Negative: F35

***Resolved: The United States federal government should considerably decrease its military commitments***

**By “Coach Vance” Trefethen**

Summary: The F35 is the next generation fighter/bomber aircraft under development and partially rolled out by the US military. It has had a number of delays and cost over-runs, so AFF will argue we should just cancel it and use older aircraft. This brief shows why that’s a bad idea. The cost issues have been solved (and could be further improved with a Minor Repair). The issue of F35’s capabilities not being as expected has also been solved, and any minor remaining issues are more than outweighed by the benefits. Canceling F35 would leave the US vulnerable in any major conflict and gravely jeopardize national security and US hegemony.

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Negative: F35

MINOR REPAIR – Reform, not reduce. Use “Performance Based Logistics” (PBL) to solve any remaining cost issues

We shouldn’t cancel F35. Instead, we should use PBL to further reduce the cost. Cost of PBL is $1.5 billion

**[PBL saves money by offering a 5-year parts and maintenance contract to supply all the necessary equipment at a fixed cost. The manufacturer has a guaranteed 5 year deal, so it’s more efficient for them, and the government has a fixed price they pay up front, so they don’t get hit with cost over-runs.]**

Scott Cooper 2020 (retired Marine Corps pilot) The Real F-35 Problem We Need to Solve 29 Sept 2020 <https://www.defenseone.com/ideas/2020/09/real-f-35-problem-we-need-solve/168883/>

It won’t matter how well the F-35 can penetrate enemy air defenses if the sorties can’t be generated. Moreover, flat budgets in the foreseeable future mean that throwing money at the problem is not an option. Nor can the U.S. afford to trim the planned F-35 fleet; we need those aircraft and their capabilities if we are to prevail. Instead, we need to improve F-35 maintenance, logistics, and sustainment — while reducing their costs. One enticing option is to move to a performance-based logistics arrangement. Currently, the Pentagon negotiates annual sustainment contracts based on a cost-plus-incentive fee. Because they must be renewed every year, they prevent long-term planning and require enormous investments of time and manpower in oversight. Last year, F-35 maker Lockheed Martin [proposed](https://www.defenseone.com/business/2019/09/sustainment-contracts-lockheed-f-35-costs/159919/?oref=d1-in-article) a different approach, starting with a five-year deal to supply, by 2025, enough parts to keep 80 percent of the world’s F-35s up and ready — a higher readiness level than we currently see. Lockheed has said that part of its strategy for living up to the deal would be investing up to $1.5 billion in subcontractors to shore up the supply chain.

PBL solves by taking cost risk away from government and increasing efficiency

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It is also noteworthy that this arrangement would take cost risk away from the government and place it on industry, in exchange for the predictability of a half-decade-long contract. Moreover, this is one of the places where the promises of “big data” can actually pay off, particularly in a program the size of the F-35. Data analytics gives opportunities to increase efficiencies, reduce manpower and material costs, and improve inventory control. These are things we conceptually understood – even in an old warhorse like the EA-6B – but we never fully leveraged. I hope DOD will move forward with this PBL idea.

Fund the Minor Repair by cutting the Dept. of Education, because it’s a great place to cut the federal budget

Arizona Rep. Andy Biggs quoted by journalist Alex Newman 2019 31 Jan 2019 “Lawmakers Introduce Bill to Shut U.S. Department of Education” THE NEW AMERICAN <https://thenewamerican.com/lawmakers-introduce-bill-to-shut-u-s-department-of-education/>

Representative Andy Biggs (R-Ariz.) highlighted the disastrous effects of the federalized “education” system. “Education of our students should lie primarily with parents, teachers, and state and local officials who know how to meet their individual needs best,” he explained in a statement. “Since its inception, the Department of Education has grown into an unrecognizable federal beast, and its policies have helped foster Common Core across the country. It is time the one-size-fits-all approach by the federal government is ended and authority is returned to the local level.”

US Dept. of Education budget (currently $64 billion/year).

US Dept. of Education 2019. “FISCAL YEAR 2020 BUDGET SUMMARY”. <https://www2.ed.gov/about/overview/budget/budget20/summary/20summary.pdf>

The President’s fiscal year 2020 Budget Request (the Request) includes $64.0 billion in new discretionary Budget Authority for the Department of Education, a $7.1 billion or a 10.0 percent reduction below the fiscal year 2019 appropriation.

Solvency: fixing the logistics will keep the F35 up and running and make it live up to its full potential

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It’s not sexy. The truth is that the unsung heroes during my operational deployments weren’t capable pilots, but rather supply officers and noncommissioned officers who were Merlin the magician making sure we had the one part that would keep the jet in an “up” status. It’s also what will determine whether or not the F-35 can live up to its full potential.

