

## No Alternatives to the F-35

Alex Wilner & Marco Wyss

Stephen Harper's recent electoral victory all but guarantees that Canadian Air Force pilots will be flying the Joint Strike Fighter, or F-35, in the years ahead. With the fighter-jet debate finally over, the episode affords Canadians with two lessons to apply in future decisions over military procurement.

First, the arms market can be transformed by advances in weapons technology. Today, there's a quasi-revolution taking place in fighter-jet technology. We are now entering a period dominated by "fifth generation" aircraft. Tomorrow's fighters will have "all-aspect" stealth abilities with internal weapons, full-sensor fusion, integrated avionics at the pilot's fingertips, and "supercruise" capabilities that greatly enhance flying performance.

While opponents of the F-35 argue that Canada's aging CF-18 *Hornets* can be replaced more cheaply with fourth (and "fourth+") generation aircraft, they're missing the point. Upgraded fourth generation aircraft - like the F-18 *Super Hornet* - will be able to fly future combat missions, but that won't stop them from becoming obsolete. Eventually fourth generation aircraft will go the way of third and second generation aircraft: to the dump.

Fifth generation fighters like the F-35 will have a qualitative edge over older models no matter what the upgrade. The only comparable fighter is the F-22 *Raptor*, flown exclusively by the U.S. Air Force. But Washington is already phasing out the *Raptor's* production, having placed all of its bets on the F-35. Our allies have gotten the message: Britain, Australia, Denmark, Italy, the Netherlands, Turkey, and Norway will all be flying F-35s by 2020. Israel and Japan are likely to follow.

If Canadians want to equip their air force with the best available tools, they need to focus on next generation technology. There's little point in looking backwards. The risk in spending a lesser fortune today on a supped-up version of the CF-18 is that Canada will find itself replacing outdated hardware before long. That's an expensive proposition.

Second, where Canadians buy their weapons can be just as important as to what they buy. The fighter-jet industry has become increasingly polarized. The Americans and the Russians are the current heavyweights, China is catching up, and Europe is on the way out. While some Canadians have demanded that alternative bids to the F-35 be entertained, in reality, there are virtually no other options available.

When a government decides to purchase military hardware from another country, it isn't only thinking about improving the quality of its armed forces. It's also thinking about the political and strategic signals it's sending to others. The arms trade can be a political minefield. Ideally, Canada will buy its military hardware from an ally. In doing so, we'll avoid sending an unintended message with our purchase and we'll pre-emptively grease the wheels in the event spare parts are needed during periods of crisis. It's important, too, that Canada signs off with a manufacturer that will survive over the long haul. That will ease with maintenance, upgrades, and future developments.

In terms of fighter-jets, that leaves Canada with few options. We could approach the French or the Swedes. Both have sophisticated warplanes in the *Rafale* and *Gripen* but, like the *Super Hornet*, these jets rely on older technology. And given the huge investment needed to leap

into the fifth generation, both countries are likely to close shop. It's possible that a European consortium, like the one behind the Eurofighter *Typhoon*, will emerge in the future, but it's a long shot. Several European partners have already invested in the F-35, so they won't be inclined to support another venture. Like it or not, the era of the European fighter is coming to a close.

That leaves Russia and China. Both countries are actively developing next generation fighters to rival the F-35. Russia began testing the PAK-FA a year ago, while China unveiled its J-20 prototype in January. But are Canadians really prepared to fly Russian or Chinese jets? What would our allies think? The political and strategic ramifications would be monumental.

Decisions over how best to arm Canada's military are always complex, but there are lessons from the F-35 episode Canadians would be wise to consider in the future.

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