

Panasonic brings LEO-Ku to market with Intellian



John Wade, Vice President of Connectivity, Panasonic Avionics at APEX Global EXPO in Long Beach, California

John Wade, Vice President of Connectivity at [Panasonic Avionics](#), has been in the IFC space for 26 years and has long been a proponent of a low earth orbit (LEO)-only future for aviation. In a [2024 PAX Panel discussion](#), Wade told *PAX Tech* that LEO, “is the closest thing to giving passengers the experience in the air that they have on the ground.”

Now, Panasonic has announced a new LEO-only terminal system (LEO-Ku) designed to connect to [Eutelsat](#)’s OneWeb LEO network. The terminal system features [Intellian](#)’s LEO-Ku antenna, designed to deliver a faster, more reliable and future-proof connectivity experience to airline customers with up to 195 Mbps and less than 100 milliseconds of latency.

As Wade tells *PAX Tech* in a September interview, when Panasonic approached traditional aviation terminal providers, the quotes for the LEO-Ku terminal were too expensive. Panasonic was seeking a terminal that was significantly cheaper than existing GEO and multi-orbit solutions, could move to market quickly, and was produced by suppliers already manufacturing OneWeb terminals.

“We surveyed the market of who is really providing terminals to OneWeb and narrowed it down to Intellian, which has a great track record,” he reveals. “They have been in the maritime and land mobile business for more than 20 years. They have a OneWeb terminal today and they met our cost points.”

Panasonic worked closely with OneWeb throughout the process to ensure it had all the necessary information from Intellian. OneWeb must go through a type approval process to bring antennae to market.

“This antenna has been approved by OneWeb multiple times,” confirms Wade. “They know the antenna, know how it performs.”

Wade points to these factors as driving what he sees as a major evolution in antenna technology and capability.

“This is a terminal that is going to be available in a year, because we do not have time to do any design. It is much cheaper than any other terminals out there. It is lighter weight, it is smaller and it uses less power,” Wade explains.

The two main use cases for the antenna include adding to Panasonic’s existing GCS fleet and for airlines to opt for this LEO-Ku solution.

The terminal is targeted for an installation time of less than 24 hours. If an aircraft is going through any formal maintenance check, there is one single hole put in the skin of the aircraft to install the product, making the process quick and simple.

“There is no performance degradation on this antenna, despite the fact that it is cheaper,” Wade emphasizes. “It has got all the throughput, full bandwidth and capability that any of the other antennas do.”

Meeting the moment

As for the “why now” of bringing the LEO-Ku solution to market, he tells *PAX* that the realization that airlines would be willing to install two antennas on an aircraft was the trigger for moving forward with the single satellite offering this year.

“That is what drove us in this direction to find a very affordable way of bringing LEO to our GEO-equipped out,” he says.

Wade adds that having a LEO-Ku offering aligns with Panasonic's vision for inflight connectivity and the company’s belief that long-term, GEO will become less relevant in aviation.

“A LEO system is so different because the latency is so much lower. All the traditional inflight Wi-Fi systems have always used GEO,” he explains, comparing LEO versus GEO to the use of 5G versus 4G on mobile devices.

“That works. This is better,” Wade says of the comparison. “If you look at every major airline connectivity decision that has been made over the last couple of years, every single one has got LEO as at least part of it. We think that is a trend that is coming.”

With the industry itself moving in the direction of low latency, Wade calls the partnership with Intellian a steppingstone for migrating away from GEO over time and into a world that will be NGSO, non-geostationary orbit. Primarily, LEO.

“We are very much focused on that, and this is the first major transition in that direction,” he affirms.

While Wade believes LEO is the future, he reiterates that Panasonic’s current multi-orbit offering with Stellar Blu remains part of the portfolio.

“There is still a definite need for that product, especially around line fare,” he explains. “This is an add-on. This is an incremental capability that we are bringing to market.”