



DISARMING ARCTIC SECURITY

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Fighter Aircraft (1): Threats and Priorities

The current deployment of Canadian fighter aircraft for bombing attacks in Iraq and Syria, along with the resurgence of “air power diplomacy” from the Black Sea to the Arctic Ocean, should refocus attention on the Ottawa melodrama known as the CF-18 fighter replacement program. The dénouement was once again put off when Ottawa announced refurbishments¹ intended to keep the CF-18s flying to 2025;² it’s a useful delay that furnishes more time for debating the options, including those that some find unpalatable.

The Conference of Defence Associates Institute’s recent Vimy Paper on “The Strategic Outlook for Canada”³ acknowledges in barely disguised alarm that the debate over the CF-18 replacement has “even provoked a discussion on whether a country like Canada, the second largest in the world, actually need[s] a fighter aircraft.” The paper is sub-titled “the eclipse of reason,” a general reference to the apparent flight of reason in conflicts from the Ukraine to the Middle East, but the paper also makes it clear that any notion that Canada might not need or acquire fighter aircraft fits squarely into the CDA Institute’s definition of the irrational. That they bring it up at all is no doubt linked to the unusual source of the suggestion. A former, and formerly very prominent, Deputy Minister of National Defence, Charles Nixon, penned an op-ed for the Globe and Mail last summer in which he said plainly, and without qualification, that Canada does not need fighter aircraft. “Fighters,” he said, “simply cannot contribute anything substantial toward the achievement of the six Canadian defence objectives”⁴ (see below). It’s a proposition that at least one episode in the CF-18 replacement drama should seriously consider.

The Government’s current plan is to acquire 65 new fighter aircraft, with any firm decision now delayed until well after the election. They are to replace the 77⁵ CF-18s still in operation, out of the 138⁶ purchased in the 1980s. The most recent cost estimate for acquiring 65 F-35 aircraft and operating the fleet for 30 years is \$45.8 billion – that amounts to \$2 million per month per aircraft (or \$130 million per month or \$1.5 billion per year for the whole fleet).⁷ The capital portion of that cost (which includes the aircraft plus initial spares and ammunition), has been frozen at \$9 billion by the Government, which implies that if the price per aircraft were to go up, the number of aircraft to be purchased would decline accordingly. And there is little doubt that costs will rise. A new report from the US Government Accountability Office (GAO) says that because the Pentagon has begun production of the aircraft (more than 100 have now been delivered) while still deeply involved in developmental testing, important design changes continue to be made. And all of these changes require costly retrofits to completed aircraft. The GAO raises doubts whether even the Pentagon will be able to afford all the aircraft it had planned to acquire.⁸

Canada has already had to reduce the number planned from 80 aircraft to 65 over funding restraints. So the number could still go lower, which in turn implies that the number of aircraft to be acquired is driven, not so much by a careful assessment of need, as by an arbitrarily set acquisition budget. Affordability is certainly not irrelevant, but neither is a clear understanding of what is actually required, and why – based on security considerations.

While the CF-18 fighter aircraft replacement has certainly been widely debated, that debate has focused almost exclusively on the pros and cons of the still under development F-35, to which Canada had prematurely committed in 2010.⁹ The F-35 is the result of the US-led Joint Strike Fighter (JSF) program, in which Canada has participated since 1997, and which designated Lockheed Martin as the prime contractor. Canada's 2010 announcement that it would buy the F-35 without the benefit of a competitive process involving other aircraft options created much public controversy, and that in turn led the Government in 2012 to abandon its formal commitment to the F-35. That doesn't mean it's not still informally committed to it, and the move to extend operations of the CF-18s to 2025 is interpreted by some as a further tip toward the F-35 purchase. Given that the F-35, though delayed and trouble plagued, might actually be in full production by 2020 and may even have gained some operational experience with early purchasers, a decision for the F-35 in that context would allow the Department of National Defence (DND) to better counter the charge that Canada is committing itself to an unproven aircraft. But the 2012 decision did shift the attention to the relative merits of the F-35 compared with the four alternative aircraft that would be available.¹⁰ The December 2014 "Evaluation of Options for the Replacement of the CF-18 Fighter Fleet"¹¹ further concentrated the public focus on the question of which of the five options would be most suitable to meeting DND's declared needs. But the more fundamental question of whether (not which) fighter aircraft make an essential or even appropriate contribution to meeting Canadian security objectives has certainly not received a thorough hearing.

i) Threats: The security context is obviously central to the question of "whether" Canada needs new fighter aircraft. Notably, the Canada First Defence Strategy, as the current Government refers to its defence policy, does not identify any current or likely future military threat to Canada.