More advocacy: PBL would reduce costs of F35 even more than Status Quo is reducing it

Dr. Steven P. Bucci 2020 (PhD; former Army Special Forces officer and top Pentagon official) 14 Sept 2020 For More Security at Less Cost, Buy More F-35s <https://www.heritage.org/defense/commentary/more-security-less-cost-buy-more-f-35s>

Costs per flight hour can be reduced more if there is a long-term, performance-based contract. Currently, Lockheed Martin can’t buy future parts that it knows it is going to need. No contract, no purchase—so the company can’t gain economies of scale. Additionally, it wouldn’t be able to take advantage of true predictive analytics. This is wasteful and inefficient.

INHERENCY

1. Status Quo policies have solved

There is no downside to moving forward with F35. Cost and capability issues have been solved

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A great many serious deficiencies in America’s air capabilities have begun to be addressed. That is good news. The drops in prices and proof of the F-35’s capabilities are great news. Taken together, these facts define a potentially historic opportunity to ensure American air dominance well into the 21st century. There is no downside.

2. Switching contractors solved cost and reliability issues

Changing suppliers on key components increased reliability and cut costs

John Venable 2020 (25-year veteran of the U.S. Air Force; senior research fellow for defense policy at Heritage Foundation) 26 Feb 2020 “Why the F-35 Is Now the World’s Most Dominant Stealth Fighter” <https://www.heritage.org/defense/commentary/why-the-f-35-now-the-worlds-most-dominant-stealth-fighter>

The total price of an F-35 is comprised of the aircraft, assembled and produced by Lockheed Martin, and the F135 engine produced by Pratt and Whitney—plus profit. When a Northrup Grumman-produced aircraft subcomponent called the Distributed Aperture System (DAS) failed to meet reliability thresholds, that system was replaced with a [DAS produced by Raytheon](https://www.defensenews.com/air/2018/06/13/raytheon-beats-out-northrop-to-provide-key-f-35-system/) that delivers twice the performance and five times the reliability at a per-unit cost 45 percent lower than the Northrup Grumman model. This switch alone will save the government $3 billion over the life of the program.

3. Status Quo is on track to solve the parts availability issue

Have to have enough parts depots to keep 80% of the F35s “Mission Capable” (MC) at all times. And we will very soon under current policies

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When an F-35 component fails, it is replaced with an available spare, and the failed part is shipped to a depot for repair. [A total of 68 depots](https://www.gao.gov/assets/700/698693.pdf) are required to effectively sustain the F-35 weapons system, [but just 30 are up and running](https://www.airforcemag.com/f-35-mission-capable-rates-up-for-all-variants-lord-tells-hasc/) and only 11 of those are fully operational. Parts availability for the F-35 will continue to hold down MC rates until all depots are operating at capacity. Lockheed Martin and the F-35 Joint Program Office have accelerated their efforts to get depots up and running and now project that 64 depots will be operational by 2024—five years earlier than the estimated 2029. Assuming funding for parts remains consistent, the parts shortfall will end, allowing fleet-wide F-35 MC rates to meet or exceed 80%.

HARMS / SIGNIFICANCE

1. A/T “High Cost”

Costs are way down –we should be ordering more!

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The down side always has been the cost. As good as the F-35 is, obtaining sufficient numbers to cover all of America’s global challenges and responsibilities has been daunting. That has begun to change—the price of the fighter jet has been dropping. Congress has recognized this and is [authorizing more planes](https://news.usni.org/2020/05/14/report-to-congress-on-the-f-35-joint-strike-fighter-program) than the Department of Defense requested. The time for even more action is now. Both in acquisition costs and operating costs, the numbers are telling. First, acquisition costs are way down. In 2016, the Defense Department put a lot of pressure on Lockheed Martin to find a way to lower the cost. The target was $80 million per plane by “lot 14”—or a purchase order scheduled for 2020. Lockheed Martin has exceeded expectations. In the most recently agreed upon lots (12-14), the price per aircraft has gone from $82.4 million (for lot 12), to $79.2 million (for lot 13), to $77.9 million (for lot 14).

F35 costs less than previous estimates and expected to fall even further

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**The price of the Lightning has fallen below even the most optimistic government targets.** In 2018, the Congressional Research Service estimated that an [F-35A produced in 2020 would cost $77.5 million](https://fas.org/sgp/crs/weapons/RL30563.pdf) using constant 2012 dollars. Translating that cost estimate to current year dollars makes the [price of each F-35A $87.1M](https://www.in2013dollars.com/us/inflation/2012?amount=77.50). The actual cost of an F-35A in fiscal year 2021 is $79.2M, and [it is expected to fall to $77.9M in 2022](file:///C:\Users\spoehrt\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\BP3E0E0Q\(last%20accessed%20February%2016,%202020)) – $9.2M cheaper than the government’s best estimate using current year dollars.

