

Broken F-35 Parts Take Six Months To Fix, GAO Finds

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An F-35 Lightning II from Hill Air Force Base, Utah, takes off from the Gowen Field runway Oct. 16, 2017, in Boise, Idaho.

USAF

If a part on one of the U.S. military's growing fleet of 250 F-35s fails, it takes about six months for the depots to repair it—twice the program's objective, a key government watchdog has found.

The Pentagon does not have enough capacity to repair F-35 parts in a timely manner because the establishment of repair capabilities at the military depots is six years behind schedule, the U.S. Government Accountability Office (GAO) writes in a recent report on the controversial fighter. These capabilities were planned to be completed by 2016, but some have now been delayed until 2022, according to the watchdog.

Neither the F-35 Joint Program Office (JPO) nor the military services would take responsibility for the delay, GAO says. Program officials attributed it to the services not providing enough funding for depot requirements, but service officials pointed fingers at the JPO, saying the program office did not clearly identify some depot requirements soon enough for the services to provide adequate funding.

In addition, GAO found that a shortage of spare parts in the F-35 supply chain is leading to low readiness levels. From January through August 7, 2017, prime contractor Lockheed Martin reported that F-35s were unable to fly because they were awaiting parts on average about 22% of the time—more than double the Pentagon's objective of 10%, according to the report.

The program office and Lockheed have identified steps needed to increase the availability of spare parts, GAO writes. Still, parts shortages are expected to continue for several years to come and may worsen if the JPO and Lockheed don't follow through.

GAO reported the striking repair limitations and parts shortages as part of a wide-ranging report on F-35 sustainment challenges, even as the Pentagon plans to triple the size of the fleet by the end of 2021.

“DOD is taking steps to address some challenges, but without more comprehensive plans and aligned funding, DOD risks being unable to fully leverage the F-35’s capabilities and sustain a rapidly expanding fleet,” GAO writes.

The report also notes that initial Marine Corps F-35 deployments on ships in 2018, and potentially initial Navy deployments, will not include the intermediate-level maintenance capabilities that will allow repairs to be done at sea. This likely will lead to degraded readiness, GAO concludes.

Meanwhile, GAO also reports delays in planned updates to the Autonomic Logistics Information System (ALIS), the logistics backbone of the fleet that is central to supporting operations and maintenance.

These sustainment challenges are leading to lower-than-expected aircraft availability and full-mission-capable rates across the fleet, GAO notes.

The F-35 already is the Pentagon’s most costly weapon system, with sustainment costs alone estimated at \$1.12 trillion over 60 years, according to GAO.

“Without revising sustainment plans to include the key requirements and decision points needed to fully implement the F-35 sustainment strategy, and without aligned funding plans to meet those requirements, DOD is at risk of being unable to leverage the capabilities of the aircraft it has recently purchased,” GAO says.

JPO spokesman Joe DellaVedova acknowledged that the report is “factually accurate,” but said due to its origination date it does not account for the work the F-35 sustainment team has done over the past few months to accelerate depot capability and capacity, implement solutions to increase spare parts and reduce overall sustainment costs.

GAO conducted the performance audit from October 2016 to October 2017, according to the report.

The JPO pointed to several initiatives it has undertaken to improve F-35 logistics and sustainment, including a disciplined reliability and maintainability program, improved maintenance procedures and manuals, continued improvement in ALIS, better forecasting of spares requirements, improved repair turnaround times from suppliers and incorporation of aircraft design improvements. These efforts are having a positive effect, but “at a slower rate than desired,” according to the JPO.

Additional actions include:

- In fiscal 2017, the JPO moved forward with accelerating depot capability by executing \$114 million to fast-track the standup of depots.

- In fiscal 2017, the JPO invested \$3.4 million in Reliability and Maintainability (R&M) improvement projects, with 28 projects in work to reduce the top maintenance cost drivers.
- In fiscal 2017, the JPO spent \$1.4 billion to increase spare part purchases, build up repair capacity and improve the speed of repairs.
- To increase F-35 intermediate-level maintenance capabilities for shipboard deployments, the JPO has identified select avionics and support equipment for repair and is working with the services to resource requirements.
- The JPO has developed a five-year ALIS technical roadmap to address future requirements.
- The JPO has jointly developed a Lifecycle Affordability Board with Lockheed Martin Aeronautics and Pratt & Whitney to provide a single location for experts in manufacturing, supply chain management, cost estimating, and acquisition to work jointly on driving down operation and support (O&S) costs.

“The F-35 Joint Program Office is moving out on all fronts to accelerate depot capability and capacity; implement solutions to increase spare parts and reduce overall sustainment costs,” DellaVedova said. “We remain focused and fully committed to developing, delivering and sustaining this next-generation stealth fighter for the warfighters.”