That low to non-existent level of "threat intent" is mitigated by escalating "threat capability," by which is meant ongoing military modernization and technological development, which in turn means that in the future there are likely to be more states with the capacity to project military power beyond their borders, theoretically into places like the Arctic Basin,¹² whether or not any of that capacity is actually directed toward Canada. In the Arctic, when threat assessments are actually linked to real world political dynamics, Canada and all the states in the regions have been at special pains to point out that while there are security issues that require attention as a result of changing climatic conditions, they do not include military threats. That is not surprising; it is consistent with decades of strategic analysis and threat assessment. Even in the Cold War, the only acknowledged military threat to Canada, including in the North, was one for which there was and is no defence – the threat that deterrence would fail and that we along with the rest of the world would be caught in a superpower conflict gone nuclear.

The threats to Canadian territory are in fact all defined as non-military: threats of natural disasters (including floods, ice storms, earthquakes, and hurricanes), potential outbreaks of infectious diseases, challenges to law enforcement in the form of terrorist attacks, human and drug trafficking, and foreign encroachments on Canada's natural resources. Increased commercial and tourism activity in the Arctic will cause those same law enforcement challenges to migrate further north.¹³

The Government-appointed panel to evaluate alternative aircraft options for replacing the CF-18,¹⁴ which reported at the end of 2014, also included a survey of threats and security challenges facing Canada. The list included climate change and its implications for Canadian sovereignty in the North, but much of its analysis focused on threats emanating from beyond North America: power rebalancing within the global system; access to the global commons (for example, “secure lines of communications and a rules-based international system, including the means to police it, remain fundamental to Canada’s security and prosperity”); regional conflicts and ungoverned spaces; increasing influence of non-state actors (including terrorism and organized crime); threats to space assets; cyber security; the development of new and advanced military technologies; and the proliferation of weapons of mass destruction. The priority task assigned to fighter aircraft in Canada, air defence operations to control approaches to Canadian territory to address the threat of unauthorized intrusions into Canadian territory, didn’t make the panel’s list of challenges to Canadian defence and security.

It is the job of defence planners to plan for the unexpected, but it is also, and especially so, their job to prepare for the expected. In other words, what are the routine, every-day roles that fighter aircraft are expected to fulfill in Canada? Canadian defence policy has consistently been focused on three contexts: defending Canada, defending North America, and contributing to international peace and security. The primary role of Canadian Forces, as set out by Governments since the 1950s, is thus to patrol Canadian territory (air, land, and sea) to “be aware of anything going on in or approaching [Canadian] territory.” Beyond that, the forces are tasked to deter threats and respond to contingencies, in Canada and North America. Internationally, the mission is to contribute to international peace and security and the stated requirements for that are open-ended: “This will require the Canadian Forces to have the necessary capabilities to make a meaningful contribution across the full spectrum of international operations [the same phrase used by the Liberal Defence Policy statement of 2005]¹⁵, from humanitarian assistance to stabilization operations to combat.”¹⁶

The roles that Canadian Forces are to carry out in support of Canadian and North American defence and international peace and security are set out as six core missions: 1) conduct daily operations within Canada and adjacent international sea and air space in support of Canadian and continental security; 2) assist civil authorities in Canada during major international events here; 3) assist civil authorities in responding domestically to terrorism; 4) support civilian authorities in response to natural disasters; 5) participate in extended major international operations; and 6) participate in short-term operations anywhere in the world.

The primary day-to-day operations carried out by the air force are not in fact strictly military missions but are in aid of civilian policing authorities. The first mission, monitoring and patrolling Canadian airspace, is a primary role for Canadian armed forces, but the mission faces civilian law

enforcement challenges rather than military threats – namely, the incursion of unauthorized civilian aircraft into Canadian airspace. So the daily military air operations, as well as the next three missions, are prominently instances of military aid to civil authorities. The final two missions imply military combat operations beyond North America, but of course it must also be acknowledged that the primary Canadian contributions to international peace and security are not delivered by military forces, and when they do, fighter aircraft deployments are discretionary additions to missions mounted and led by the United States, often with dubious outcomes. The role of fighter aircraft in Canadian, North American, and overseas military operations are explored further in the coming Fighter Aircraft-2 briefing.

