April 2013

# PRESIDENTIAL HELICOPTER ACQUISITION

## Program Makes Progress in Balancing Requirements, Costs, and Schedule

GAO Highlights

Accountability * Integrity * Reliability

Highlights of GAO-13-257, a report to congressional requesters

## Why GAO Did This Study

The VXX is a Navy program to develop a replacement for the current fleet of presidential helicopters. The Ike Skelton National Defense Authorization Act for Fiscal Year 2011 directed GAO to review and report annually to the congressional defense committees on the program. GAO has reported on the program twice previously. The first report identified major lessons learned from a prior terminated program that should be applied in the follow-on program. The second covered the program's progress, upgrades to the existing helicopters, and plans for moving the program forward. This is the last of the required reports. It discusses (1) the program's progress over the past year, particularly regarding evaluation of alternatives, and (2) DOD's efforts to develop key technologies for the VXX aircraft. GAO examined program documents; interviewed officials; and compared the AOA with elements GAO previously reported are needed for a robust AOA, and cost estimating and analysis standards. GAO also assessed the Navy's approach to developing key technologies and progress made.

## What GAO Recommends

GAO is not making recommendations in this report. DOD stated that it would ensure that mitigations are in place to address potential risk areas. It believes its efforts are aligned with GAO's best practices and the recommendations in GAO's 2011 report on the program and plans to continue to monitor program progress in view of these standards.

View GAO-13-257. For more information, contact Michael J. Sullivan at (202) 512-4841 or sullivanm@gao.gov.

## What GAO Found

The Navy made progress in the past year in establishing a sound VXX business case that reflects a rational balance between requirements, costs and schedule. In 2012, the Navy completed an updated Analysis of Alternatives (AOA) based on refined requirements and an acquisition approach that would leverage mature technologies from outside the program onto an in-production commercial or military airframe—allowing the program to begin in the engineering and manufacturing development phase of the Department of Defense's (DOD) acquisition process. The 2012 AOA reflected additional trade-offs made among cost, schedule, risk, and performance. The table below illustrates how some key performance requirements changed from the terminated VH-71 program to the VXX.

**Comparison of Minimum VXX to VH-71 Requirements for Certain Performance Areas**

| Performance area | VXX requirements compared to VH-71 |
|---|---|
| Passenger capacity | Reduced |
| Range | Reduced |
| Landing zone suitability | Unchanged |
| Transportability | Reduced |
| Operational availability | Reduced |
| Airspeed | Reduced |
| Hover performance | Reduced |

Source: GAO analysis of VXX and VH-71 program information.

Per the AOA, using this approach would reduce investment cost by approximately $1.5 billion (19.7 percent) and shorten the schedule by about 18 percent from the approach anticipated in 2010, which included more time and cost to develop technology within the program.

DOD's Director of Cost Assessment and Program Evaluation deemed the AOA sufficient to inform future acquisition decisions and the Under Secretary of Defense for Acquisition, Technology and Logistics approved the program to move forward toward a decision to begin engineering and manufacturing development. GAO's review of the AOA found it to be sufficient for this phase of the acquisition.

DOD's efforts to ensure key technologies are ready for integration into VXX aircraft are also making progress. The Navy's acquisition approach relies on the government providing mature technologies for integration into an in-production aircraft selected for the VXX program. These technologies either exist or are in development. Their use will be an important factor in achieving the reduced cost and schedule the Navy seeks. While the program reports that these efforts are on track and assesses the risks of integration as low, it is possible that key technologies may not be realized as planned or be as easy to integrate as anticipated. To mitigate integration risk, the Navy is making use of an integration laboratory and plans to demonstrate key technologies in a test aircraft.

Building on these decisions, the program will have to manage challenges in a number of areas, including holding the line on VXX requirements, controlling helicopter weight growth, and ensuring that efforts to mitigate integration risks are adequately planned, resourced, and executed.