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CAPABILITIES ARE EASILY LOST – BUT DIFFICULT TO REGAIN

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JCSP 44

Exercise Solo Flight

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PCEMI 44

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CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES

JCSP 44 – PCEMI 44

2017 – 2019

EXERCISE *SOLO FLIGHT* – EXERCICE *SOLO FLIGHT*

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CAPABILITIES ARE EASILY LOST - BUT DIFFICULT TO REGAIN

Canada's defence policy, Strong Secure Engaged (SSE), released in 2017 presents a new strategic vision that embraces the statements of, Strong at home, Secure in North America and Engaged in the world.¹ This continues along the theme of the three requirements governed by previous policies. The policy further states that, "The long-term funding commitment that underpins this policy will provide the Canadian Armed Forces (CAF) with the force size and equipment required to achieve excellence across the full spectrum of military operations, from humanitarian assistance and disaster relief, to peacekeeping, to combat."² To achieve excellence in operations, the government will need to address its procurement process it has demonstrated over the last two decades, and deal with the obsolete equipment across the services. Specifically, in the area of air combat capability, and the ability for Canada to detect, deter and defend against threats to Canadian airspace, the Royal Canadian Air Force (RCAF) has been allowed to stagnate to the point where immediate action is required. There now exists a somewhat embarrassing question of whether Canada can, or actually wants to achieve a capable air combat capability.

In accordance with SSE, the Future Fighter Capability (FFC) project has the responsibility to, "...acquire 88 advanced fighter aircraft to enforce Canada's sovereignty and to meet Canada's North American Aerospace Defense Command (NORAD) and North Atlantic Treaty Organization (NATO) commitments."³ With an Initial Operating

¹ Canada, Department of National Defence, "Strong, Secure, Engaged: Canada's Defence Policy", 2017. p14

² *Ibid.*, p11

³ *Ibid.*, p13

Capability (IOC) of mid 2020s, and a Full Operational Capability (FOC) of early 2030s, the RCAF is still more than 10 years off a transition to a modern capable force.⁴

Political decisions disrupting procurement, have resulted in an interim capability life extension of the CF-18, through a purchase of 25 Australian supplementation F-18s.⁵ This purchase will undoubtedly put strains on an already aged/fragile sustainment system. The RCAF will have to navigate capability impacts that question its ability to conduct the assigned roles as per SSE, with the burden of additional sustainment financial implications. An analysis of the Canadian FFC procurement process, reveals that the government's decision to purchase additional Australian F-18s to sustain an interim capability, will contribute to a widening capability gap over the next decade.

The essay will first analyse how the situation has developed to the point where procurement is still not assured for the FFC. It will then address what the current procurement process means for the RCAF over the coming 10-15 years and how the supplementation F-18s will struggle to close the identified capability gap.

A FUTURE FIGHTER CAPABILITY JUST AROUND THE CORNER?

As Canada moved into the 21st century, there was a great commitment to change management across the Canadian Armed Forces (CAF). The CDS Action Team for enabling transformation noted that, "Undoubtedly, the CF will pursue transformation with vigour and focus. As part of this process, the military will acquire new technologies and equipment in order to operate effectively in today's challenging security environment

⁴ Canada, Department of National Defence, "Future Fighter Capability Project", Last updated 13 Dec 2018

⁵ CBC News, "Canada Could be Flying Australia's Used F-18 Fighters This Summer", 4 Jan 2019

alongside our allies and other government and non-governmental agencies.”⁶ The identification of the FFC project was made a few years after this statement. This was a necessity given the age of the existing CF-18 fleet. It then took seven years, coinciding with SSE, to approve the project. During this period, political turmoil has prevented Canada making a decision, both for a permanent and interim solution. The Government of Canada (GoC) in 2016 used words such as, ‘essential’ and ‘vital’, when referencing the need to obtain a modern fighter fleet, so that it could continue with their commitment to Canadian sovereignty and the critical partnership with the United States.⁷ When it is noted that the CAF are no closer in gaining the much needed new technologies to meet today’s security environment, it is evident that the CAF vision has not been supported adequately by the procurement process.

