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How Much Does An F-15EX Cost? Boeing And The Air Force Don't Agree.



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An artist rendering of a pair of Boeing F-15EXs in loose trail. BOEING DEFENSE

Boeing's new version of the F-15, the F-15EX, made news earlier this month when the U.S. Air Force awarded the company a \$22.9 billion contract for up to 200 of the Eagles. It comes after a years-long fight that's not over yet about recapitalizing the Air Force fighter fleet.

The heart of it is a debate about whether buying more copies of a less expensive 4.5th generation fighter to replace aging F-15s on a relatively short timeline is a better option than buying fewer copies of a more expensive fifth generation fighter on a longer timeline. Essentially, it's the Advanced F-15 vs. F-35 debate.

The Eagle won this round though it owes victory to Congress and the Pentagon, not necessarily the Air Force. The EX's stronger, revamped airframe, new engines, new avionics and increased weapons payload lend the 1960s McDonnell-Douglas design impressive capability even though the calendar says it's 2020. While a debate about capabilities was central, cost was arguably the linchpin in the ultimate decision.

The EX was – and is – viewed as having lower flight hour and lifecycle cost than the Air Force version F-35A. But up-front cost was important, too.

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[In testimony before Congress in March 2019](#), General Joseph Dunford, then Chairman

of the Joint Chiefs of Staff, said that the EX would have a lower purchase price than the F-35A. [In a feature for *Aerospace America*](#) in September 2019, a Boeing source made the same claim.

Those assertions have not been borne out, [according to reporting by *Air Force Magazine*](#), which cited the per unit flyaway cost of F-15EX in the newly minted contract as \$87.7 million, a figure including engines. The same article reported the unit flyaway cost for the latest Lot 14 batch of F-35As as \$77.9 million, including its engine.

Was Boeing wrong about being cheaper than F-35A? Is the reported flyaway cost figure in the contract higher than Boeing assured the public and Congress? It's a worthwhile question.



Artist rendering of a Boeing F-15EX departing after takeoff. BOEING DEFENSE J. GUAY

A Firm Fixed-Price Offer

"I don't know how *Air Force Magazine* got the contract number — \$87.7 million is a number published in the President's budget request for 2021. It's not a contractual number," says Boeing vice president and F-15 program manager Prat Kumar.

Kumar went on to suggest that *Air Force Magazine's* reporting was not properly researched.

"The flyaway cost of Block 1 [F-15EX] will be less than \$80 million."

This is what Boeing has long told the Air Force, Kumar affirms, emphasizing that the company has been "very consistent" on this point. Another Boeing source, also participating in the interview, reiterated that Boeing made a firm fixed-price offer for the aircraft. Kumar was also keen to point out that F-15EX and F-35A are not "fungible," they are different aircraft for different requirements. He repeated Boeing's assertion that the lifecycle cost of F-15EX is "more attractive" than that of F-35.

"What we have said to the Air Force is that we're going to hit a price point for them," Kumar maintains. "What we offered to the Air Force absolutely measures up to that. It's up to them to figure out whether we're keeping our word or not."

Following up on Kumar's comments, we asked Air Combat Command what it understood the flyaway cost for the first lot of F-15EX aircraft was as specified in the contract. In an emailed response, an Air Force spokesperson said, "Per the DAF's [Department of the Air Force] FY21 budget request, the flyaway unit cost estimate is \$87.7 million."

While the response doesn't mention the contract specifically, it cites the same reported price. That price is obviously higher than Lockheed Martin's LMT per copy price for Lot

14 F-35As. It appears that Boeing and the Air Force are somewhere around \$7.7 million-plus per unit apart on their expected cost for the EX.

Do they also have different views of what the F-15EX is about to do?

Ready to Fight Off The Line Or Ready To Test Off The Line?

In a July 15 [Air Force press release on the Boeing contract award for EX](#), General Mike Holmes said, “The F-15EX is the most affordable and immediate way to refresh the capacity and update the capabilities provided by our aging F-15C/D fleets. The F-15EX is ready to fight as soon as it comes off the line.”



Gen. Mike Holmes, commander of Air Combat Command, discusses deployments, readiness, and training at.. [+] U.S. AIR FORCE
PHOTO BY STAFF SGT. NICK WILSON

General Holmes' comment is interesting in view of the fact that the same press release stated that the “first eight F-15EX aircraft will be fielded at Eglin Air Force Base, Florida, to support testing efforts.”

The release added that two F-15EXs are slated to arrive at Eglin in the second quarter of FY21. Boeing too expects the first F-15EXs to be ready to test, not to fight. In fact, the company is doing the Air Force a favor in getting a pair of EXs to Eglin early, Kumar says. The remaining six Lot 1 F-15EXs won't be delivered until 2022.

What needs testing? Boeing says it's not the EX's airframe or engines, acknowledging that \$5 billion in foreign investment in Advanced Eagle variants (the F-15K, F-15SA, F-15QA) and thorough testing took care of that.

Rather, it's the U.S. Air Force-specific hardware/software systems – from the EX's Eagle Passive Active Warning and Survivability System (EPAWSS) to its Operational Flight Program (OFF) 9.1 mission computer, APG-82 radar and Legion IRST Pod - that need vetting. The Air Force had already begun testing these modernization systems on F-15C and F-15E. Adding a pair of showroom new, reliable EXs to the relatively small test fleet at Eglin and at Boeing's Palmdale, Calif., facility will speed things up.

How much? Air Combat Command says the test aircraft will remain at Eglin for a while. It expects the new F-15s to achieve initial operating capability (IOC) following the Required Assets Available milestone expected by the end of FY23. Boeing plans to deliver the next batch of EXs (Lot 2) the same year.

As for General Holmes' “ready to fight as soon as it comes off the line” statement, the Air Force's spokesperson says the general was, “referring to the fact that we do not believe the F-15EX program will require a long development phase since F-15EX takes advantage of Foreign Military Sales funding spent to develop the F-15K and F-15SA.”

It's an easier matter to reconcile than an \$8 million difference in F-15EX's window sticker.



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