



SPACE-BASED ADS-B UNLOCK YOUR ATM POTENTIAL



In 2018, Aireon will deploy the world's first truly global air traffic surveillance system, extending Automatic Dependent Surveillance-Broadcast (ADS-B) across the entire planet. Through an unprecedented space-based ADS-B system, Aireon will provide 100 percent surveillance coverage of ADS-B equipped aircraft in real time.

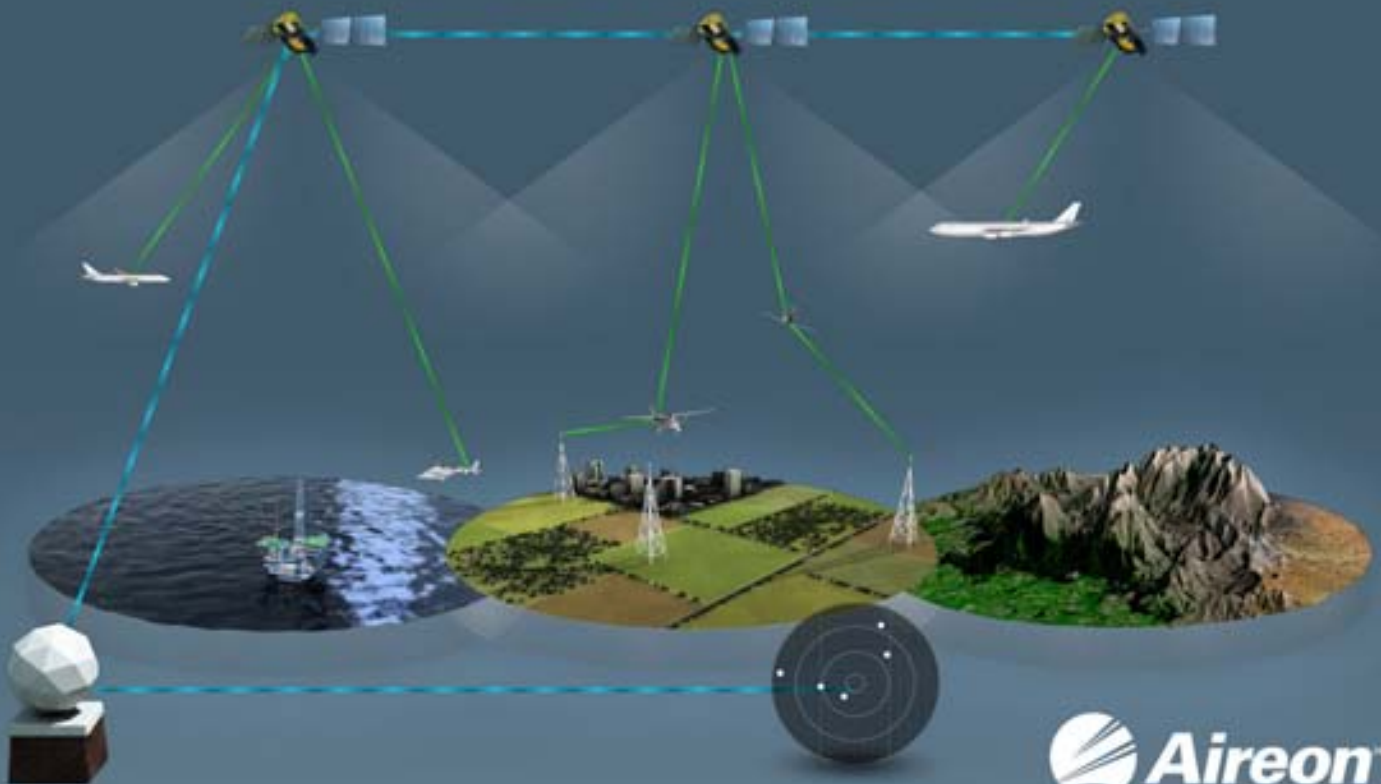
In partnership with NAV CANADA, the Irish Aviation Authority (IAA), ENAV and Naviair, as well as Iridium Communications, Aireon will enable real-time transmission of ADS-B data to Air Traffic Management (ATM) automation platforms and Air Traffic Controllers (ATC) in every Flight Information Region (FIR) on the planet.

