ONBOARD AIRCRAFT TRACKING (OAT)

REAL-TIME UPDATES ON YOUR FLIGHT SITUATION

In a continued effort to improve our ability to track aircraft globally, Collins Aerospace has teamed with Airbus to introduce a new Onboard Aircraft Tracking solution. This concept fulfills the goals put forward by IATA Aircraft Tracking Task Force works and the Concept of Operations of the ICAO Global Aeronautical Distress and Safety System (GADSS).

Our aircraft tracking is based on the transmission to the ground of aircraft 4D position (latitude, longitude, altitude, time) and aircraft identification at least every 15 minutes during "normal operations," and at least every 1 minute following the triggering of an event detecting "abnormal operations."

The OAT solution monitors aircraft information to detect and alert when abnormal flight situations occur. The specific set of aircraft parameters could indicate a problem with a flight, including such issues as low altitude, low speed, excessive pitch, engine failure and others. If triggered, the aircraft automatically begins to emit aircraft position information at an increased rate.

Your ground airline center is also able to activate/deactivate abnormal mode upon uplink request if necessary.

The Onboard Aircraft Tracking function is implemented as an update to the Airline Operational Control (AOC) avionics software and does not request any additional flight crew action. It is available for both forward fit and retrofit for A320/A330/A350/A380 fleets.

Onboard Aircraft Tracking is the cost efficient and Airbus-recommended solution to answer the ICAO GADSS mandate for normal mode transmission.

KEY FEATURES AND BENEFITS

- Compliant with ICAO aircraft tracking requirements
- Affordable solution
- Easy deployment
- Flexible architecture to meet airline operations and specific national aviation authority rules
- Compliant with ARINC 620 aircraft position reporting formatting
- Fits on A320/A330/A340/350/380 families
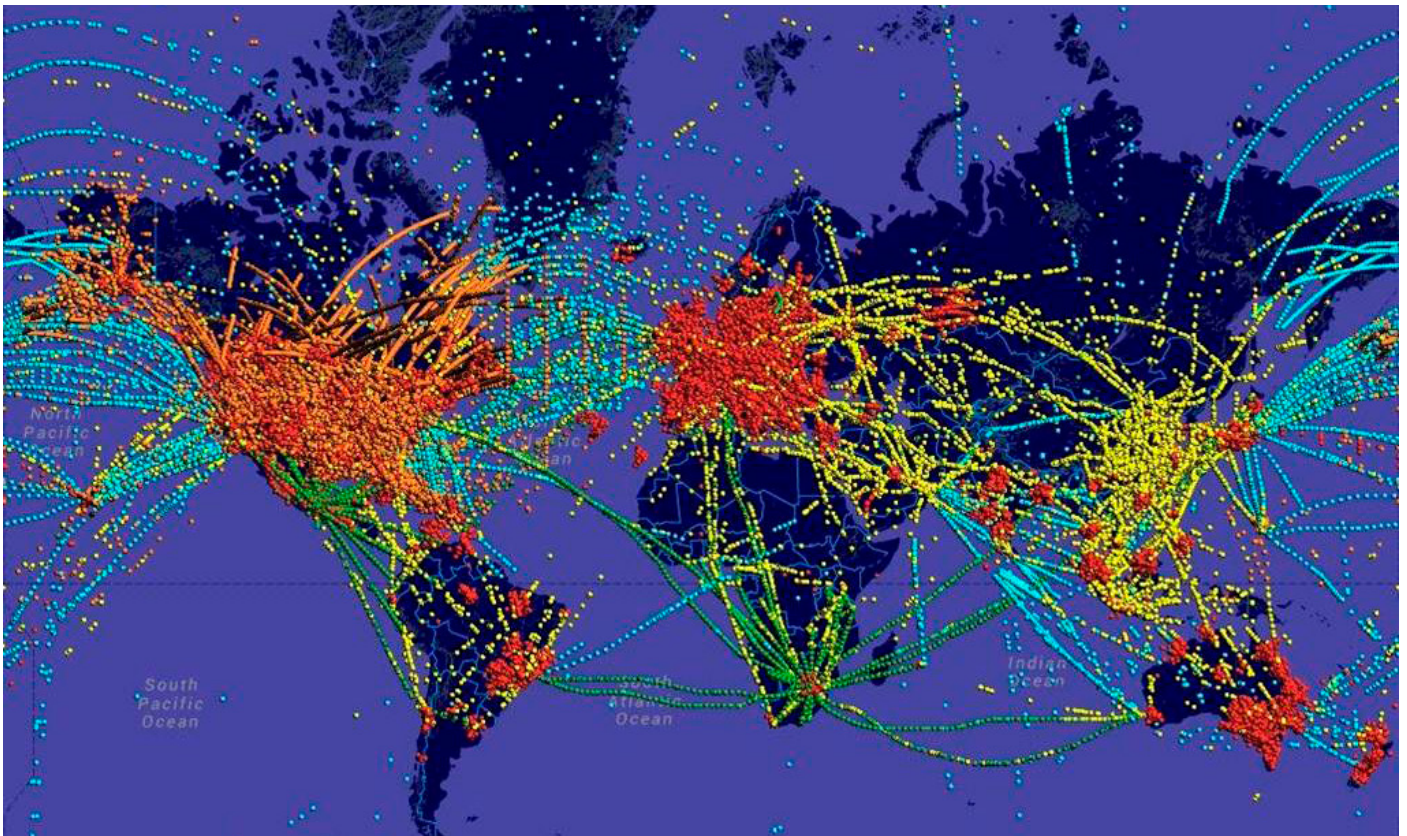
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ABNORMAL CONDITION TRIGGERS

Our Onboard Aircraft Tracking application compares the aircraft's situation in flight against a list of abnormal condition triggers, developed by Airbus using a large amount of flight data analyses and extensive simulations. These triggers, which the Onboard Aircraft Tracking application detects, include:

- Low altitude
- Low speed
- High speed
- Vertical speed
- Excessive bank
- Excessive pitch

- Engine failure
- TCAS RA
- GPW pull up/don't sink/terrain/sink rate
- Cabin altitude
- Load factor
- Loss of all F/CTL protections

Thanks to our expertise in AOC development, Collins Aerospace has designed customization that implements a remote-control interface for our ARINC MultiLink flight tracking service ground counterpart and a flexible solution to accommodate existing ACARS position reports messaging.

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