Compounding the delay in the FFC project, was what could be considered a tragic outcome for Canadian air combat capability, when the government decided in 2017 to withdraw the requirement to purchase the 18 x Super Hornet interim capability pending the FFC project outcome.⁸ Based on a political decision that resulted from a feud between Bombardier and Boeing, the much-needed interim capability has now become a scramble to maintain capability. The current CF-18 fleet, which is now over 30 years old, has been reduced from 138 aircraft to 77.⁹ This is only the simple numbers side of capability, while at the same time any enhancements for the fleet have ceased, resulting in an air combat

⁶ Canada, Department of National Defence, Enabling Transformation: CDS Action Team 4 Report: Canadian Forces Transformation: Institutional Alignment. Ottawa: DND, 2005. p1

⁷ Canada, Department of National Defence, National Defence News Release, 22 Nov 2016

⁸ Insinna, Valerie, “Canada to Kill Boeing Super Hornet Deal”, Defense News, 5 Dec 2017

⁹ Canada, Department of National Defence, National Defence News Release, 22 Nov 2016

capability that is frozen a generation behind any anticipated threats. This results in further pressure applied to the existing CF-18 fleet.

To further analyse the FFC procurement process, it is necessary to draw parallels with a similar sized force and national requirements. Australia is a perfect example from which to draw a comparison. Australia and Canada have similar sized armed forces, but their approach to defence policy are quite different.¹⁰ What is quite significant, is while Australia's GDP in 2016 was about 18% smaller than Canada's, it spent US\$24 billion on defence as opposed to Canada's just US\$14 billion.¹¹ While things can be done smarter, that is still an incredibly large amount of efficiency to find. It would be more than likely, that Canada are spending a greater amount of their budget on keeping the extant forces going than Australia is.¹² That works for the present, but when the time comes to recapitalise, you are either faced with finding extra money, or letting capabilities go.

When looking at the FFC project specifically, some notable timelines have been forecasted. From project identification to FOC, this will span a touch over 20 years. Interestingly the period from contract award in 2022 till FOC is listed as only approximately 10 years. By breaking down the similar Australian air combat capability procurement process, it is notable that there appears to be an optimistic Canadian timeline, that will only contribute to disguising a widening capability gap.

To explain this optimistic Canadian FFC project timeline, it is necessary to dig deeper into the Australian specifics. Australia made a decision to acquire 24 Super

¹⁰ Davies, Andrew and Cowan, Christopher. "Australia and Canada: Different Boats for Different Folks", Australian Strategic Policy Institute, 21 Dec 2016

¹¹ *Ibid.*

¹² Davies, Andrew, "Canada's F-35: Yeah but no but ... Yeah?", Australian Strategic Policy Institute, 2 Nov 2015

Hornets in 2007, while debating the make-up of a future air combat capability. It was identified that as the ‘classic’ Hornets were set to retire in the 2018-2020 period and the F-111s were about to retire, there would be a capability gap before the Joint Strike Fighter (JSF) became FOC in 2023. Over a period of five years from 2009-2014 a staged approval process resulted in a plan to acquire 72 JSF aircraft, that forms the basis of the identified 100 aircraft required from the 2007 Defence White Paper.¹³ This requirement was reinforced in the 2016 Defence White Paper. IOC/FOC was initially listed as 2018/2021 respectively, but during inevitable project changes it was amended to 2020/2023.¹⁴ By looking at the time from contract award to FOC, you can see Australia will accomplish this in around 14 years. This fact identifies that the GoC has listed an overly ambitious FFC project timeline for a capability that hasn’t even been decided on yet. If the Australian example is anything to go by through a pretty stable targeted aircraft process, then the FFC project will actually result in a FOC closer to the mid-2030s. For the CF-18 that was due to retire more than 10 years before that date, the CAF will certainly face a capability gap as a result of their procurement process, that will not meet the needs of SSE in the short term.

