

GAO Highlights

Highlights of [GAO-20-316](#), a report to congressional requesters

Why GAO Did This Study

The F-35 is DOD's most ambitious and costly weapon system in history, with U.S. sustainment costs estimated at about \$1.2 trillion over a 66-year life cycle. Central to the F-35 is ALIS—a complex system that supports operations, mission planning, supply-chain management, maintenance, and other processes. A fully functional ALIS is critical to the F-35's operational success. However, over the past 5 years GAO has reported on key risks associated with the system, such as challenges deploying the F-35 with ALIS, inaccurate data that reside in ALIS, and ineffective training for personnel who need to use ALIS.

GAO was asked to review DOD's efforts to improve ALIS. This report assesses the extent to which (1) improvements have been made over the past 5 years and challenges remain for ALIS users, and (2) DOD is taking actions to enhance the long-term viability of the system. GAO reviewed F-35 and ALIS program documentation and data, interviewed DOD officials and contractor employees, and visited five U.S. F-35 sites.

What GAO Recommends

GAO is recommending that DOD track how ALIS is affecting readiness of the F-35 fleet and develop a strategy for the ALIS re-design. In addition, GAO believes that Congress should consider requiring DOD to develop a performance measurement process for ALIS. DOD concurred with both of GAO's recommendations.

View [GAO-20-316](#). For more information, contact Diana Maurer at (202) 512-9627 or maurerd@gao.gov.

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WEAPON SYSTEM SUSTAINMENT

DOD Needs a Strategy for Re-Designing the F-35's Central Logistics System

What GAO Found

The Autonomic Logistics Information System (ALIS) is integral to supporting the F-35 fighter jet's operations and maintenance. F-35 personnel at 5 locations GAO visited agreed that ALIS is performing better in some aspects, such as faster processing speeds for some tasks. However, problems with ALIS continue to pose significant challenges for F-35 personnel (see figure).

Examples of Challenges Identified by Personnel Who Use the F-35 Autonomic Logistics Information System (ALIS)

Inaccurate or missing data: Poor data sometimes result in ALIS signaling that an F-35 aircraft should not be flown even though it is ready for flight.

Challenges deploying: Hardware required to take ALIS on F-35 deployments is bulky, internet connectivity is frequently limited, and contractor support is needed.

Poor user experience: ALIS is not intuitive, can be difficult to navigate, and standard functions can take more time than users expect to complete.

Source: GAO analysis of information obtained from five U.S. F-35 locations. | GAO-20-316

The Department of Defense (DOD) has not (1) developed a performance measurement process for ALIS, which GAO recommended in 2014, or (2) determined how ALIS issues affect F-35 fleet readiness. Without efforts in these areas, DOD will be hindered in addressing ALIS challenges and improving aircraft readiness.

DOD and the prime contractor have a variety of initiatives underway for re-designing ALIS. However, these initiatives involve differing approaches and technical and programmatic uncertainties are hindering the re-design effort (see figure).

Uncertainties about the Future of the F-35 Autonomic Logistics Information System



Source: GAO analysis of Department of Defense and Lockheed Martin information; F-35 Joint Program Office (ALIS hardware images). | GAO-20-316

DOD has not developed a strategy for the future of ALIS that includes goals of the re-design, an assessment of key risks, or costs. Without this, DOD may not be able to coordinate various ALIS design-improvement initiatives that are under way or meaningfully enhance the system over the long term.