# GAO Highlights

Highlights of GAO-19-341, a report to congressional committees

## Why GAO Did This Study

In 2018, DOD sent an F-35 aircraft to its first combat mission and started initial operational testing. DOD now plans to spend over \$270 billion to buy more than 2,000 F-35 aircraft over the next 26 years. Since 2011, GAO has found the need for more attention to the F-35's R&M performance to achieve an operationally suitable system.

The National Defense Authorization Act for Fiscal Year 2015 included a provision for GAO to review the F-35 acquisition program until it reaches fullrate production. This is GAO's fourth report under this provision. This report assesses, among other objectives, (1) the program's progress in meeting R&M requirements (such as mission reliability) and (2) its plans for spending on new capabilities. GAO reviewed and analyzed management reports and historical test data; discussed key aspects of F-35 development with program management and contractor officials; and compared acquisition plans to DOD policies and GAO acquisition best practices.

## What GAO Recommends

GAO is making five recommendations to DOD, including that it identify specific and measurable R&M improvement objectives, align improvement projects, and prioritize resources to meet them. In addition, DOD should complete its business case for modernization before beginning additional development efforts. DOD did not concur with this recommendation, but did concur with the R&M recommendations and plans to take action to address them.

View GAO-19-341. For more information, contact Michael J. Sullivan at (202) 512-4851 or sullivanm@gao.gov

#### April 2019

## F-35 JOINT STRIKE FIGHTER

# Action Needed to Improve Reliability and Prepare for Modernization Efforts

## What GAO Found

The F-35 program has made slow, sustained progress in improving the aircraft's reliability and maintainability (R&M). The F-35 aircraft (see figure) are assessed against eight R&M metrics, which indicate how much time the aircraft will be in maintenance rather than operations. Half of these metrics are not meeting targets. While the Department of Defense (DOD) has a plan for improving R&M, its guidance is not in line with GAO's acquisition best practices or federal internal control standards as it does not include specific, measurable objectives, align improvement projects to meet those objectives, and prioritize funding. If the R&M requirements are not met, the warfighter may have to settle for a less reliable and more costly aircraft than originally envisioned.

### Image of F-35 Aircraft



Source: © 2016 Lockheed Martin. | GAO-19-341

In 2019, the F-35 program will start modernization efforts—estimated to cost \$10.5 billion—for new capabilities to address evolving threats, without a complete business case, or a baseline cost and schedule estimate. Key documents for establishing the business case, such as an independent cost estimate and an independent technology assessment, will not be complete until after the program plans to award development contracts (see figure).

### Key F-35 Modernization Business Case Documents to Be Completed After Contract Awards Program is executing at risk 10/2019 - 12/2019 Partial Technology Readiness Assessment Independent 05/2019 Cost Estimate Modernization Test and Evaluation development Master Plan contracts 1st quarter 2<sup>nd</sup> quarter 3rd quarter 4th quarter

Source: GAO analysis of Department of Defense data. | GAO-19-341

Without a business case—consistent with acquisition best practices—program officials will not have a high level of confidence that the risk of committing to development has been reduced adequately prior to contract awards. Moving ahead without a business case puts F-35 modernization at risk of experiencing cost and schedule overruns similar to those experienced by the original F-35 program during its development.

. United States Government Accountability Office