Boeing A160 Hummingbird Completes Flight Test

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Boeing has announced the A160 Hummingbird unmanned rotorcraft made its first test flight from an airfield near Victorville, Calif., Nov. 30. "This flight - the first with a six cylinder Subaru engine - is an important step toward concept demonstration of this innovative UAV to offer unprecedented capabilities in the history of helicopters," said Gary Gallagher, A160 program manager for Boeing Phantom Works.

"It's gratifying to resume flight testing as the A160 team does a great job with this new technology. This aircraft can change all the rules as they apply to UAV vertical take-off and landing operations."

The new A160 successfully flew for about 30 minutes in the vicinity of the air field, bringing the total number of A160 test flights to 32 and the total number of flight hours to 58.

The objectives of the recent flight test were to open the A160's flight envelope for the latest vehicle configuration, as previous aircraft used four cylinder Subaru engines. Engineers are currently analyzing the flight data in preparation for the next series of test flights.

The Hummingbird features a unique optimum speed rotor technology that significantly improves overall performance efficiency by adjusting the RPM of the rotor system at different altitudes, gross weights and cruise speeds.

It is designed to fly autonomously, for much longer periods of time (in excess of 24 hours), over greater distances (2,500+ nautical miles), at higher altitudes (up to 30,000 feet), and much more quietly than current helicopters.

The A160 could provide reconnaissance, surveillance, target acquisition, communication relay and precision re-supply. Its unique characteristics would allow it to effectively address current and emerging requirements of the U.S. armed forces, Department of Homeland Security, and international military and security organizations.

The A160 Hummingbird is being developed and tested by Boeing Phantom Works under contract with the Defense Advanced Research Projects Agency (DARPA). Phantom Works currently is under contract for eight A160 UAVs for DARPA and ten for Naval Air Systems Command.

As the advanced R&D unit and catalyst of innovation for the enterprise, Phantom Works collaborates with Boeing business units, external

customers, suppliers, universities and other R&D agencies throughout the world to provide new system solutions and breakthrough technologies that are defining the future of aerospace.

Phantom Works will complete initial development of the Hummingbird and then transfer the program to Boeing Integrated Defense Systems - a unit of The Boeing Company and one of the world's largest space and defense businesses - for further development and production.

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