

Dispelling F-35 Myths

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The federal government's decision to replace Canada's aging fleet of CF-18 fighter aircraft with the F-35 Joint Strike Fighter has generated a lively debate, not all of it based on reality. There is a lot of mythology out there about the F-35 program. This is not surprising, given the complexity of the technology, the uncertain strategic threats facing Canada and her allies, and the cost of the acquisition. Canadians need to be able to see through the many misconceptions that surround the F-35 acquisition, which is a vital element in the securing of our nation's future.

Here are ten myths in particular that need to be debunked, together with a more realistic view of each.

Myth No. 1: "The F-35 is unsafe because it has a single engine."

Reality: Modern jet engines are so reliable that there is little safety advantage, if any, in a twin-engine configuration. Two engines also mean more complexity and higher cost.

Myth No. 2: "We are buying the F-35 to protect Arctic sovereignty"

Reality: True, but tracking Russian bombers around the Arctic is only part of the requirement. Many potential threats, global and domestic, face Canada in the coming decades. The rational approach is to replace the CF-18 with a modern multi-role fighter capable of deterring and opposing a variety of threats to our security and prosperity for many years to come.

Myth No. 3: "Canada could do with a less capable fighter, or even none at all."

Reality: Arguments that we could get along with less advanced fighter aircraft are naively based on the presumption of a benign future security environment. Even more far-fetched are suggestions that all we need are drones, or that we don't need fighters at all. As various threats emerge through to mid-century, so must Canada's ability to respond. The F-35, with its remarkable flexibility and adaptability, was designed to cope with a wide range of future challenges, including combat. There are certain inviolable responsibilities that come with nationhood. Protecting security and contributing to international stability are two of the most important. Without a top-notch fighter aircraft, Canada could not meet the test, and would in effect turn over those responsibilities to others.

Myth No. 4: "The F-35 is slower, has less range, is less manoeuvrable, etc., than some other fighters."

Reality: The F-35 is the best multi-role fighter available to Canada, combining excellent capabilities in all of the needed fighter missions. Top speed was important in World War II, but today it is the missiles which do the high-speed work. Dogfighting is a thing of the past. Electronic systems are dominant today, and the F-35 is unmatched in this regard.

Myth No. 5: "Stealth is somehow sinister and unnecessary."

Reality: Stealth is simply a means of improving pilot survivability and operational effectiveness, by making the aircraft very difficult to detect visually, by radar or by other enemy sensors.

Myth No. 6: “The F-35 is too expensive.”

Reality: It is an expensive program, as was the comparably-priced (in today’s dollars) CF-18 acquisition forty years ago. But the \$9 billion purchase cost will be spread over the next 12 years or so, while the in-service support cost – not yet known, but estimated to be about \$7 billion – will be expended over twenty years from first delivery. Taken together, these two expenditures will amount to approximately 3% of the defence budget. It is important to recognize that the expenditure will give our nation the ability to make a vital contribution to national and collective security for at least thirty years.

Myth No. 7: “A competition is called for.”

Reality: Competitive procurement is preferable in most cases, but not for this program. A true competition requires at least two viable contenders. The F-35 stands alone in its ability to meet Canada’s requirement, so a forced competition for essentially political reasons would be time consuming, costly and in fact a sham. Furthermore, to switch to competitive bidding at this critical stage, Canada would have to withdraw from the nine-nation Joint Strike Fighter program, thereby giving up its preferred place on the production line and the favourable pricing that goes with it, while losing special access to the JSF’s massive industrial benefits from the manufacture and maintenance of thousands of F-35s.

Myth No. 8: “The stealth fighter project could actually cost Canada more jobs than it will create.”

Reality: The history of industrial regional benefits from aircraft acquisitions has demonstrated time and again that guaranteed offsets don’t often produce long term, high quality benefits for Canadian industry. Mandated work on 65 aircraft doesn’t come close to the value of competitively earned contracts for work on many thousands of F-35s. The Canadian aerospace industry is a world leader, and doesn’t need artificial protection to thrive in the F-35 program.

Myth No. 9: “The F-35 development programme is in serious trouble.”

Reality: Headlines claiming that the F-35 has been put on “probation” are inaccurate. This story refers to the F-35B short takeoff/vertical landing model being developed for the U.S. Marine Corps, a version which has run into numerous technical problems due to its complex propulsion system. This is not the aircraft Canada is purchasing. Ours is the conventional takeoff/landing version. While some problems have shown up in the course of the development and testing of this particular model (not at all unusual for a new fighter aircraft), there is a high degree of confidence that they will be routinely resolved.

Myth No. 10: “Canada’s acquisition of the F-35 should be put on hold pending a review.”

Reality: Little or nothing would be gained from such a review, and it would introduce some serious risks. The inevitable delay could jeopardize Canada’s place in the

multinational JSF program, affect our relationship with the other consortium members, and hinder the timely and efficient replacement of the CF-18, whose end-life is due in the 2018-2020 period.

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