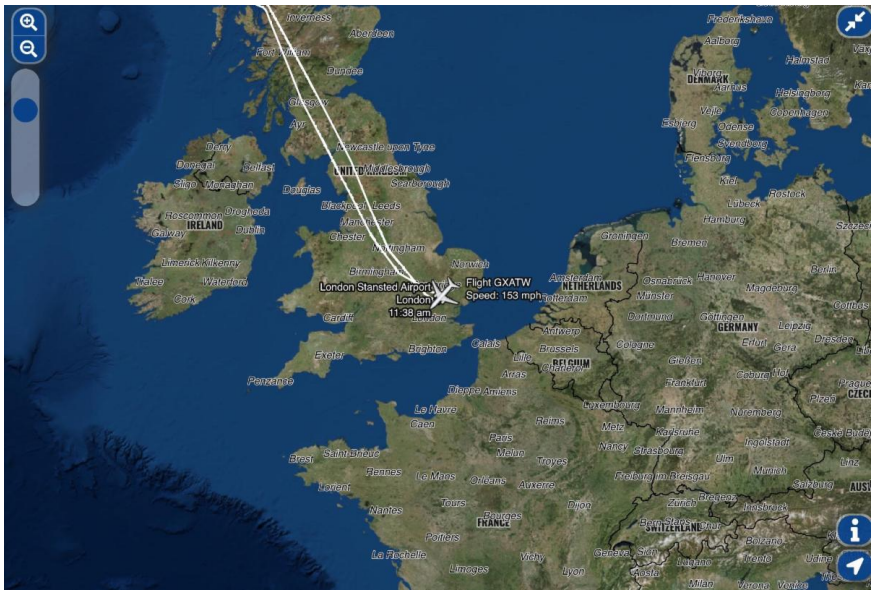
Bluebox delivers wireless IFE to Airbus OSP



Titan Airways' moving map is one is part of the the airlines wireless inflight entertainment system

Bluebox Aviation Systems has successfully delivered the first integration of wireless in-flight entertainment (W-IFE) software into the Airbus Open Software Platform (OSP).

The technology is being deployed with Titan Airways, a charter airline. The system was part of a line-fit OSP installation on the carrier's first new Airbus A321LR delivered from Airbus to Titan on October 26.

OSP is Airbus' standardized on-board hardware and software infrastructure available as both line-fit and retrofit for the A320 and A330 tamily. It enables a number of on-board digital services including integration of W-IFE from a selection of vendors. Bluebox was the first partner selected by an airline customer for the Airbus OSP program in 2019, which kicked off the core integration work and a series of system tests to ensure Bluebox's wireless base software suite passed Airbus' quality standards. For line-fit installations such as Titan's, integration of the passenger-facing IFE portal is completed after transfer of title to the aircraft customer. Airbus OSP is fully compatible with the aircraft manufacturer's "Airbus Connected Experience," which is pioneering the Internet of Things in the aircraft cabin and paving the way for a new personalized passenger experience and an open ecosystem approach for airlines.

Based at London Stansted Airport (STN), Titan Airways holds a worldwide Air Operator's Certificate and additional licenses to operate aircraft in the US, Canada and Australia. It tailors its service to meet clients' needs – be it a charter for a VIP, operating on ice in the Antarctic, hosting a music concert in the sky, or leasing an aircraft to another airline with just one hour's notice. Titan has added two Airbus A321LRs to its fleet, with the first delivered in October and the next expected in the spring of 2021. Being able to provide browser-based IFE for passengers is yet another way Titan is providing value for its customers. Along with movies, TV, games and music, passengers on Titan's A321LRs will be able to access the internet as well, either for free or as a paid service.

Titan's first customer for its new aircraft is TCS World Travel, a luxury tour operator based in Seattle. TCS requested additional IFE functionality to support its tour program and upgrade its in-flight

enrichment opportunities. It includes comprehensive destination-driven modules which interface with real-time flight route information and enabling TCS to manage bespoke content for these modules via Bluebox's content management system.

Final system testing took place October 28-30 at London Stansted, with the test flight (G-XATW) from Stansted on October 29 2020. After several ground-based tests, the two-hour flight involved testing various elements of the system under live flight conditions. 150 iPads were set up on the aircraft set to test functionality, performance and reporting – including content streaming, moving map, third-party application integration, and connectivity. The latter being the biggest pre-test challenge given the limited opportunities to test Bluebox's software working with the connectivity software prior to the final test flight, with that part of the project developed during the COVID-19 lockdown in the UK.

"Despite the challenges of COVID-19 during development, the tests ran very smoothly, and we are really happy to have achieved this significant milestone," said James Macrae, Chief Technology Officer, Bluebox. "To be the first IFE vendor with a proven working W-IFE system on Airbus OSP is a really exciting position to be in right now – especially within the context of something as significant and complex as Airbus's overall IoT program. It was a strategic investment for us before COVID-19 and remains so as W-IFE is set to make real gains in the post-COVID world thanks to the ease of deployment and emphasis on touchless travel solutions. Enabling that final link to passenger devices – for entertainment, retail, and other in-flight engagement applications – from the point of aircraft delivery will become the new standard, and we've proven we can deliver it."

Titan Airways' Andrew Taggart, A320 TRI, EFB Manager, Project Manager and Performance Engineer said: "Any new platform with the technical complexity of Airbus OSP would have been challenging enough to deliver, but then, with one of our customers already in line to fly our new aircraft, Bluebox was faced with a triple challenge – develop two IFE portals concurrently, to meet our general charter business needs and those unique and specialized requirements of our customer TCS, and do so in spite of a global pandemic. I think I speak for ourselves and our customer in saying Bluebox stepped up and delivered an impressive result."

To support customer development projects as part of the Airbus OSP program, Bluebox has set up an Airbus OSP lab at the company's expanded facilities in Scotland, in which Titan and TCS IFE user interfaces and content sets were tested, along with the system software package, before shipping to Titan for installation upon delivery of the aircraft. Bluebox's Airbus OSP lab includes the Aircraft Communication Manager (ACM) - a media server hosting the Airbus ALNA/OSP software platform, a test harness for simulation of aircraft systems interfacing with the media server (such as ARINC data for moving maps, and the PA system for PA Pause), a 4G cellular gatelink capability, and a Wireless Access Point of the same type to be used in the line-fit solution.