Unlike traditional surveillance systems, which are costly to deploy over large geographic areas and limited to line-of-sight, Aireon's space-based ADS-B system will extend ADS-B coverage over oceans, mountains, remote areas and polar regions to provide real-time visibility of ADS-B equipped aircraft anywhere in the world.

Space-based ADS-B surveillance will also bypass the limitations of ground-based radar, Wide Area Multilateration (WAM) and ADS-B surveillance systems, which are often restricted by location, cost and power requirements and leave an estimated 70 percent of global airspace without real-time aircraft surveillance coverage.

Although Automatic Dependent Surveillance - Contract (ADS-C) can enhance situational awareness for air traffic controllers in areas without surveillance coverage, the high cost of aircraft equipage typically restricts ADS-C to large, twin-aisle aircraft, with position updates only provided every 10 to 18 minutes.

By eliminating these blind spots and delays, space-based ADS-B surveillance will enable the optimization of flight paths and altitudes, increasing operational and fuel efficiency for airlines, while significantly reducing infrastructure costs for the world's Air Navigation Service Providers (ANSPs).

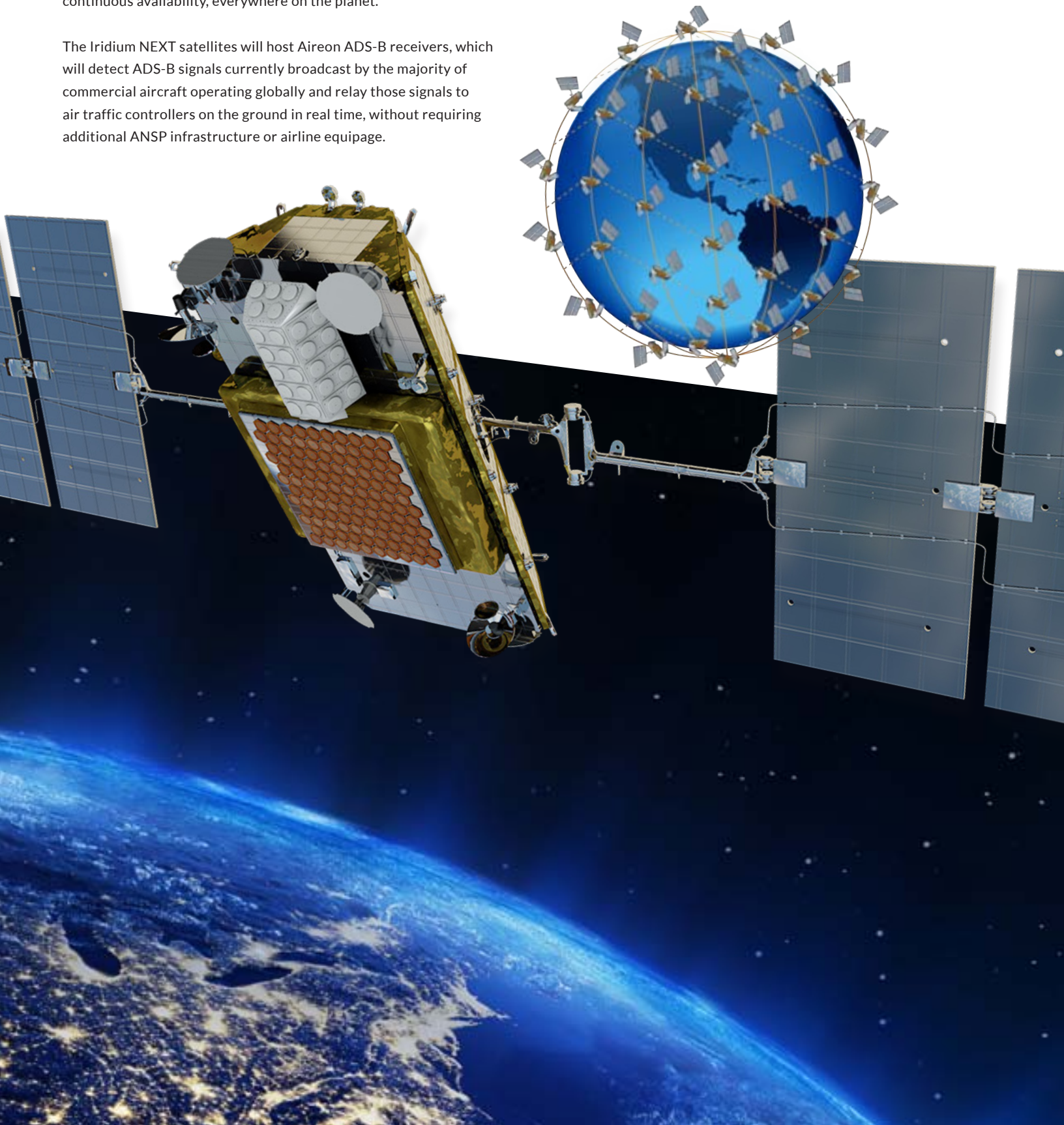


Iridium NEXT

The backbone of Aireon's space-based ADS-B system is the Iridium NEXT constellation of satellites, which is scheduled for eight launches through 2017 and is uniquely suited to meet the technical demands of global air traffic surveillance.

Iridium NEXT's low-latency, 66 cross-linked Low Earth Orbit (LEO) satellites — plus six orbiting spares and an additional nine ground spares — will orbit approximately 485 miles above the Earth, with each satellite linked to up to four others, creating a dynamic mesh network to ensure continuous availability, everywhere on the planet.

The Iridium NEXT satellites will host Aireon ADS-B receivers, which will detect ADS-B signals currently broadcast by the majority of commercial aircraft operating globally and relay those signals to air traffic controllers on the ground in real time, without requiring additional ANSP infrastructure or airline equipage.





Aireon Solutions

Aireon's global ADS-B coverage will provide aviation stakeholders with the benefits of lower-cost surveillance along with higher accuracy than traditional radar through several surveillance services:

Global Air Traffic Surveillance