It's not surprising that CF-18 replacement briefings by officials in the Department of National Defence (DND) point to growing dangers in a threatening world – that's their job. Nor is it surprising that DND wants the most advanced fighter aircraft money can buy – it's been that way since the Avro Arrow. Both are understandable impulses, but the second doesn't follow logically from the first – the enumerated threats do not lead logically to an unavoidable need for fighter aircraft.

ii) Priorities: Need, after all, is relative, not absolute. The challenge for Canada, therefore, is to measure the “need” for, and cost of, fighter aircraft against alternative contributions to security and against other urgent national needs on a rather long list.

Again, the contingencies or threats to security to which the Canadian Forces are mandated to respond at home and abroad overwhelmingly involve support to civilian law enforcement, the restoration or establishment of public safety, and natural disaster relief. Canada has from time to time chosen to join overtly combat operations beyond North America – from Afghanistan to Syria, but one key feature of those engagements is that they were and are all “chosen” operations. In each case other choices were available, ranging from non-involvement through a variety of protection, humanitarian, and diplomatic engagements. When aircraft intrude into Canadian skies, responding is not optional – then you can't choose whether or not to respond.

It is in imagining the potential combat environments of the future, especially overseas, that worst-case thinking comes to the fore. Combat scenarios pitch Canadian fighter aircraft against an array of state-of-the-art air defence systems as well as the very latest in fifth generation fighters – Russia's new versions being exhibit number one of the kind of thing Canadian fighters, it is argued, must be prepared to face.¹⁷ To that are added warnings of land-attack cruise missiles (LACM), the threat of which, the US Air Force insists, “will increase over the next decade.” Not because Canada is likely to actually face military threats, but because it says “at least nine foreign countries will be involved in LACM production during the next decade, and several of the LACM producers will make their missiles available for export.”¹⁸

But as it is argued below, defence planning obviously has to clearly distinguish between threat “capabilities” and “intentions.” Were Canada obliged to somehow match or counter all capabilities beyond our borders there would obviously be no point of sufficiency. No level of defence preparedness would be enough. In the US, the largest military establishment in the world, bigger than the next ten combined, and allied as it is with some of the rest of the world's largest military

powers, and despite the fact that all its adversaries are dwarfed by American military might, the security discourse in the United States is still dominated by a sense of growing threat and America's weakness and growing insecurity.

The Department of National Defence obviously has a powerful preference for a fleet of "fifth generation" fighter aircraft, but that is not the same as evidence of need for it. The evidence in fact is persuasive that domestic surveillance and air defence do not require stealth or other advanced capabilities of fighter aircraft (more on this later). Internationally, Canada is in a position to decide what kinds of missions to pursue – indeed it must be highly selective since we obviously can't do everything, and there are many other, and arguably more effective, non-military and military ways for Canada to make significant contributions to international peace and security.

Furthermore, there are many competing needs, many of which are also expensive. The list is very long and includes more icebreakers to patrol the thawing and increasingly commercial Arctic waters. Canada needs large and long-range transport aircraft (that money is already spent in the acquisition of C-130 and C17 aircraft, a procurement decision of genuine foresight), along with well-equipped military and civilian personnel to respond effectively to anything from search and rescue emergencies in the Arctic to humanitarian and security crises beyond our borders. We need a major boost in Canada's diplomatic corps to meet the myriad of diplomatic, political, and conflict challenges that a G8/G20 nation and aspirant to the Security Council should bring to the global table. We certainly need a massive increase in foreign assistance. It currently stands at about \$5 billion per year, but to meet our still avowed target of boosting annual official development assistance to the UN-proposed level of .7 per cent of GDP, aid spending would have to increase by almost another \$7 billion each and every year.¹⁹ And of course we need to balance the federal budget, pay down the national debt, improve education, meet the voracious and still growing demands for health care, end child poverty, meet global environmental standards, and promote the arts.

The hard part is not identifying needs, it's obviously setting priorities. Looked at from the vantage of Canadian security and Canadian contributions to international peace and security, acquiring new fighter aircraft, each of which will cost about \$2 million per month to operate over a period of three to four decades, would be unlikely to top any list of carefully considered security priorities.

