



Proposed Air Force Acquisition of New F-15EXs

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The Trump Administration's FY2020 budget proposal includes a request for \$1.1 billion to buy 8 F-15EX aircraft, the first procurement toward a planned [initial buy of 144](#). This proposal represents a change from previous Air Force plans to procure only stealthy "fifth-generation" fighter aircraft. What is an F-15EX, and why might the Air Force have changed plans?

What Is an F-15EX?

The Air Force received its first F-15 Eagle air superiority fighter [in 1974](#). Subsequently, the F-15 evolved to encompass more roles, most notably with the deployment of the [F-15E Strike Eagle](#) in 1989. The F-15E added substantial air-to-ground capability, including a second cockpit for a weapons systems operator. The Air Force has 453 F-15s of all variants, the last of which was ordered in 2001. Since then, F-15s have been in continuous production for a variety of international customers, including (among others) Israel, Saudi Arabia, and Japan.

Current F-15s have stronger airframes and more advanced sensors, processors, and flight control systems than those in the U.S. fleet. Many also include conformal fuel tanks to extend range and increase payload. The proposed F-15EX would be based on the most advanced Eagles, currently in production for Qatar, and add radar and other subsystems unique to the United States. Boeing says that the F-15EX would have 70% parts commonality with existing U.S. F-15s.

Why Is the Air Force Requesting F-15EXs?

Air Force Secretary Heather Wilson has said publicly that the Air Force [did not request](#) the F-15EXs in its initial FY2020 budget submission. This proposal appears to have been added by the [Office of the](#)

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[Secretary of Defense](#) during the budget build process, without a request for proposals or explanation. However, Air Force officials have subsequently offered several justifications for the F-15EX:

- In addition to the eight F-15 EXs, the FY2020 budget proposal reportedly [includes \\$949 million](#) for upgrades to existing F-15s. While costing more per aircraft than modernizing legacy F-15s, a new F-15EX would yield [more future life](#). Replacing the older, 1980s-era F-15Cs with F-15EXs could enable the Air Force to avoid some or all of those upgrades.
- Buying F-15s, according to the Air Force, is [an economical way](#) of reaching the service's goals for fighter fleet size and average age.
- F-15s could also [cost less to operate](#) over time than fifth-generation fighters like the F-35. (It may be noted that the per-hour cost of F-15s is fairly well established, while there is less real-world experience with the F-35 fleet, so a direct comparison is difficult.)

Does the F-15EX Replace the F-35?

The Air Force has been at pains to emphasize that the F-35 and F-15EX [are not rivals](#), but complementary. The F-35 brings superior stealth and sensor fusion; the F-15 can carry more payload. (Air Force officials describe this as the difference between “capability” and “capacity.”) The message of different missions can also be seen in the emphasis on F-15EX as an alternative to modernizing existing F-15s in their existing roles.

Given a fixed Air Force budget topline, however, increases in one program require cuts in others. According to Air Force Chief of Staff [General David Goldfein](#), “If we had the money, those would be 72 F-35s. But we’ve gotta look at this from a cost/business case.”

While maintaining the planned purchase of 48 F-35As in FY2020, the Administration’s FY2020 budget submission reduces outyear F-35As from the previous plan by 24 aircraft through FY2024. This may not be a direct correlation, but has led some to see [a tension](#) between the two programs. (A reduction in the number of F-35s requested in FY2020 compared to previous plans comes mainly from a reduction in Marine Corps purchases of the F-35B rather than Air Force F-35As.)

Possible Questions

- Should acquisition of new fighters be a competitive procurement?
 - What are the relative costs of upgrading and modernizing existing F-15s as opposed to buying new ones? How many flight hours does the Air Force expect to get from the jets in each case?
 - If new F-15EXs are purchased, would the Air Force retire older F-15s rather than upgrading them? How many upgrades would be foregone for each new F-15 purchased?
 - How does the replacement of F-15s fit with the Air Force’s declared goal of growing to 386 squadrons?
 - If stealthy aircraft are required in a given conflict only until the air defenses are taken down, which allows older-technology aircraft to operate with impunity, does it make sense to size the buy of fifth-generation aircraft to requirements for the early phases of conflict?
 - What is DOD’s commitment to completing the planned buy of F-35As?
 - How does the F-15EX fit with the current National Military Strategy emphasizing capability against sophisticated adversaries?
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