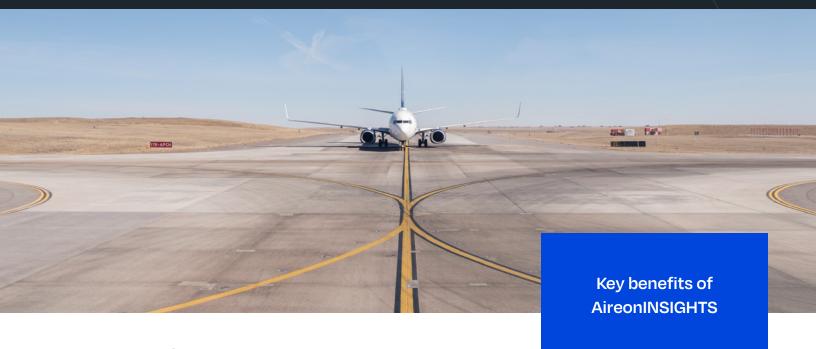# AireonINSIGHTS™

A single source of contextual space-based ADS-B data
for operational readiness and data-driven decision making

Key benefits of AireonINSIGHTS

Enhanced flight safety
with detailed, real-time
aircraft tracking

**Efficient operational
event detection**
for optimized decision-making

Customizable alerts
to allow for tailored insights

Seamless integration
for operational readiness

A singular, high-fidelity dataset plays a crucial role in Air Traffic Management (ATM). Supporting tools are essential to an evolving industry, responding to the growing demand for comprehensive, globally dependable data.

AireonINSIGHTS seamlessly integrates real-time, space-based Automatic Dependent Surveillance-Broadcast (ADS-B) data from Aireon with aviation contextual information such as infrastructure, weather, avionics, aircraft registry, and scheduling data. This fusion enables the identification of key performance indicators related to flight operational safety and efficiency. Stakeholders can then make informed, data-driven decisions based on reliable and detailed aircraft tracking events and alerts for flights, including airport and airspace events, ongoing flight data, and safety events.

By leveraging high-fidelity, surveillance-quality space-based ADS-B data, AireonINSIGHTS effectively detects critical operational events and streamlines data management, serving as a singular, comprehensive source for decision-making and operational readiness platforms.

Events, alerts, and custom-targeted insights

AireonINSIGHTS provides a customizable, near-real-time stream of worldwide events and alerts, including details like aircraft arrival/departure, "wheels up"/"wheels down," arrival/departure runway, current aircraft
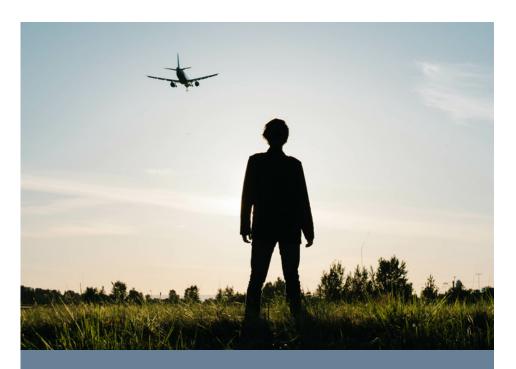
location, aircraft deviation, flight cycles, flight hours, and geofence restrictions. Customers can tailor their preferences, receiving events within a 50 nautical mile radius of an airport's latitude and longitude, for a selection of aircraft tail numbers, or specific events occurring globally.

Aircraft position data

Aireon's space-based ADS-B offers aircraft position data for any aircraft equipped with 1090 MHz/ADS-B equipment up to an altitude of 127,600 feet above ground level. Position reports are accessible for all subscribed aircraft, featuring a variable update rate based on the use case and a latency of less than 30 seconds. Aireon ensures continuous global coverage with an availability rate of over 99%.

Integration of AireonINSIGHTS

AireonINSIGHTS seamlessly integrates by utilizing Microsoft Azure's Advanced Message Queuing Protocol (AMQP) to ensure reliability. This integration requires no additional development from the customer's side.

Use cases

AireonINSIGHTS is designed to meet the needs of numerous operational use cases, including:

▶ **Aircraft/fleet operators** can subscribe to event data within their fleet to identify and detect critical moments during flights and alert users in near-real-time

▶ **Logistics companies** can receive flight events and alerts to provide additional shipment tracking information, increase efficiency and monitor critical flight moments

▶ **Fixed-Base Operators (FBOs)** can subscribe to alerts for aircraft inbound to the airport to prepare for arrivals

▶ **Financial institutions, leasing companies, and insurance providers** can receive data to perform traffic analytics for the industry or for aircraft they own or insure