Why GAO Did This Study

From 2011 through 2015, DOD plans to spend over $336 billion to operate, maintain, modernize, and recapitalize its tactical air forces. Since DOD projects tactical aircraft inventory shortfalls over the next 15 years, it must effectively balance resources between an increasingly expensive Joint Strike Fighter program and the need to keep its legacy aircraft viable.

GAO was asked to assess DOD’s tactical aircraft requirements, the extent to which plans for upgrading and retiring legacy aircraft and acquiring new aircraft are likely to meet the requirements, and how changes in strategic plans and threat assessments have affected requirements. GAO analyzed tactical aircraft requirement and inventory data, key plans and threat assessments.

What GAO Found

DOD’s current combined tactical aircraft requirement is around 3,240 aircraft. The requirement includes a mix of various types of Air Force, Navy, and Marine Corps fixed-wing fighter and attack aircraft. The Air Force requirement is 2,000 aircraft, and the combined Navy and Marine Corps requirement is about 1,240 aircraft. To achieve national security objectives, however, DOD not only needs the right quantity of aircraft to adequately equip each service’s force structure, but must also have the right organization and mix of aircraft capabilities. The services have reduced required quantities by a combined total of around 900 aircraft since 2002. Service officials believe that the current numbers provide sufficient capabilities to carry out assigned missions with manageable risk, but are not at optimal levels. Although officials also stated that current requirements account for capabilities provided by other weapon systems, such as unmanned aircraft and bombers, it is unclear exactly how and to what extent.

DOD expects to encounter shortfalls in both Air Force and Navy tactical aircraft inventories, but the timing and magnitude of these shortfalls largely depend on assumptions about Joint Strike Fighter (JSF) acquisitions and the viability of legacy aircraft. The JSF program has continued to experience cost and schedule problems and is in the process of being restructured. In addition, DOD’s investments in legacy systems have generally been assigned lower priority in the budgeting process. As a result, many legacy aircraft systems are becoming increasingly difficult to maintain as parts needed to support key subsystems age and become obsolete. The Navy and Air Force are exploring various options for closing their projected inventory shortfalls—including upgrading and extending the service lives of hundreds of legacy aircraft, and making modifications to how tactical air forces are used. Many of these options may be funded in future budgets and could cost billions of dollars.

The services have not fully reconsidered tactical aircraft requirements in light of recent changes in strategic planning and threat assessments, but according to service officials, the 2010 Quadrennial Defense Review (QDR) affirmed the existing force structure in the near-term, principally the next 5 years. Similarly, DOD’s recent Aircraft Investment Plan, which was required by Congress, and fiscal year 2011 budget decisions did not directly affect tactical aircraft requirements, but did make some changes in near-term aircraft investments. The QDR reflected a change in how DOD views future national security challenges, examined expected challenges in various combinations, and recognized the need to plan for and acquire adaptive and agile systems, including unmanned aircraft. The department is still in the process of establishing the analytical foundation for its future requirements. Until requirements analyses and JSF restructuring are complete and capabilities provided by unmanned aircraft and bombers are more clearly accounted for, it will be difficult for DOD to make informed investments in legacy aircraft upgrades and modernizations, and new aircraft procurements. In addition, without a joint comprehensive analysis that compares and contrasts the costs and benefits of various Air Force and Navy options for addressing inventory shortfalls, it will be difficult to determine the best approach to meeting requirements and mitigating shortfalls or eliminating redundancies.

What GAO Recommends

GAO suggests that Congress consider requiring that costs associated with modernizing and sustaining the legacy fleet be included in future investment plans, and recommends that DOD 1) better define requirements and the size and severity of projected shortfalls, 2) clearly articulate how systems like unmanned aircraft are accounted for, and 3) complete a comprehensive cost and benefit analysis of options for addressing expected shortfalls. DOD agreed with the second recommendation and partially agreed with the others, citing current and planned actions. GAO believes its recommendations remain valid.

View GAO-10-789 or key components. For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.