
Isotropic Systems now licensing antenna tech

By **Rick Lundstrom** on March, 4 2020 | Connectivity & Satellites



The Isotropic Systems radome for use in inflight connectivity

[Isotropic Systems](#), a developer of broadband terminal technologies, today announced it is licensing patented core components of its scalable multi-beam antennas to leading aeronautical and defense system integrators to accelerate customized designs, certifications, and deployments of next-generation terminals aboard commercial, business, and government aircraft.

Licensing discussions are underway, as aircraft manufacturers, terminal developers, and systems integrators review the benefits of Isotropic Systems' optical beam-forming lens modules and chipsets. The platform conforms to the fuselage or radome for a terminal that provides a continuous "make-before-break" connection for maximum performance throughout a flight by linking with multiple satellites in multiple orbits while using less power than other flat panel or electronically-steered antennas.

The Isotropic Systems terminal platform is also customizable to the size of the aircraft and the mission it is flying - whether it's enabling commercial airline passengers to send two-way email, social media, and video streaming services in flight or high-definition video surveillance transmitted from an

unmanned UAV. The platform offers all-electronic scanning performance at low power consumption that meets ARINC standards.

“Our optical multi-beam antennas provide customized high-performance connectivity seamlessly across multiple satellites and orbits at low power consumption, which delivers big advantages over single beam antennas to both commercial and government aircraft operators – from airlines to UAVs and every form of aircraft in between,” explained John Finney, Isotropic Systems Founder and CEO in today's announcement. “Isotropic Systems’ optical lens modules can be conformed to the size and shape of the fuselage or radome for a tailored low-profile solution that meets the requirements that government and commercial markets value the most as they look to unleash a new level of capabilities from their inflight connectivity (IFC) systems.”

“More than five billion people will fly this year with their smart phones in hand and growing expectations for a connected travel experience like the one they enjoy on the ground,” said Christopher Baugh, President of Northern Sky Research (NSR), a leader in satcoms research and producer of the Aeronautical Satcom Markets report. “Terminal advancements made in 2020 will play a pivotal role in bringing new LEO and MEO high throughput satellite capacity to the aero market, bringing long-awaited IFC expectations more closely in line with the technical realities and capabilities aboard commercial, business and government aircraft.”

Aeronautical and defense system integrators that license Isotropic Systems’ multi-beam antenna technologies will be working toward the integration of patented lens modules and chipsets into their terminal platforms throughout 2020, with trials set for the first half of 2021. The commercial launch timeframe of 2021 and 2022 aligns with new high throughput low Earth orbit and middle Earth orbit constellations expected to initiate services in 2022.