Glitches to the procurement process weren’t totally unexpected. Lt Col Rostek summed up the transformation process well in 2009, by saying that there is still much work that needs to be done. He also goes on to say, that the cracks that are appearing should come as no surprise for those familiar with change management in large organisations. The second and third order effects of the change are inevitable, and it is

¹³ Australian Government, Department of Defence, Capability Acquisition and Sustainment Group, “Joint Strike Fighter Division”, Last updated Feb 2019

¹⁴ *Ibid.*

how the leadership/change management team respond to these, that is a true measure of their strength, commitment and vision.¹⁵ The response by the GoC in acquiring 25 Australian supplementation ‘classic’ Hornets, appears as only a ‘band aid’ solution. It certainly doesn’t fit in with what Lt Col Rostek said about how the leadership reacts to the situation, being a strong indication of their commitment. This is a worrying indication that the GoC is not really certain about the FFC and is certainly baulking at the costs involved, regardless of what is written down in the SSE defence policy.

Whether the GoC is certain about the FFC or not, it is paramount that the Capability Based Planning (CBP) process is duly carried out. The CBP process is, “... about establishing context and choice for senior leadership as they consider long-term strategic decisions”.¹⁶ Importantly though, capability development requires a well-structured process, drawing on appropriate tools and resources to mitigate any risk. In the case of the FFC project, there are indications surfacing that this process is not well-structured, and may actually fold to political and public opinion. If the CBP process and SSE do not line up, then the GoC and CAF need to start aligning the policy with their actions. There is always a certain amount of ‘smoke and mirrors’ when it comes to politics, but a national capability is at stake, that really can’t afford any further political sabotage.

In the case of the FFC project, it is not only the CBP process that requires adherence, but also the Defence Procurement Strategy (DPS). The DPS has three key objectives: delivering the right equipment to the CAF and CCG in a timely manner;

¹⁵ Rostek, Michael, “Managing Change.” *The Public Management of Defence in Canada*, edited by Craig Stone. Toronto: Breakout Education Network, 2009. p230

¹⁶ Canada, Department of National Defence, “Capability-Based Planning Handbook”, Jun 2014. p5/66

leveraging the purchases of defence equipment to create jobs and economic growth in Canada; and streamlining defence procurement processes. Combining this strategy with the ITB Policy, means that there is a strong push towards sustainability and growth of Canada's defence industry.¹⁷ This should not hinder the FFC project requirements, but enforce the benefits it will undoubtedly produce to local industry. The GoC stated that the FFC project offers a once-in-a-generation opportunity for the Canadian aerospace and defence industry.¹⁸ The JSF project has already delivered more than \$1 billion of work to Canada, and if it was to be chosen for the FFC, it is predicted to deliver more than \$10 billion over the programs lifetime.¹⁹ Even though local industry benefit is an objective of the DPS, the push for guaranteed offsets by the GoC, has meant the JSF program has been handicapped in the FFC project process. This stance has been stated as, "The government's mishandling of the offset piece threatens to derail its entire procurement strategy."²⁰ Amending a process to fulfil an election promise, seems a dangerous way to gamble with your national security. The only positive to come out of all this, is the fact that the unit cost for JSF has come down considerably now that other international orders are flowing. Importantly though, this only remains a fact as long as Canada remains a partner in the program.

Aspects will change from government to government, but a capable military requires robust long-range planning. A perfect example has been Australia, where over the last 15 years it has had the worst period of political stability in its history. At the same

¹⁷ Canada, Government of Canada, "Defence Procurement Strategy", Last updated 14 Feb 2019

¹⁸ Canada, Department of National Defence, National Defence News Release, 22 Nov 2016

¹⁹ Shimooka, Richard, "Canadians Should be Concerned About Fighter Jet Replacement Process", Macdonald-Laurier Institute, 21 Nov 2018

²⁰ *Ibid.*

time though, defence has ensured that its long-term strategy plans have been implemented and continues to build a modern capable force. It is a CBP process that has proven to be successful, and it has all resulted from nearly an identical situation that Canada itself faced over 10 years ago now. It is clear that the procurement process for the FFC project, is in direct conflict to the process that Canada has pursued in its transformation efforts this century.

