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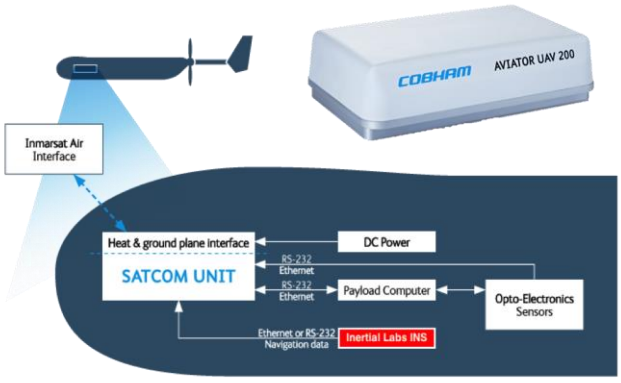
AirSatOne successfully completed another test of Satcom connectivity for Beyond Line of Sight (BLOS) operations with COBHAM AVIATOR UAV 200 with GPS-Aided INS from Inertial Labs Inc.

AirSatOne (ASO), an Aviation Satellite Communication Service Provider, reported that its test using a COBHAM AVIATOR UAV 200 for Satcom connectivity and the Inertial Labs INS-P for Position, Heading, Pitch, Roll, and Velocity data has been successfully completed. The integration of the Inertial Labs INS-P provides rapid connectivity from static or dynamic initialization.

The AVIATOR UAV 200 was specifically designed for UAV's to provide Satcom connectivity for Beyond Line of Sight (BLOS) operations which can be used to remotely pilot the aircraft and provide video feed for surveillance and situational awareness. Cobham designed the satcom terminal with a very unique low gain, electronically steered antenna allowing full Inmarsat hemisphere coverage to 5° elevation where competing systems only offer coverage to 20° elevation. To achieve this, the satcom terminal needs external navigation data. To support this requirement, Inertial Labs equipped its INS-P with an AVIATOR UAV 200 compliant data format.

Upon UAV system's initialization, the Inertial Labs INS-P precisely indicated 3D orientation, velocity as well as latitude and longitude utilizing its powerful tactical-grade IMU (1 deg/hr gyro), high precision GNSS receiver and gyro-compensated Fluxgate magnetic compass. During testing, connectivity remained stable with no interruptions while rotating 360°, during pitch variations of greater than ±45°, and roll values up to 45°. The resulting accuracy: Position <1 meter; Heading <0.2°; and Pitch/Roll <0.1°.



"We subjected the INS-P and Cobham AVIATOR UAV 200 to aggressive maneuvers in pitch, roll and heading/yaw and found that the combination allowed connectivity at extreme angles; including maintaining connectivity beyond 60 degrees pitch and roll. To further note, the INS-P came online quickly, even faster than our requirements." - Jo Kremsreiter, President at AirSatOne

AirSatOne is a Satcom service provider that specializes in aircraft satcom. AirSatOne's UAV and special mission customers use its services on airborne assets for border patrol, aerial surveillance, and other specialized activities. Their exclusive Flightstream™ SA includes network traffic control with prioritization to make sure high priority data reaches its destination even when 100% of the allocated bandwidth is being used. AirSatOne also provides Hybrid Satellite / Terrestrial connectivity with IP-Sec, Leased Line, and MPLS so we can deliver the secure connectivity all the way to the customer's location.

Established in 2001, Inertial Labs is a leader in position and orientation technologies for commercial, industrial, aerospace, and defense applications. Inertial Labs has a worldwide distributor and representative network covering 20+ countries across 6 continents and a standard product line spanning from Inertial Measurement Units (IMU) to GPS-Aided Inertial Navigation Systems (INS). With application breadth on Land, Air, and Sea, Inertial Labs provides the support and products to solve customers' most difficult sensing and navigation integrations.

For further information and specifications on the Inertial Labs products, please call +1-703-880-4222, e-mail sales@inertiallabs.com or visit us on the Web: www.inertiallabs.com