



Cobham SATCOM's AVIATOR UAV 200 is the world's smallest and lightest Inmarsat UAV satcom solution, pictured installed in AnsuR-Nexus

Mar 13, 2018 21:14 GMT

Cobham SATCOM - Satellite 2018: Cobham reveals the engineering behind ELGA class 4 antennas

Satellite 2018, 12th to 15th March, Washington, DC, Booth 1301

13 March 2018 (LYNGBY, Denmark): Cobham SATCOM is highlighting the engineering breakthroughs behind its most technologically advanced

terminals, the next-gen Inmarsat Class 4 AVIATOR S series and AVIATOR UAV 200, at Satellite 2018.

Cobham is the supplier of the only Inmarsat SB-S approved satellite communications systems currently flying, after developing the first Enhanced LGA (ELGA) antennas that meet the gain requirements to operate over the full Inmarsat hemisphere.

To create the first Class 4 Inmarsat terminals, Cobham designed a simple to manufacture, radiating structure, which allowed spreading of excessive gain at boresight down to the lower elevations. Previously, the only low gain antennas on the market typically consisted of helix radiators, offering low gain from antenna boresight down to about 20 degrees above the horizon, which did not cover the full Inmarsat hemisphere down to 5 degrees above the horizon.

For the advanced AVIATOR S system, Cobham developed the very compact HELGA (combined HLD and Enhanced LGA) antenna, which contains an ELGA antenna as well as a DLNA function and High Power Amplifier (HPA), all in one package.

Willem Kasselmann, Vice President Aero at Cobham SATCOM, explained: *“The DLNA and HPA components are normally located inside the aircraft, shielded from the extreme environmental conditions. In the AVIATOR S package, we’ve miniaturised it into the antenna to harness the benefits of low signal loss, thereby reducing the amount of amplification and filtering, but now requiring temperature control.”*

Currently nearing the completion of the qualification phase, AVIATOR S is an ARINC 781 compliant small satcom system enabling Inmarsat’s SB-S IP data service and featuring the most advanced security architecture and domain segregation measures available in a two LRU solution.

Cobham’s range of SB-S powered AVIATOR satcom systems tap in a new world of data-rich, near real-time applications to improve operational efficiency and enhance flight safety. A service fit for the digital age, SB-S offers the highest system availability, shortest message transaction time, and most secure, reliable voice and data performance in the industry.

The AVIATOR UAV 200 is the world's smallest and lightest Inmarsat UAV satcom solution, weighing just 1.45kg (76% lighter than comparable products).

To achieve this innovation, Cobham set the target on also including the radio portion along with the antenna, DLNA and HPA inside a single enclosure, with additional weight reduction targets.

To learn more about the connected cockpit and UAV solutions, visit Cobham Booth 1301 at Satellite 2018 or visit www.cobham.com/AVIATOR.

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About Cobham SATCOM

Our satellite and radio communication terminals perform in the most challenging and remote environments on land, at sea and in the air.

We design and manufacture these high-performance products under the AVIATOR, EXPLORER, SAILOR and Sea Tel brands providing customers with outstanding performance, value and support through our global sales and service network.

Please visit www.cobham.com/AVIATOR

About Cobham

Cobham offers an innovative range of technologies and services to solve challenging problems in commercial, defence and security markets, from deep space to the depths of the ocean.

The challenging and rewarding roles we offer, across a wide range of disciplines, are what make Cobham a true global technology and services leader. To view our current roles, visit www.cobham.com/careers.