INTERIM SOLUTIONS CAN BRING PERMANENT PROBLEMS

The essay will now look at the interim purchase specifics, and how this will disrupt the FFC project process, as well as contribute to the widening capability gap. The deal to purchase 25 Australian supplementation ‘classic’ Hornets is in place, and the first two aircraft have already been delivered to Canada at the start of this year. Out of the 25 aircraft, seven of them will be solely used for testing and parts. All aircraft are expected to be delivered by the end of 2021. The process of converting the remaining 18 to Canadian specifications has commenced, and it will not be an easy task for the existing maintenance force, that already has a challenging task maintaining the remaining 77 CF-18s. Modifications include the ejection seat, landing gear, targeting pod and uploading Canadian software.²¹ The modifications were to bring the Australian F-18s to the same configuration as the CF-18, without any increase to capability. It was noted in a report by the Auditor General Michael Ferguson in November 2018, that the Australian aircraft would not fix the fundamental weaknesses of the CF-18 fleet. The weaknesses were described as the aircraft’s declining combat capability and a shortage of pilots and

²¹ Australian Aviation, “Canada Receives First Two RAAF Classic Hornets”, 18 Feb 2019

maintenance personnel.²² These are significant contributors to the overall Canadian air combat capability.

There exists a need and a desire for any air combat capability force, to maintain their level of training and professional mastery at the highest level. When a force is operating a generation behind its coalition partners, there will be notable consequences. Not only is the force unable to operate on the same level as its partners, but the pilots also start to look elsewhere for a challenge with reliable and leading-edge technology. Canada's force may also end up being passed over, in favour of more advanced forces that are ready to integrate into a fifth-generation network. It is also hardly an incentive for any recruiting drive of the next generation, to have as its main attraction, the opportunity to come and fly obsolete fighters. Combining this with maintenance personnel that have difficulty maintaining an aging fighter, the shortage of personnel will, as time goes by, result in the ability to maintain the fighter fleet, being slowly eroded away. That begs the question, is another 10-15 years of operation of the CF-18 really a realistic vision?

The interim supplementation purchase is an example of the GoC not making the hard decisions to support their own policy. The GoC acknowledges that there is indeed a capability gap, and something was needed to handle its commitments to NATO, as well as protecting North America. Defence Minister Harjit Sajjan stated just last year, that the extra jets were required to deal with the capability gap.²³ He was quoted as saying the same thing for the proposed Super Hornet purchase a year earlier. The supplementation project has been allocated \$500 million in its entirety, which is a significant saving when

²² Pugliese, David, "Installing Canadian Software on Australian F-18s First Order of Business When Aircraft Arrive, Says Defence Official", Ottawa Citizen, 6 Jan 2019

²³ *Ibid.*

compared to the \$5 billion that would have been required with the purchase of 18 new Super Hornets.²⁴ But is this cost saving delaying the inevitable ‘head on smash’ awaiting the capability? The question also needs to be asked of the procurement process, whether the shutting out of one of the major air combat capable producers in Boeing, is a smart decision, given the amount of back peddling that has been made about the possible purchase of the JSF. The reduced chances of the North American competitors for the FFC project, could only mean Canada going down a European air combat capability that will struggle in its interoperability with its major partners in NATO and the United States in the defence of North America. Interoperability after all, is considered one of the main considerations for the fleet modernisation.²⁵ It is not only this important aspect, but the fact that any European aircraft purchase would require a new weapon inventory and supply chain. The significant costs and relationship/training establishment is something that cannot be understated in assessing the value of such a considerable change of direction. This extra implementation effort would definitely contribute to a widening capability gap.

