

GAO Highlights

Highlights of [GAO-18-678](#), a report to congressional committees

Why GAO Did This Study

DOD spends billions of dollars annually to sustain its weapon systems to support current and future operations. The Air Force and Navy are operating many of their fixed-wing aircraft well beyond their original designed service lives and therefore are confronted with sustainment challenges.

House Report 114-537 included a provision for GAO to evaluate the sustainment of major weapon systems. This report, among other things, (1) examines the trends in availability and O&S costs for selected Air Force and Navy fixed-wing aircraft since fiscal year 2011, including whether they met availability goals, and (2) assesses the extent that the departments documented sustainment strategies, reviewed sustainment metrics, and implemented plans to improve aircraft availability. GAO selected a nongeneralizable sample of 12 fixed-wing aircraft by considering a variety of factors, such as the type, age, and manufacturer of the aircraft, among other factors, and analyzed condition and availability data, O&S costs, and sustainment challenges from fiscal year 2011 through March 2017 for each aircraft in a “Sustainment Quick Look.” GAO also analyzed policies, strategies, and plans, and interviewed Navy and Air Force officials in program offices, squadrons, and maintenance depots.

What GAO Recommends

GAO is recommending that DOD and the Navy update or issue new policy and guidance clarifying the requirements for documenting sustainment strategies for legacy weapon systems. DOD concurred with the recommendations.

View [GAO-18-678](#). For more information, contact Zina Merritt, 202-512-5257, merritt@gao.gov

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WEAPON SYSTEM SUSTAINMENT

Selected Air Force and Navy Aircraft Generally Have Not Met Availability Goals, and DOD and Navy Guidance Need to Be Clarified

What GAO Found

Between fiscal years 2011 and 2016, the Air Force and Navy generally did not meet aircraft availability goals, and operating and support (O&S) cost trends for GAO’s selected fixed-wing aircraft varied. Specifically, GAO found that

- availability declined for 6 of 12 aircraft—3 from each service—between fiscal years 2011 and 2016;
- availability fell short of goals for 9 of 12 aircraft in fiscal year 2016; and
- O&S costs increased for 5 of the aircraft, and maintenance costs—the largest share—increased for 8 of 12 aircraft.

GAO found, and officials agreed, that these aircraft face similar challenges.

Sustainment Challenges Affecting Selected Air Force and Navy Fixed-Wing Aircraft

Sustainment challenges	Air Force					Navy						
	B-52	C-17	E-8C	F-16	F-22	AV-8B	C-2A	E-2C	E-2D	EA-18G	F/A-18A-D	F/A-18E-F
Delays in acquiring replacement aircraft				✓	✓	✓					✓	
Unexpected replacement of parts and repairs	✓	✓	✓		✓	✓	✓	✓			✓	✓
Delays in depot maintenance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shortage of depot maintainer personnel					✓	✓	✓	✓	✓	✓	✓	✓
Parts obsolescence ^a	✓		✓			✓	✓	✓	✓		✓	
Diminishing manufacturing source ^b	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: GAO analysis of Air Force and Navy data. | GAO-18-678

^aObsolescence means a part is unavailable due to its lack of usefulness or it is no longer current or available for production.

^bDiminishing manufacturing sources is a loss or impending loss of manufacturers or suppliers.

The Air Force and Navy have documented sustainment strategies for some aircraft, regularly reviewed sustainment metrics, and implemented improvement plans. The Air Force has documented sustainment strategies for all aircraft GAO reviewed; however, the Navy has not documented or updated its sustainment strategies for four aircraft. Specifically, the Navy does not have a documented sustainment strategy for the C-2A, and has not updated the strategies for the E-2C, EA-18G, and F/A-18A-D since before 2012. The Navy is in the process of documenting its strategies, but Department of Defense (DOD) policy is unclear on whether a sustainment strategy is required and has to be updated every 5 years for weapon systems that are in the operations and support phase of their life cycle (i.e., legacy systems). Also, Navy guidance does not specify a requirement for legacy systems, although Air Force guidance does. Clarifying the requirements to document sustainment strategies for legacy systems, and documenting those strategies, would add additional visibility over the availability and O&S costs of DOD aircraft and any associated sustainment risks.

This is a public version of a sensitive report issued in April 2018. Information on aircraft availability and other related information was deemed to be sensitive and has been omitted from this report.