Aireon's space-based ADS-B system will provide ANSPs a surveillance solution with several coverage options. Aireon subscribers will have the ability to extend surveillance coverage over oceanic and remote airspace allowing air traffic controllers and airlines to optimize flight routing, altitudes and speed and reduce operating and infrastructure costs, fuel consumption and emissions. ANSPs will also be able to leverage Aireon to complement existing surveillance systems to optimize their current surveillance infrastructure, reduce costs and improve reliability. Space-based ADS-B can also serve as a contingency surveillance layer to limit the impact of a legacy surveillance outage or system failure.

Aireon's system will also allow for cost-effective and rapid implementation of surveillance services to meet future capacity needs and support compliance with the International Civil Aviation Organization's (ICAO) Aviation System Block Upgrades (ASBU).

Global Flight Tracking

Aireon's space-based ADS-B system will enable airlines, airports and other aviation stakeholders to precisely track the location and position of ADS-B-equipped aircraft, anywhere in the world, in real time, through a complete, gate-to-gate, global data feed that requires no additional investment in infrastructure or avionics.

Unlike aggregated tracking information from ground-based surveillance systems, Aireon's single-source flight tracking solution will enhance existing traffic handling and resource management systems, increase arrival and departure predictability, improve resource allocation, enable collaborative decision making and lower operating costs.

Aireon ALERT

Offered as a free, public service to pre-registered airlines and ANSPs, Aireon's Aircraft Locating and Emergency Response Tracking (ALERT) service will allow search and rescue authorities to locate distressed aircraft in emergency situations.

Aireon ALERT will leverage the 100 percent global surveillance coverage of Aireon's space-based ADS-B system to provide precise GPS location and real-time tracking data for ADS-B-equipped aircraft flying beyond the reach of existing surveillance. Aireon ALERT will be operated by the Irish Aviation Authority (IAA) out of a 24/7 communications facility, located in IAA's North Atlantic Communications Centre in Ballygirreen, Ireland.

Analytical ADS-B Data

Unlike existing data sources with incomplete fleet data, regional surveillance limitations and significant coverage gaps, Aireon will provide the industry's first truly global database archive of comprehensive ADS-B flight track information worldwide, based on actual aircraft movements instead of scheduled flight plans.

Aireon's space-based ADS-B system will provide precise aircraft location information to support global air traffic analysis, capacity and resource planning and predictability analysis for arrivals and departures, as well as fleet analysis and optimization, airspace and air route design and planning, as well as aviation trends and performance reporting.





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