WAVESTREAM

FULL IN-FLIGHT SATELLITE CONNECTIVITY PORTFOLIO

Your Partner in Creating an Enhanced User Experience

BENEFITS

- **In-house cutting-edge aero terminal components – antennas, transceivers, and modems**
  - **Dual-band Ku/Ka terminal maximizes service coverage and capacity availability**
  - **De-facto industry standard IFC transceivers**
  - **Ultra-high performance modem manager - 400Mbps**
- **Service enablement via SkyEdge II-c global mobility platform**
- **Comprehensive NOC services lowering OPEX and accelerating service ramp-up**

MEETING DEMAND FOR IN-FLIGHT CONNECTIVITY

Wavestream is a leading provider of satellite terminal equipment for commercial airlines. We offer the most comprehensive broadband backhaul terminal solution for Inflight Connectivity Service Providers (IFC SPs). Wavestream's inflight terminal enables IFC SPs to deliver an excellent user experience to passengers, enabling them to maximize both business productivity and entertainment for the duration of their journey.

Today, High Throughput Satellites (HTS) are driving global coverage, reduction in the cost of bandwidth, and high speed connectivity. Wavestream's X-Architecture-powered SkyEdge II-c VSAT platform is the preferred ground segment for key HTS deployments around the globe. Through our existing infrastructure and upcoming network deployments, Wavestream is capable of providing complete global coverage to answer airlines' connectivity demands. Wavestream has the expertise to power your mobility network by offering a full end-to end backhaul solution for in-flight communications.

STATE-OF-THE-ART, VERSATILE EQUIPMENT

Wavestream is unique in providing IFC Service Providers with a full portfolio for in-flight Internet connectivity for commercial airlines. The offering includes Wavestream's aero satellite tracking antenna – the RaySat ER6000-A, our leading power amplifier – the Wavestream AeroStream® Transceiver, and the SkyEdge II-c Taurus ultra-high performance modem manager (MODMAN).
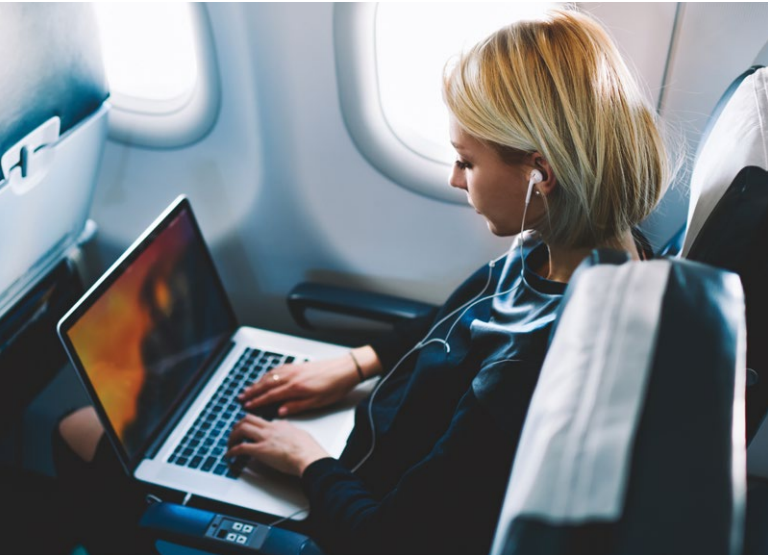
The RaySat ER6000-A is a high capacity, dual band Ku/Ka aero antenna intended for use on narrow and wide body commercial aircrafts. It has the capability for quick and easy electronic switching between frequency bands. The benefit to the airline is the flexibility to dynamically choose between different satellite technologies subject to price, weather or geo-location.

Using Wavestream's efficient low profile and low weight antenna panel technology, we designed an antenna that maximizes the available swept volume under a standard commercial aircraft radome. This enables us to provide the best performing antenna on the market, resulting in reduction of network operational cost. It is powered and controlled by Wavestream's aircraft networking data unit (KANDU).

The AeroStream® Ku and Ka radio frequency units (KRFU), produced by Wavestream's subsidiary Wavestream, are already deployed in hundreds of commercial aviation platforms. These transceivers remain unmatched in airborne environments in terms of reliability and performance. Over time, they have become the de-facto industry standard, meeting the requirements of Boeing, Airbus and other major aircraft manufacturers.

