Press Release
October 2, 2007
Gillespie Field, El Cajon, CA

On September 30, 2007, the duPont Aerospace Company Inc. successfully demonstrated controlled, autonomous tethered hover of the world's first turbofan powered vertical/short takeoff and landing jet transport aircraft (VSTOL). The DP-1C, using two Pratt & Whitney Canada 535A engines, hovered twice for 45 seconds. This is well in excess of the 30 second military demonstration required for helicopters.

The DP-1C research and development prototype is a 53% scale model of the DP-2 VSTOL jet transport. The DP-2 is a high speed, long range aircraft designed to carry passengers, troops or cargo. The airplane is constructed primarily of carbon-composite, including the proprietary thrust vectoring system (TVS). The TVS turns the hot engine exhaust through 90 degrees to achieve vertical takeoffs and landings. The TVS is rotated to a horizontal configuration in order to transition to conventional forward flight from a hover. In the stowed TVS configuration, the DP-2 will takeoff and land like a traditional airplane.

Under the direction of the Office of Naval Research, duPont has developed the concept into an unmanned aerial vehicle (UAV) in order to minimize risk. This UAV was tethered to an elevated test stand at their facility at Gillespie Field in El Cajon, CA. With NASA's assistance, it has gone through a series of refinements in preparation for eventual manned flight.

During this process, the reliability of the system has been proven to be equivalent to commercial airline dispatch reliability. Flights were routinely conducted every hour, with over 100 completed to date. For these flights, the pilot was used only to start the engines, and remained on standby in a nearby control vehicle in case of an emergency. The flight control software controlled the plane during liftoff, and hover, maintaining attitude and position autonomously.

The duPont DP-2 will enable airlines and business jet operators to utilize over 5,000 small domestic airports, which are currently too small to accommodate the long runway requirements inherent in high speed jet aircraft.

The military can operate the DP-2 out of remote and unprepared sites, getting troops and supplies into and out of the exact point where they are needed. The range of the DP-2 permits delivery from a long distance, and its high speed ingress and egress makes the aircraft less susceptible to being shot down in hostile territory. In this type of military operation, "Speed is life".

A video clip of the two tests can be found online at: http://www.dupontaero.com/testing/

>>

Contact Carol duPont (carol.dupont@dupontaero.com) at 619-596-2186 for more information.