

GAO Highlights

Highlights of [GAO-20-234T](#), a testimony before the Subcommittees on Readiness and Tactical Air and Land Forces, Committee on Armed Services, House of Representatives

Why GAO Did This Study

DOD's F-35 Lightning II fighter aircraft provides key aviation capabilities to support the U.S. National Defense Strategy. The F-35 is also DOD's most costly weapon system, with U.S. sustainment costs estimated at more than \$1 trillion over its life cycle. As of October 2019, there were more than 435 U.S. and international F-35 aircraft in operation, with more than 3,300 aircraft expected to be fielded throughout the life of the program. While there is little doubt that the F-35 brings unique capabilities to the U.S. military, DOD faces significant challenges in sustaining a growing fleet.

This statement discusses F-35 sustainment challenges. It also summarizes GAO's open recommendations related to these challenges.

This statement is based on previously published work since 2014 related to F-35 acquisition, sustainment, affordability, ALIS, operations, and the global supply chain.

What GAO Recommends

GAO has 21 recommendations related to the challenges described in this statement that DOD has not fully implemented. DOD generally concurred with all 21 recommendations. Continued attention to these recommendations is needed by DOD to successfully operate and sustain the F-35 fleet over the long term within budgetary realities.

View [GAO-20-234T](#). For more information, contact Diana Maurer at (202) 512-9627 or maurerd@gao.gov.

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F-35 AIRCRAFT SUSTAINMENT

DOD Faces Challenges in Sustaining a Growing Fleet

What GAO Found

The Department of Defense (DOD) faces challenges in sustaining a growing F-35 fleet. This statement highlights three challenges DOD has encountered related to F-35 sustainment, based on prior GAO work (see figure).

Selected F-35 Sustainment Challenges



Supply Chain

Spare parts shortages are keeping F-35 aircraft on the ground more than expected. From May through November 2018, F-35s across the fleet were unable to fly about 30 percent of the time due to a lack of parts.

Several factors contribute to these parts shortages, including F-35 parts that are breaking more often than expected, and DOD's limited capability to repair parts when they break.



Autonomic Logistics Information System (ALIS)

ALIS, a key component of the F-35, is intended to provide users the tools to operate and sustain the aircraft.

However, ALIS' capabilities are immature and require personnel to perform time-consuming, manual workarounds. Users also have concerns about its deployability and data accuracy, among other things.



Long-term Sustainment Planning

Looking to the future, DOD lacks information about the technical characteristics and costs of the F-35 to effectively plan for long-term sustainment.

This will impair its ability to negotiate planned performance-based contracts or pursue alternative options.

Source: GAO. | GAO-20-234T

As a result of these challenges, F-35 performance has not met warfighter requirements. While DOD works to address these issues, it must also grapple with affordability. DOD has determined that it will need to significantly reduce F-35 sustainment costs—by 43 percent per aircraft, per year in the case of the Air Force—in order for the military services to operate the F-35 as planned.

Continued attention to GAO's recommendations in these areas will be important as DOD takes actions to improve F-35 sustainment and aircraft performance for the warfighter.