

Intelsat success with multi-orbit inflight Wi-Fi tests



Intelsat anticipates delivering and installing shipsets in early 2024

[Intelsat](#) has announced the successful completion of inflight testing of its new electronically steered array (ESA) antenna.

Announced in June 2022, the new antenna has been accumulating flight hours with [Ball](#), [Stellar Blu Solutions](#), Intelsat and [OneWeb](#) engineers validating antenna and network performance.

In early 2023, Intelsat successfully demonstrated the new system to global airlines on the company's Bombardier CRJ-700 regional jet outfitted with the new antenna and inflight Wi-Fi system. With peak inflight download speeds exceeding 275 Mbps, airline customers were able to participate in live virtual meetings, stream media and stay connected without interruptions.

Weighing 90 lbs and with no moving parts, the new antenna stands 3.5 inches tall on the top of the aircraft. The terminal's low profile has the lowest drag of any product Intelsat has ever offered, reducing CO2 emissions for airlines.

"After installing the system in December, we've been hard at work perfecting this new technology and have taken some of the world's leading airlines for test flights. An antenna without moving parts, that is much smaller than its predecessors, enables airlines to compete in the marketplace, delight their guests and have confidence that Intelsat's multi-orbit antenna will provide the best performing inflight connectivity experience in the market," said Jeff Sare, President of Intelsat Commercial Aviation, in a February 28 press release.

By using the Intelsat and OneWeb satellite networks together, Intelsat can offer the benefits of LEO's low latency along with the redundancy GEO provides to address network hotspots that LEO networks

on their own cannot address. Whether aircraft are flying polar regions or over the most populated cities in the world, the ESA antenna will offer seamless coverage from takeoff to touchdown.

“The best way to provide airlines and passengers with faster, more consistent and truly global broadband service is with a variety technologies and partnerships. These tests have demonstrated the power of leveraging multi-orbit technologies” said Greg Mashlan, Head of Commercial Aviation at OneWeb in a company statement dated February 28. “We’re witnessing the dawn of a new era for mobile connectivity where new technologies as well as new flexible thinking and collaboration will finally meet the needs of today’s digital airline and digital passenger.”

Intelsat has supplemental-type certificate programs underway for a wide range of aircraft and expects to begin delivering and installing shipsets in early 2024.