Airbus Group Completes Successful Flight Tests of Laser-Based Airspeed Sensor System

Stage Now Set for Certification Aboard Rotary Wing Aircraft

HERNDON, VA--(Marketwired - Dec 18, 2014) - Airbus Group has completed successful flight tests on a fiber-optic, eye-safe, laser-based sensor system that delivers accurate airspeed information in the three axis at low and even negative airspeed. This range of capability is not possible with pitot tubes, the longstanding industry standard for airspeed sensors.

The sensor system, developed by Manassas, Virginia-based Optical Air Data Systems (OADS) was installed aboard an Airbus Dauphin 6542 helicopter for the battery of flight tests that were conducted in Marignane, France by Airbus Group’s Airbus Helicopters division. With the successful completion of these tests, the stage is now set for Airbus Group to work with OADS for certification, with the ultimate goal being commercialization aboard rotary wing aircraft.

“We are very impressed by the system’s performance during flight tests and believe this technology can offer significant performance improvements in changing the way we design and operate aircraft in the future due to the accuracy and timeliness of the information,” said Allan McArtor, chairman and CEO of Airbus Group, Inc.

“This technology reflects our corporate commitment to advancing innovative technologies to benefit the aviation industry and represents a dramatic evolution for flight control systems,” he said.

The OADS system measures airspeed as low as -20 knots with an accuracy of better than 2 knots over the entire flight envelope compared to standard pitot tubes which are not functional at airspeeds below approximately 30 knots. The system measures the air 50-60 meters away from the aircraft. This factor is especially significant in rotary wing applications, where airspeed measurements may be affected by the downwash effect.

Further, the OADS system is not affected by icing -- a dangerous condition during which ice can form in the sensor openings of pitot tubes, blocking their ability to accurately measure airspeed.

“We are very excited about the successful results of our flight test program and look forward to working with Airbus Group over the coming months to certify this product as the next-generation air data system,” said Phil Rogers, OADS President.

Beyond measuring airspeed around an aircraft, the OADS technology can measure wind and turbulence several thousand feet above and below the aircraft, providing pilots the ability to select the most favorable altitudes for flight, resulting in fuel savings and a smoother ride. As a result, Airbus Group executives are also examining the technology’s capability in collecting wind data for tactical en route and strategic flight planning over extended periods of time.

“We’ve just scratched the surface in exploring the operational efficiencies that this technology can potentially enable,” said McArtor.

About Airbus Group
Airbus Group is a global leader in aeronautics, space and related services. In 2013, the Group -- comprising Airbus, Airbus Defense and Space and Airbus Helicopters -- generated revenues of EUR 57.6 billion (restated) and employed a workforce of around 139,000 (restated).
About Airbus Group, Inc.
Airbus Group, Inc. is the U.S.-based operation of Airbus Group, a global leader in aeronautics, space and related services. Airbus Group contributes more than $14.4 billion to the U.S. economy annually and supports over 245,000 American jobs through its network of suppliers. Airbus Group, Inc., headquartered in Herndon, Va., offers a broad array of advanced solutions to meet U.S. military and commercial requirements, including fixed- and rotary-wing aircraft, homeland security systems, public safety communications, defense electronics and avionics, and threat detection systems.

About Optical Air Data Systems, LLC
Optical Air Data Systems, LLC (OADS), a high technology, award winning Small Business, is a rapid developer of lightweight, rugged Light Detection and Ranging (LIDAR) remote sensing solutions for real world precision measurement applications. OADS has a state of the art design, engineering, manufacturing, as well as field and flight test facility located in Manassas, Virginia. OADS has established itself as a world leader in the development of customized all-fiber optic motion-compensated LIDAR solutions that meet the reliability, maintainability, and survivability requirements essential for aviation sensors. Over its 24-year history, OADS’ experienced management and engineering team has launched numerous products including the world’s first laser based air data system for rotary and fixed wing aircraft, LIDAR for wind turbine control, hand held laser wind sensors, as well as laser range finders.