



# News Release

## Defense Advanced Research Projects Agency

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IMMEDIATE RELEASE

May 14, 2007

### **DARPA DEMONSTRATES LOW-COST, AUTONOMOUS CONTROL SYSTEM FOR MULTIPLE AIRCRAFT**

The Defense Advanced Research Projects Agency has successfully shown how its low-cost, autonomous control system can manage a variety of unmanned U.S. Army reconnaissance aircraft, in airspace also occupied by manned aircraft, to deliver timely information about enemy positions to troops on the ground.

The system, known as HURT, for Heterogeneous Unmanned Reconnaissance Team, allows ground forces to receive video surveillance imagery of the surrounding area and request specific information about suspected enemy positions on user-friendly touch-screens. The system autonomously processes multiple requests and directs the most suitable aircraft to take a closer look.

The latest exercise, the third demonstration of the HURT system's capabilities, was conducted April 9-24, 2007, at Fort Hunter Liggett, Calif. During the demonstration, the HURT system controlled combinations of manned and unmanned aircraft to send essential tactical data in real-time to Soldiers equipped with handheld computers.

DARPA program manager Dr. Michael Pagels explained, "This demonstration showed the increased effectiveness of multiple airborne assets to the warfighter when the assets are flown in a coordinated manner."

The exercise showed HURT's ability to simultaneously control three "tiers" of reconnaissance aircraft. A manned C-12 aircraft served as Tier I, flying at 6,000 feet and scanning areas as far away as 100 miles from the combat area. Aircraft in Tier II (Hunter, Shadow and Scan Eagle unmanned aerial vehicles) flew at 2,000 feet and covered areas approximately 50 miles away, and those in Tier III (Pointer, Raven and Wasp unmanned aerial vehicles) flew as low as 100 feet over the immediate combat zone. Using a software interface, HURT linked the aerial platforms together to build a unified picture of the combat area for the warfighters' use.

Previous demonstrations showed how HURT could control unmanned aerial vehicles to collect and deliver real-time surveillance information to ground forces in urban combat zones. In 2006, U.S. Marines used HURT's capabilities during training exercises at the Marine Corps Air

(more)

Ground Combat Center, Twentynine Palms, Calif. The system was initially demonstrated in 2005 at the former site of George Air Force Base in Victorville, Calif.

The recent demonstration was performed in cooperation with the U.S. Army. Northrop Grumman is the prime contractor for HURT.

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