

## Combat Search and Rescue Replacement Vehicle (CSAR-X) / Personnel Recovery Vehicle (PRV)

### Executive Summary

- The Combat Search and Rescue Replacement Vehicle (CSAR-X) program submitted a Test and Evaluation Master Plan (TEMP). OSD directed the program to re-submit the TEMP including an updated LFT&E strategy within 90 days of source selection.
- A Defense Acquisition Board (DAB) met on October 31, 2006, and approved implementation of the program at Milestone B.
- Shortly after the DAB, an Air Force source selection board announced selection of the Boeing H-47 helicopter for the CSAR-X program.
- A government review of the source selection process will delay detailed test planning.
- The program has a test strategy that provides for an operational assessment prior to the low-rate initial production (LRIP) decision. Based on DOT&E's experience with other programs, the CSAR-X program retains schedule risk in achieving the desired capabilities before the proposed LRIP decision point.

### System

The CSAR-X (formerly called the Personnel Recovery Vehicle (PRV)) will replace aging Air Force HH-60 Combat Search and Rescue (CSAR) helicopters. The program intends to field a new vehicle capable of meeting the Air Force CSAR requirements and increase the inventory of available rescue helicopters based on updated needs analyses. The primary program requirements are:

- Two hundred and seventy-five nautical miles (nm) combat radius
- Downwash that does not impede safe and successful recovery of personnel



- Ready for deployment within three hours of tasking, ready for flight operations within three hours of arrival, and worldwide operations capable within 24 hours of departure
- Self-defense, survivability, and vulnerability capabilities that support CSAR
- Lethal and electronic threat engagement
- Capacity to carry 2,900 pounds; usable cabin space for aircrew, recovery team, four non-ambulatory patients, and mission equipment

### Mission

- Operational units equipped with CSAR-X recover isolated personnel and downed aircrew.
- Time is the single most important factor in successful recovery of personnel. The purpose of the CSAR-X is to help operational units conduct the recovery mission operational tasks (i.e. rapid deployment, refueling, self-protection, and self-sustainment) more quickly than current systems, thus minimizing the overall time to recover personnel.

### Activity

- The CSAR-X program submitted a TEMP for Milestone B prior to source selection. Out of concern that the TEMP be updated to account for competitor-specific testing, OSD directed the program to re-submit the TEMP, including an updated LFT&E strategy, 90 days after source selection.
- A DAB met on October 31, 2006, and approved implementation of the program at Milestone B. Shortly after the DAB, an Air Force source selection board announced selection of the Boeing H-47 helicopter for the CSAR-X program.

- The program implemented a number of DOT&E suggestions in their test strategy, including an operational assessment prior to the LRIP decision and use of production representative aircraft for operational testing.

### Assessment

- The test program appears adequate with sufficient test assets to support an LRIP decision and IOT&E. An operational assessment using available developmental testing information will support the LRIP decision.

# AIR FORCE PROGRAMS

- The program schedule delivers the first test assets approximately two years after development begins. DOT&E is concerned about schedule risk with respect to developing and producing a survivable, capable helicopter that meets requirements within the relatively short span between program initiation and the proposed LRIP decision point.
- The Air Force requested offers from three companies with aircraft that come close to the Air Force requirements for a new rescue helicopter. There is sufficient variation in the proposed aircraft such that USD (AT&L) and DOT&E believe that the TEMP required significant changes in testing and LFT&E strategy depending on the aircraft selected. The original direction for this required 90 days from source selection; however this will be delayed as the Air Force and Government Accountability Office review the source selection process for the program.

## Recommendations

- Status of Previous Recommendations. The program took effective action on all of the DOT&E recommendations from the previous annual report.
- FY06 Recommendations. The CSAR-X program should:
  1. Continue with a strategy and TEMP that matches those submitted for the Milestone B decision. The program should retain the operational assessment prior to committing to LRIP and complete sufficient test planning to support adequate operational testing.
  2. Shift from a calendar-driven to event-driven approach if development identifies significant deficiencies that might delay or impact operational testing.