The SkyEdge II-c Taurus modem manager (MODMAN) provides the best performance, service availability and spectral efficiency for IFC services. It meets all satellite communication needs for both HTS and wide beam satellites on a global network. Taurus manages the whole in-flight SATCOM system, providing broadband satellite backhauling for inflight Internet connectivity and other inflight services such as cellular connectivity, entertainment, and live TV, delivering a high-quality end-user experience. Taurus uses advanced QoS features which guarantee superior application experience as well as traffic optimization for hundreds of passengers. To ensure fast web browsing and an ultimate high-quality end-user experience, Taurus contains a full set of embedded protocol optimization and application acceleration features, including TCP/HTTP protocol acceleration and compression.
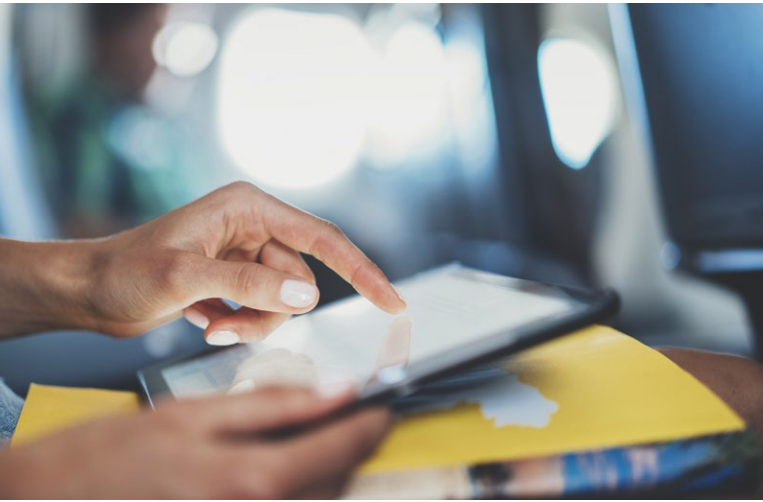
These components comprise Wavestream's aeronautical high capacity SATCOM offering, with advanced network features that enable maximum performance and efficiency for IFC Service Providers. Wavestream markets both the leading individual components and a full integrated terminal.

POWERING YOUR MOBILITY NETWORK

Wavestream powers your mobility network by offering a full end-to-end backhaul solution for in-flight communications.

Wavestream's mobility network solution is based on the SkyEdge II-c platform powered by X-Architecture. It is designed to support the latest communication standards and HTS. SkyEdge II-c is optimized for Ku and Ka HTS and wide beam satellites, enabling maximum flexibility to design contiguous global coverage.

Furthermore, X-Architecture enables network support for true seamless beam switchover, enabling passenger service continuity. SkyEdge II-c provides transparent switchover between beams, satellites and gateways while maintaining user application sessions. IFC SPs and their users can be confident that their in-flight broadband Internet access will be maintained, so that they can experience the highest quality and fastest speed connectivity throughout their entire journey.

Additionally, with SkyEdge II-c bandwidth management, satellite operators can share space segment resources for different applications, such as consumer broadband access, enterprise and other mobility services. This reduces OPEX and diminishes the need to allocate dedicated bandwidth for inflight connectivity services on each beam. Essentially, it is a much more efficient use of bandwidth that enables its allocation on demand to the various applications.

EXPERT MANAGED SERVICE FOR IN-FLIGHT SATELLITE BACKHAUL

Wavestream provides the ground segment infrastructure for multiple HTS service providers around the globe. Our currently deployed global networks, utilizing the SkyEdge II-c VSAT platform, can be leveraged to provide the complete satellite backhauling needs to support IFC service providers.

Wavestream offers a comprehensive managed service that most efficiently utilizes the satellite space segment, reducing OPEX, with a full transparent network interface to the IFCs global network management systems.

SkyEdge II-c's TotalNMS enables IFC global service providers to manage their services independent of the satellite network operator, providing a complete management suite. This includes real-time viewing of all airborne terminals' location and status, bitrate capacity, events, alarms and statistics, plus historic/trend analysis of the service over longer periods. The system also offers service providers an automated and easy-to-use interface for simple creation, activation and operation of end-to-end services with a high level of visibility and flexibility.

Wavestream operates customer networks from state of the art, redundant and secure 24x7 Network Operations Centers, guaranteeing high network availability. Our 24x7 multi-lingual helpdesks provide technical support assistance to the service providers and installers. We offer customized OSS components including ITIL-based Service Management, Network Performance and SLA Dashboard. Together, with efficient capacity planning, system engineering and implementation, Wavestream can improve your network operational economies.

As one of the largest international SATCOM companies, with more than five hundred hubs installed, and over a million terminals shipped to more than ninety countries; Wavestream has established close relationships with the key satellite operators. These relationships and leveraging our international offices enables Wavestream to offer competitive rates for satellite capacity.

PROVEN PERFORMANCE. GLOBAL REACH.

Wavestream's networks are proven globally, enabling us to provide competitive offerings whilst delivering state-of-the-art IFC satellite backhaul connectivity of the highest performance in both Ka and Ku bands. As innovators and experts in the field of mobility SATCOM, Wavestream is uniquely placed to provide the most comprehensive and versatile services to IFCs.

ABOUT WAVESTREAM

Wavestream sets the standard in the design and manufacture of next generation high power solid state amplifiers. Wavestream's Family of Ka, Ku and X-band Solid State Power Amplifiers (SSPAs), Block Upconverters (BUCs) and transceivers provide systems integrators with field-proven, high performance solutions designed for ground mobile and fixed, gateway and airborne satellite communication systems worldwide.

These items are subject to the Export Administration Regulations (EAR), 15 C.F.R. Parts 730-774, and may not be exported or transferred to any non-U.S. person, except as authorized by the U. S. Department of Commerce

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