Lockheed has huge incentive to drive down costs, and they will go down even more in the future. We should buy more!

Dr. Steven P. Bucci 2020 (PhD; former Army Special Forces officer and top Pentagon official) 14 Sept 2020 For More Security at Less Cost, Buy More F-35s <https://www.heritage.org/defense/commentary/more-security-less-cost-buy-more-f-35s>

Additionally, the number of fighter jets produced in each year have gone up: 61 in 2017, 91 in 2018, and 134 in 2019. Lockheed Martin was ready to hit 141 in 2020, but COVID-19 forced a slight decrement. Lockheed Martin is determined to continue ramping up to 165 per year, and to garner [additional cost savings per unit](https://reader.defensenews.com/2020/07/23/the-price-of-the-f-35-has-been-falling-but-it-could-hit-a-wall-soon/content.html). We should be riding this positive momentum and taking steps to buy more F-35s as soon as possible. This is not even the best news. In regards to operations and sustainment costs, the potential savings are even greater. Lockheed Martin owns a 45% share of overall costs, so it has a huge incentive to lower those costs. Keeping in mind the macro perspective is vitally important, scale matters.

F35 is the most capable, cost-effective option and best choice when money is short

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When money is short, and threats are getting more sophisticated, the nation needs to buy what works most effectively, in the most situations, for the lowest price. The goal must be more planes of the best variety at the lowest acquisition cost and with the best operating costs. That is the F-35.

2. A/T “Lack of capabilities”

F35 capabilities are great: It’s the most lethal, cost-effective fighter

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The F-35 Lightning II is now the world’s most dominant multi-role fighter. Its detection range, geolocation, threat identification, and system response capabilities allow the jet to precisely fix and destroy the most advanced threats in the world including every layer of Russia’s latest SA-20 surface-to-air missile (SAM) system. While it still has several rough edges, the F-35 has now crossed several thresholds that make it the most lethal and cost-effective fighter in or nearing production within the NATO Alliance.

F35 has all the necessary capabilities and is better than any existing aircraft

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It gives all the [key attributes needed](https://www.forbes.com/sites/davedeptula/2020/07/20/f-35-problem-child-or-on-track-for-success/) in a high-intensity fight: stealth, electronic warfare, processing power, sensors, and a capability to integrate with allies. The F-35 can do all the low-intensity missions as well as or better than any of the legacy planes. In other words, there is no reason not to plow the investment into the better plane that can be had for a lower price.

3. A/T “Delays in production rollout / Way behind schedule”

F35 are deployed, combat-ready, and being flown today. Pilots love them

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**The first**[**U.S. F-35A wing is fully equipped**](https://www.airforce-technology.com/news/usaf-hill-afb-final-f-35-lightning-ii/)**and already executing combat deployments.** The maneuvering restrictions the jet had when first introduced are now completely removed. Even with a complete internal weapons load-out and full internal fuel, pilots can fight without limitation. Last year, I [interviewed 30 pilots](https://www.heritage.org/defense/report/the-f-35a-fighter-the-most-dominant-and-lethal-multi-role-weapons-system-the-world) at Hill Air Force Base, and all 20 with previous experience in fourth-generation fighters said they would rather fly the F-35 in combat than their previous rides. That preference held for almost every dogfight scenario they could imagine.

4. Net benefits favor F35 Status Quo

Remaining shortfalls are minor compared to the benefits, and we need to ramp up F35

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Overall, the F-35A fighter is flying exceptionally well. It now provides the United States with a significant competitive advantage against a peer competitor threat. Shortfalls in repair parts and other smaller issues need to be fixed as soon as possible, but the capabilities that the F-35 provides the nation today along with the dramatic drop in price make Air Force decisions to procure the F-15EX and to not ramp up F-35A procurement very puzzling indeed. The aircraft provides a capability America needs to engage in strategic competition.

SOLVENCY

1. Older planes can’t substitute for F35

Older planes have less capability and are very costly themselves. Not worth it

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Now, you might say that having these older planes around to fight in “other wars” is worth it, and a fair use of scarce funds. We might agree, except they are in fact quite costly, and not nearly as versatile as the F-35. The F-15EX, for example, costs nearly [$88 million](https://www.forbes.com/sites/davedeptula/2020/07/20/f-35-problem-child-or-on-track-for-success/), and gives our forces no help in a fifth-generation fight. Why spend more for less?

