Why GAO Did This Study

Airborne electronic attack involves the use of aircraft to neutralize, destroy, or suppress enemy air defense and communications systems. Proliferation of sophisticated air defenses and advanced commercial electronic devices has contributed to the accelerated appearance of new weapons designed to counter U.S. airborne electronic attack capabilities. GAO was asked to assess (1) the Department of Defense’s (DOD) strategy for acquiring airborne electronic attack capabilities, (2) progress made in developing and fielding systems to meet airborne electronic attack mission requirements, and (3) additional actions taken to address capability gaps. To do this, GAO analyzed documents related to mission requirements, acquisition and budget needs, development plans, and performance, and interviewed DOD officials.

What GAO Found

The Department of Defense’s (DOD) evolving strategy for meeting airborne electronic attack requirements centers on acquiring a family of systems, including traditional fixed wing aircraft, low observable aircraft, unmanned aerial systems, and related mission systems and weapons. DOD analyses dating back a decade have identified capability gaps and provided a basis for service investments, but budget realities and lessons learned from operations in Iraq and Afghanistan have driven changes in strategic direction and program content. Most notably, DOD canceled some acquisitions, after which the services revised their operating concepts for airborne electronic attack. These decisions saved money, allowing DOD to fund other priorities, but reduced the planned level of synergy among systems during operations. As acquisition plans have evolved, capability limitations and sustainment challenges facing existing systems have grown, prompting the department to invest in system improvements to mitigate shortfalls.

DOD is investing in new airborne electronic attack systems to address its growing mission demands and to counter anticipated future threats. However, progress acquiring these new capabilities has been impeded by developmental and production challenges that have slowed fielding of planned systems. Some programs, such as the Navy’s EA-18G Growler and the Air Force’s modernized EC-130H Compass Call, are in stable production and have completed significant amounts of testing. Other key programs, like the Navy’s Advanced Anti-Radiation Guided Missile, have required additional time and funding to address technical challenges, yet continue to face execution risks. In addition, certain systems in development may offer capabilities that overlap with one another—a situation brought on in part by DOD’s fragmented urgent operational needs processes. Although services have shared technical data among these programs, they continue to pursue unique systems intended to counter similar threats. As military operations in Iraq and Afghanistan decrease, opportunities exist to consolidate current acquisition programs across services. However, this consolidation may be hampered by DOD’s acknowledged leadership deficiencies within its electronic warfare enterprise, including the lack of a designated, joint entity to coordinate activities. Furthermore, current and planned acquisitions will not fully address materiel-related capability gaps identified by DOD—including some that date back 10 years. Acquisition program shortfalls will exacerbate these gaps.

To supplement its acquisition of new systems, DOD is undertaking other efforts to bridge existing airborne electronic attack capability gaps. In the near term, services are evolving tactics, techniques, and procedures for existing systems to enable them to take on additional mission tasks. These activities maximize the utility of existing systems and better position operators to complete missions with equipment currently available. Longer-term solutions, however, depend on DOD successfully capitalizing on its investments in science and technology. DOD has recently taken actions that begin to address long-standing coordination shortfalls in this area, including designating electronic warfare as a priority investment area and creating a steering council to link capability gaps to research initiatives. These steps do not preclude services from funding their own research priorities ahead of departmentwide priorities. DOD’s planned implementation roadmap for electronic warfare offers an opportunity to assess how closely component research investments are aligned with the departmentwide priority.