## News Release



## **Defense Advanced Research Projects Agency**

"Providing technological innovation for national security for over 40 years." 3701 North Fairfax Drive Arlington, VA 22203-1714

IMMEDIATE RELEASE

February 13, 2003 (corrected)

## FOUR-BLADE A160 HUMMINGBIRD CONDUCTS FIRST FORWARD FLIGHT

The four-blade Hummingbird A160 vertical takeoff and landing unmanned aerial vehicle successfully conducted its first forward flight on February 10, at the Southern California Logistics Airport, Victorville, Calif.

The four-blade A160 air vehicle took off and accelerated to 20 knots at a low altitude along the runway, then climbed gradually to 4,000 feet above mean sea level at a speed of 30 knots. Once on its flight path, the A160 accelerated to a maximum speed of 62 knots. The Hummingbird remained airborne for approximately one hour.

The flight validated the A160's ability to fly using 50 percent of the power and 50 percent of the fuel consumed by similarly loaded conventional helicopters. As a result of the reduced power, the A160 is also substantially quieter, a benefit while operating in urban environments. The vehicle handled very much as the computer simulation predicted, validating the computer simulation as a reliable design tool for future expansion of the A160's operating envelope. This was the fifth flight of the four-blade A160 since November 2002.

Frontier Systems, Irvine, Calif., designed and developed the A160 Hummingbird and is currently conducting the flight test program.

-END-

Media with questions, please contact Jan Walker, (703) 696-2404, or <u>jwalker@darpa.mil</u>. Military organizations should contact Van Olinger, (703) 696-2376 or <u>volinger@darpa.mil</u>. This release and a video of the flight are available on the web at <u>www.darpa.mil/body/news.html</u>.