Notes

¹ Department of National Defence, Royal Canadian Air Force, CF-188 (Fighter Aircraft). <http://www.rcaf-arc.forces.gc.ca/en/aircraft-current/cf-188.page>. "Extending CF-18 lifespan to cost about \$400 million: report," The Canadian Press, 11 December 2014. <http://www.cbc.ca/news>

² National Fighter Procurement Secretariat, Public Works and Government Services Canada, last modified 19 November 2014. <http://www.tpsgc-pwgsc.gc.ca>

³ Ferry De Kerckhove, "The Strategic Outlook for Canada, 2015: the eclipse of reason," *Vimy Paper*, The Conference of Defence Associates Institute, February 2015. www.cdainstitute.ca

⁴ Charles Nixon, "Canada does not need fighter jets, period," *The Globe and Mail*, 08 July 2014. <http://www.theglobeandmail.com>

⁵ Steven Chase, "Canada to funnel money into upgrades to keep CF-18 fighter jets flying," *The Globe and Mail*, 30 September 2014. <http://www.theglobeandmail.com>

⁶ "Canada Preparing to Replace its CF-18 Hornets," *Defense Industry Daily*, 05 June 2014.

<http://www.defenseindustrydaily.com/canada-preparing-to-replace-its-cf-18-hornets-05739/>

⁷ DND, Next Generation Fighter Capability Annual Update, 2014. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/mdnd-dndb-eng.html>

⁸ "F-35 Joint Strike Fighter: Assessment Needed to Address Affordability Challenges," US Government Accountability Office, Report to Congressional Committees (GAO-15-364), April 2015.

⁹ Department of National Defence, "Government Of Canada Strengthens Sovereignty While Generating Significant Economic Benefits," (ARCHIVED) News Release, July 16, 2010: "The Government of Canada today announced it is acquiring the fifth generation Joint Strike Fighter F-35 aircraft to contribute to the modernization of the Canadian Forces, while bringing significant economic benefits and opportunities to regions across Canada." <http://www.forces.gc.ca/en/news/article.page?doc=government-of-canada-strengthens-sovereignty-while-generating-significant-economic-benefits/hnps1uf7>

¹⁰ The Boeing F/A-18 Super Hornet, the Dassault Rafale, the Eurofighter, and the SAAB Gripen.

¹¹ Government of Canada, Summary Report – Evaluation of Options for the Replacement of the CF-18 Fighter Fleet, December 2014. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/eorfcf18-eorcf18ff-eng.html>

¹² "Threat Capability Assessment for Canada's Fighter Aircraft Capability," National Defence and the Canadian Forces, Government of Canada. [forces.gc.ca](http://www.forces.gc.ca)

¹³ Canada First Defence Strategy. <http://www.forces.gc.ca/en/about/canada-first-defence-strategy.page> (last modified 270713).

¹⁴ Government of Canada, Summary Report – Evaluation of Options for the Replacement of the CF-18 Fighter Fleet, December 2014. <http://www.tpsgc-pwgsc.gc.ca/app-acq/stamgp-lamsmp/eorfcf18-eorcf18ff-eng.html>

¹⁵ "A Role of Pride and Influence in the World: Defence," Department of National Defence, 2005, p. 26.

¹⁶ Canada First Defence Strategy, Department of National Defence, Ottawa. <http://www.forces.gc.ca/site/pri/first-premier/index-eng.asp>.

¹⁷ Steve Gutterman, "New Russian stealth fighter makes first flight," Reuters, Moscow, 29 January 2010. <http://www.reuters.com/article/2010/01/29/us-russia-fighter-idUSTRE60SOUW20100129>.

¹⁸ [v] "Ballistic and Cruise Missile Threat," National Air and Space Intelligence Center, Wright-Patterson Air Force Base, 2009. Available at: <http://www.fas.org/programs/ssp/nukes/NASIC2009.pdf>.

¹⁹ "Budget 2013: Implications for Canadian ODA," Aid Watch Canada, the Canadian Council for International Cooperation. http://www.ccic.ca/files/en/what_we_do/2013_03_27_Analysis_Budget_2013.pdf
Mike Blanchfield, "Foreign aid, poverty spending shrinking, says federal budget watchdog," The Canadian Press, CBC, 23 January 2015. <http://www.cbc.ca/news/politics/foreign-aid-poverty-spending-shrinking-says-federal-budget-watchdog-1.2929922>