



# 100% GLOBAL COVERAGE UP-TO-THE-MINUTE AIRCRAFT POSITIONS

## Are you ready for GADSS?

**GlobalBeacon is a first of its kind product from Aireon and FlightAware. As a turnkey solution for compliance with the International Civil Aviation Organization (ICAO) Global Aeronautical Distress Safety System (GADSS), GlobalBeacon enables airlines of all sizes to proactively position themselves to respond in the event of an emergency.**

**GlobalBeacon exceeds GADSS standards and recommended practices and facilitates communication between aircraft operator and controller with constant fleet monitoring, automated distress alerts and tools that make it easy to share information.**

Beginning in November 2018, airlines and aircraft operators will be expected to track their fleet anywhere in the world at a frequency of one position every 15 minutes during normal operations. By 2021, they will need to automatically receive positions once-per-minute for aircraft in distress.

By combining FlightAware's data processing platform and web-interface with Aireon's space-based ADS-B network, GlobalBeacon transcends borders and Flight Information Regions (FIRs) and provides 100% global coverage, including over deserts, polar airspace and oceanic regions. With GlobalBeacon, airlines and aircraft operators are able to exceed GADSS standards and recommended practices for flight tracking. Aircraft equipped with ADS-B OUT transponders are tracked automatically with their position broadcast in real-time. Since 1090MHz ADS-B OUT is mandated throughout the world, most aircraft do not require additional equipment to take advantage of GlobalBeacon.



## What is GADSS?

ICAO, which is a United Nations specialized agency created the Global Aeronautical Distress Safety System (GADSS) largely in response to the loss of flights AF447 and MH370. GADSS contains Standards and Recommended Practices (SARPs) that establish what is expected of airlines and aircraft operators for tracking aircraft in normal conditions as well as when an aircraft is in distress.

The normal aircraft tracking SARPs are applicable starting November 2018 and establish the air operator's responsibility to track its aircraft throughout its area of operations. Operators are expected to receive positions at least once every 15 minutes whenever air traffic services cannot do so.

The SARPs relating to the location of an aircraft in distress become applicable in January 2021 and establish the requirement for automatically tracking aircraft in distress with position updates at least once-per-minute.

**GlobalBeacon is designed to work in conjunction with existing processes and tools commonly used by aircraft operators, making it easy to deploy at any size airline. By leveraging existing ADS-B OUT technology, GlobalBeacon also has a unique advantage over other potential solutions because it does not require any new hardware or equipage.**



**GlobalBeacon empowers airlines  
and aircraft operators to exceed  
GADSS standards and recommended  
practices for flight tracking**

# How will GlobalBeacon work?

GlobalBeacon is a web-based alerting dashboard that provides 100 percent global, real-time aircraft tracking, with minute-by-minute position updates as the standard rate of reporting. GlobalBeacon combines Aireon's space-based ADS-B position data with FlightAware's web interface and worldwide flight information – including origin, destination, and estimated time of arrival (ETA).

It's designed to work in conjunction with existing processes and tools commonly used by aircraft operators, making it easy to deploy at any size airline. By leveraging existing ADS-B OUT technology, GlobalBeacon also has a unique advantage over other potential solutions because it does not require any new hardware or equipment.

GlobalBeacon is a turn-key solution that gives airlines and aircraft operators the peace of mind that their fleet is being monitored anywhere in the world and provides real-time 4D aircraft positions and customizable alerts for immediate notification when an aircraft is in distress.

- ▶ **4D position information reported at a standard interval of at least once-per-minute.**
- ▶ **100% global coverage for monitoring aircraft anywhere in the world.**
- ▶ **Automatically generates logs with 4D positions for aircraft in distress or potential distress.**
- ▶ **Does not require additional avionics or equipment for aircraft equipped with**
- ▶ **1090MHz ADS-B OUT and a top mounted antenna.**
- ▶ **Works in conjunction with existing processes and tools commonly used by operators.**
- ▶ **Facilitates communication between operator and ATC with constant fleet monitoring, automated distress alerts and tools that make it easy to share information when needed.**
- ▶ **Transcends borders and Flight Information Regions (FIRs), including polar airspace.**
- ▶ **Easy to deploy and/or provision to any third party on behalf of the operator.**

## KEY COMPONENTS



Less than 1 minute  
Reporting Interval



66 Low-Earth-Orbit  
Satellites with 100%  
Global Coverage



Instant Distress  
Notifications

## **SIGNING UP IS EASY.**

Visit [globalbeacon.aero](https://globalbeacon.aero) and discover how to implement ICAO best practices for aircraft tracking and take GADSS head-on.

