# Lockheed Martin Team Completes Preliminary Design Review For UCAR Unmanned Aircraft Development Program

PRNewswire-FirstCall
OWEGO, N.Y.

A team led by Lockheed Martin successfully completed a week-long Preliminary Design Review (PDR) of the Unmanned Combat Armed Rotorcraft (UCAR) program, finishing on schedule the preliminary design phase program.

The goal of UCAR is to demonstrate the technical feasibility, military utility and operational value of a system of unmanned rotorcraft capable of autonomous collaboration with manned and unmanned air and ground systems. The Defense Advanced Research Projects Agency (DARPA) is developing the UCAR system jointly with the U.S. Army.

"The successful completion of the PDR signifies readiness to proceed with detailed design and demonstrates continued progress in developing UCAR, an important addition to U.S. Army's Future Force capability," said Jeff Bantle, vice president, Multi-Mission Solutions for Lockheed Martin Systems Integration - Owego. "We have completed all program milestones on schedule and look forward to continuing to support this strategic and transformational program."

The PDR, conducted in late July at Lockheed Martin in Owego, included a thorough review of the preliminary design for all elements of the system, including ground- and air-based command and control elements, the air vehicles, mission management software, sensors systems and communications.

The air vehicle concept, developed by team member Bell Helicopter of Fort Worth, TX, is a heavy-fuel, advanced compound helicopter having speed comparable with larger manned rotorcraft and excellent maneuverability, particularly at low altitudes. The aircraft has a robust, fully integrated sensor and weapons suite and is able to operate at terrain flight as well higher altitudes.

"The advanced technical achievements of this design will revolutionize the helicopter industry for years to come," said Mike Redenbaugh, chief executive officer of Bell Helicopter. "Our design simplicity, use of man-rated helicopter components and specifications, combined with our fully integrated redundant flight control system, provides significant improvements compared to standard UAV systems featuring single thread or non-integrated dual redundant flight control systems."

The PDR also included a review of detailed plans for Phase III of the program, which involves the fabrication and testing of two UCAR demonstrators. The next step in the process is a Critical Design Review, which is scheduled for April 2005 as part of the program's Phase III effort.

"UCAR will provide such a vitally needed capability to our soldiers that we stand ready to support our customer as we move forward with this important program," Bantle added.

The Lockheed Martin UCAR team includes Lockheed Martin Systems Integration - Owego, Lockheed Martin Aeronautics Company Advanced Development Programs, Lockheed Martin Advanced Technology Laboratory, Lockheed Martin Simulation and Training Systems, Lockheed Martin Missiles and Fire Control, Bell Helicopter, a Textron company, Raytheon Company, the Charles Stark Draper Laboratory, Whitney, Bradley & Brown, L-3 Communications, DRS Technologies and Harris Corporation.

Headquartered in Bethesda, MD, Lockheed Martin employs about 130,000 people worldwide and is principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services.

For additional information, visit our website: http://www.lockheedmartin.com/ .

SOURCE: Lockheed Martin

Web site: http://www.lockheedmartin.com/si
http://www.lockheedmartin.com/

---

https://news.lockheedmartin.com/2004-08-19-Lockheed-Martin-Team-Completes-Preliminary-Design-Review-for-UCAR-Unmanned-Aircraft-Development-Program