DISADVANTAGES

1. Losing air supremacy and US hegemony

Link: Older airplanes are NOT a good option. Without the F35, we will be vulnerable in a war with a major adversary

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Some experts are saying America also should be buying additional legacy aircraft (or legacy with product improvements). These include the F-15EX, the F-16, and the F-18E/F. They were all fine aircraft in their day, and can play a role in low-intensity conflicts (with no major enemy air capability), but they have no viable missions in a high-intensity, near-peer competitor fight, which we are likely to face in this century. In fact, if American pilots aren’t flying fifth-generation aircraft (including the F-22, F-35, and B-21) before we have to face a near-peer competitor, they likely will be vulnerable and a liability in the [big fight](https://www.forbes.com/sites/davedeptula/2020/07/20/f-35-problem-child-or-on-track-for-success/).

Link: Losing air superiority means we lose capability to globally deter bad guys from aggression, and they know it

Dr. Peter Layton 2016. (*Visiting Fellow at the Griffith Asia Institute, Griffith University. A former RAAF senior officer, he has extensive defence experience, including in the Pentagon, and a doctorate in grand strategy* ) 30 Aug 2016 “THE LOOMING AIR SUPERIORITY TRAIN WRECK” <https://warontherocks.com/2016/08/the-looming-air-superiority-train-wreck/>

U.S. Air Force Lt. Gen. Mike Holmes observes: “Air superiority is the most important thing the Air Force provides for the joint force in the tactical environment.” If an air force can’t get you air superiority where and when it is needed, there may not a compelling argument for even having an air force. Gaining air superiority is an air force’s raison d’etre, and providing air superiority enables many other air, maritime, and land warfighting missions. Even more importantly, air superiority is an important plank in conventional deterrence. Without it, adventurism by Russia, China, Iran, and others becomes much more practical. The cost-benefit ratio for revisionist states starts to change toward assertiveness and aggression, even if potential adversaries can never be completely sure of the relative military balance until combat is joined.

Impact: Decline into anarchy with decline of US dominance and rise of Russia and China. Massive loss of life, money and freedom

Dr. Robert Kagan 2017. (PhD in American history; Stephen & Barbara Friedman Senior Fellow - Foreign Policy, Project on International Order and Strategy at Brookings Institution) 6 Feb 2017 ‘Backing into World War III” <https://www.brookings.edu/research/backing-into-world-war-iii/>

Think of two significant trend lines in the world today. One is the increasing ambition and activism of the two great revisionist powers, Russia and China. The other is the declining confidence, capacity, and will of the democratic world, and especially of the United States, to maintain the dominant position it has held in the international system since 1945. As those two lines move closer, as the declining will and capacity of the United States and its allies to maintain the present world order meet the increasing desire and capacity of the revisionist powers to change it, we will reach the moment at which the existing order collapses and the world descends into a phase of brutal anarchy, as it has three times in the past two centuries. The cost of that descent, in lives and treasure, in lost freedoms and lost hope, will be staggering.

2. Higher costs if we do the AFF plan

Turn the impact on AFF’s “cost” harms. F35 only takes 1/10 as many planes to do the same mission as the older ones they want to use

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The F-35 can do most missions with a tenth of the number of aircraft compared to what is in use now. For a country with a global mission set, that is a huge multiplier. Two of the less expensive planes can do what takes [20 fourth-generation aircraft to do](https://www.forbes.com/sites/davedeptula/2020/07/20/f-35-problem-child-or-on-track-for-success/). That’s in the professional opinion of pilots currently flying the F-35. The math should be easy, even for Washington wonks. In short, this is no time to back off the gas pedal. The Department of Defense and Congress must push hard, fill as much of our shortfall as soon as possible, and gain all the monetary advantages available.

F35 alternatives would cost more

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**The F-35A now costs less than any other ally-produced fourth-plus generation fighter.** A fully combat-equipped F-35A is the same price of an F/A-18 E/F, $9.8 million below the $87.7 million base price of an F-15EX, and $40 million less than the Eurofighter—and all three of those competitors require additional equipment like multi-million dollar targeting pods before they can employ weapons in medium threat combat environments. The F-15EX self-protection system is estimated to cost [$7.5 million](https://www.esd.whs.mil/Portals/54/Documents/FOID/Reading%20Room/Selected_Acquisition_Reports/19-F-1098_DOC_31_F-15_EPAWSS_SAR_Dec_2018.pdf), and the Sniper Targeting pod costs more than [$1.7 million per jet](http://www.defense-aerospace.com/articles-view/release/3/119275/lockheed%2C-northrop-share-%242.3bn-order-for-targeting-pods.html), making the total cost for a combat configured F-15EX $19 million more than a fully combat configured F-35A. And none of those other jets would last for a day in a modern-day high-threat environment.

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