canada can do so given the state of their current procurement policies.

## CHAPTER 5: CONCLUSION

Canadians are very proud of their military but can be labelled ‘unmilitary people’ when it comes to defence procurement. Therefore, the acquisition of major platforms for the Canadian military must be conducted in accordance with federal procurement regulations or the government in power risks becoming politically vulnerable. The government has taken the appropriate steps to rectify their mistakes in handling the F-35 file, but it must learn from these mistakes and ensure all future defence procurement, during periods of relative peace, be conducted following the government’s own policies. If not, they risk having the intended acquisition delayed or cancelled, and risk losing political power.

The procurement framework established by the government to acquire major platforms is intended to provide the best value for all involved. This framework follows a logical process, whereby a deficiency is identified, options are explored to solve the deficiency and finally the deficiency is satisfied by the solution which should offer the best value. There are several decision points throughout the process, with these decisions made by authorized authorities. Choosing the right procurement strategy is also important and is delegated to PWGSC who acts on behalf of the government as the contracting authority in the procurement of major capital. All of these policies, authorities, and organizational oversight should produce a resolution offering the best value. At the same time, the process also reduces political risk if the government allows the process to conduct itself without interference. Conducting defence procurement in accordance with regulations is prudent and limits the government’s political vulnerability.

The NFA was a rational process that delivered a world class fighter aircraft to the CAF, in the required quantities and within a limited budget, while also limiting political risk for the governments in power at the time. The Trudeau government was facing political pressure from its allies to reequip the CF, and that pressure forced the government to start procuring major platforms. To procure the CF-18 Hornet, the government used a very rational approach by creating an independent program office that was responsive to the three main departments involved but answered to a committee of deputy ministers. Next, they gave the project clear limitations and expectations. Finally, the government used a ‘hands off’ approach and allowed the program office and its departments to come to a logical recommendation, which was approved and announced once it was politically viable to do so. This was indeed an example of rational ‘unmilitary people’ conducting defence procurement in a rational manner.

Unlike the acquisition of the CF-18 Hornets, the announcement that Canada was going to procure 65 F-35 Lightning II’s, made by MND MacKay in 2010, was an approach to defence procurement that resembled more of how a ‘military people’ would shop for major platforms. It is clear that the F-35 is what the CAF wants. The F-35 will likely be the most technologically advanced fighter aircraft, and it may also be the fighter aircraft that yields the best value. However, the approach used by the Harper Government to acquire this aircraft was truly flawed given the level of perceived threat Canada was facing at the time in conjunction with the economic situation that Canadians were experiencing in 2010. Moving forward, Canada needs to avoid this type of bold defence procurement decisions, unless there is an emergent need to make a decision, which was not the case with the F-35.



Canada's participation in the JSF has not been without merit but it does need to explore the implications of participating in a consortium. The traditional procurement process is governed by laws and policies that must be adhered to, whereas, consortium participation may bring better value to Canada but it does not adhere to all of the regulations. The F-35 case brings up two significant issues with regard to procurement. First, can Canada conduct a fair competition between a product of a consortium Canada is participating in with other products? And second, are the types of industrial benefits offered in the JSF model enough given they are not guaranteed? Participation in consortiums may be the way of the future with regard to defence procurement as militaries around the world are reducing in size and scope. Further study needs to be conducted in order to determine how Canada should approach the consortium issue given that they do offer clear advantages and disadvantages.

The CFDS gave DND direction with regard to the types and quantities of major platforms the government wanted it to procure, representing a large commitment from the federal government towards spending money on DND. Moving forward, Canada must approach this 'retooling' of its armed forces in a deliberate and rational manner. It is too risky for both the government and DND to stray from procurement policies during a time of relative peace. Therefore, the government should continue to implement their Seven-Point Plan and allow the process to decide on what fighter aircraft should replace the CF-18.

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