It could be argued that the interim purchase was in fact just a means to delay the FFC project decision till after the next election.²⁶ Regardless of which way you look at this purchase, it is going to have a substantial impact to the Canadian air combat capability for the next 15 years. It would be easier at this point for the GoC to actually fade away the capability to non-existence, and simply amend their defence policy from

²⁴ Pugliese, David, “US Approves Canada’s purchase of Used Australia Fighter Jets – Deal to be Completed by End of Year”, National Post, 21 Sep 2018

²⁵ Shimooka, Richard, “Canadians Should be Concerned About Fighter Jet Replacement Process”, Macdonald-Laurier Institute, 21 Nov 2018

²⁶ Cowan, Christopher, “Trudeau’s Folly: Canada’s New ‘Interim’ Fighters”, Australian Strategic Policy Institute, 24 Nov 2016

2017. After all, the procurement process seems to be heavily influenced by public and political opinion to the detriment of actually achieving Canada's aims. While countries like Australia rely on seaborne trade, Canada has the largest bilateral trade relationship in the world with the United States.²⁷ Combined with the geographic proximity of the United States to Canada, you would understand if Canada wants to relax its military commitment, as the United States will always take the lead in continental defence.²⁸ This may form the strong argument within the political and public domain, to actually remove the air combat capability, but it certainly doesn't match the defence policy which is clearly articulated.

To add further complexity to the equation, is Canada's requirement to replace its frigates at the same time. It has been reported, that the budget allocation doesn't support both, unless the ambitions are scaled back to purchase a less expensive FFC or more money is poured into the budget.²⁹ As an onlooker from outside Canada, there is every indication that the option of increased defence spending is far from the thoughts of the politicians in Ottawa. The widening air combat capability gap, means that the decision made for the FFC project, is the most important decision in the history of the RCAF.

CONCLUSION

It is clear that Canada currently find themselves in a difficult situation. It is not plausible for Canada to have 0% air combat capability, given its NATO and NORAD commitments as outlined in SSE. With the cost of a new 4.5 generation fighter now

²⁷ Davies, Andrew and Cowan, Christopher. "Australia and Canada: Different Boats for Different Folks", Australian Strategic Policy Institute, 21 Dec 2016

²⁸ *Ibid.*

²⁹ Brewster, Murray, "Canada Can Afford New Fighters or New Frigates — But Not Both at Once", CBC News, 8 Jan 2019

comparable to the 5th generation JSF in today's numbers, it also bordering on ridiculous that the JSF should be handicapped from the FFC project selection, when its capability and Canadian industry participation far outweighs any slight cost differences. One could say, that politics has just cost Canada a significant amount of money and time, that it won't get back. There is every indication that this could end up proving to be a farcical situation, should the JSF end up being selected as the FFC.

Through an analysis of the Canadian FFC procurement process, this essay has established that the government's decision to purchase additional Australian F-18s to sustain an interim capability, will contribute to a widening capability gap over the next decade. The capability gap has been acknowledged and the intention of the GoC has been stated in SSE. The interim purchase does nothing to address either of these problems, and the increased timeframe to a FFC means the widening capability gap might just end up being the 'nail in the coffin' for Canadian air combat capability. It is important for the Canadian politicians and public to remember, that often the capability you most need, is the capability you will least use.

When the accountability for national defence was addressed it was noted that, "Granting the CDS unfettered access to the defence minister and the prime minister is essential in order for the civilian authority to be aware of the military consequences of its defence decisions".³⁰ It seems that there is a breakdown in this area, as the interim supplementation Hornet purchase can only result in a widening capability gap, with the situation left behind for the FFC, that even has less certainty about its intention or

³⁰ Lagassé, Philippe. "Accountability for National Defence: Ministerial Responsibility, Military Command and Parliamentary Oversight." IRPP Study, no. 4 Mar 2010. p57

possible successful implementation. Looking ahead for the Canadian air combat capability, presents a wicked procurement problem that may be just beyond that of the Canadian procurement processes, that has been handicapped and hijacked to the point of breakdown by the political and public arena.

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