

VH-71 Presidential Helicopter Fleet Replacement Program

Executive Summary

- The VH-71 replaces existing presidential support helicopters.
- Increment 1 provides seven test articles and five production aircraft with reduced capability in the near term.
- Increment 2 provides two new test articles and 23 modified production aircraft that vary significantly from Increment 1 aircraft.
- The program remains schedule driven vice event based.
- The Navy initiated Increment 1 Live Fire testing.

System

- The VH-71 aircraft replaces the current U.S. Marine Corps fleet of 11 VH-3D and eight VH-60N Helicopters flown by Marine Helicopter Squadron-One to perform the presidential lift mission.
- The VH-71 is a dual-piloted, multi-engine helicopter based on the Augusta EH-101 (pictured).
- The Navy intends the VH-71 to be capable of operating worldwide in day, night, or adverse weather conditions.
- The communications system will provide the ability to simultaneously conduct short- and long-range secure and non-secure voice, data, and video communications. It can also exchange situational awareness information with outside agencies, organizations, and supporting aircraft.
- Procurement of Increment 1 aircraft will include seven test articles and five pilot production (low-rate initial production) aircraft.
- Procurement of Increment 2 aircraft will include 10 low-rate initial production aircraft and eight full-rate production aircraft. If it proves impractical to retrofit the five pilot



production aircraft, five more production aircraft will be added at the end of Increment 2 production.

Mission

- Marine Helicopter Squadron-One, using the VH-71 aircraft, will provide safe and timely transport of the President and Vice President of the United States, Foreign Heads of State, and other parties as directed by the White House Military Office.
- The VH-71 is required to operate from commercial airports, military airfields, Navy ships, and austere sites throughout the world.

Activity

- The DoD is working to restructure the VH-71 program. DOT&E has not approved the Test and Evaluation Master Plan (TEMP) for the VH-71. DOT&E continues to support the established and long-standing policy of "fly-before-buy."
- The Navy initiated Increment 1 Live Fire testing in accordance with the approved strategy.
- The program conducted a successful Increment 2 System Requirement Review in April 2007.
- Test Vehicle 1 (a pre-production EH-101 prototype) conducted landings on the White House lawn during January 2007. Landings assessed rotor downwash effects and pilot workload.
- Test Vehicle 2, the first government test article, achieved first flight on July 3, 2007.

- The integrated test team, including operational test personnel from Marine Helicopter Squadron One, continues to refine and merge developmental and operational test plans.

Assessment

- The LFT&E is progressing as planned.
- The Increment 2, Milestone C decision is essentially a full-rate production decision as most Increment 2 aircraft will be on contract before completion of IOT&E.
- Significant differences between Increment 1 and Increment 2 aircraft increase the amount of required testing for Increment 2.

NAVY PROGRAMS

- The current design is overweight. Increment 1 and Increment 2 performance will likely fall short of required range and airspeed.

Recommendations

- Status of Previous Recommendations, The program should execute the VH-71 program on an event-based, rather than schedule driven, basis. The program has made little progress in this regard (FY06).
- FY07 Recommendations. The program should:
 1. Increase the scope of the Operational Assessment conducted to support the Increment 2, Milestone C decision.
 2. Conduct additional Operational Assessments to reduce the risk of an unsuccessful IOT&E and to support subsequent production decisions.
 3. Continue with the planned LFT&E program.