THALES

ADS-B SECTOR ANTENA

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AS 680 ADS-B GROUND STATION

YBAD

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SMART MOSQUITO

> ADS-B Systems

Automatic Dependent Surveillance – Broadcast (ADS-B)

OUR COMPREHENSIVE RANGE OF INTEGRATED PRODUCTS IS A PREFERRED SOLUTION FOR ENHANCED WIDE AREA SURVEILLANCE OF AIRCRAFT.

Why ADS-B?

Airlines and air navigation service providers benefit from improved low cost surveillance leading to safety enhancement, reduced workload for both pilots and controllers and more efficient operations.

ENABLERS FOR ADS-B

ADS-B used in air-to-ground applications provides support in all phases of flight and ground operations:

- en-route e.g. for radar-like separation in non-radar or low coverage airspace
- in TerMinal Areas (TMA) e.g.for precision approach monitoring
- at airports, e.g. within Advanced Surface Movement Guidance and Control Systems (A-SMGCS) including multilateration for surveillance and identification, and vehicle fleet management.

Ground Stations

A Ground Station receiver processes and relays avionics broadcasts of ADS-B data to suitable systems.

Air Traffic Control

Display of processed ADS-B data integrated with radar, flight plan and ADS-C data to provide a single view for controllers.

Advanced Surface Movement Guidance and Control Systems (A-SMGCS)

Display of all airport surface movements through automated evaluation of multiple inputs including surface movement radar. ADS-B components include:

Multilateration

Identification and location of aircraft and vehicles, including the capability to monitor aircraft in the air.

Vehicle Management

Advanced vehicle tracking for all vehicles in an airport environment.

securing your future

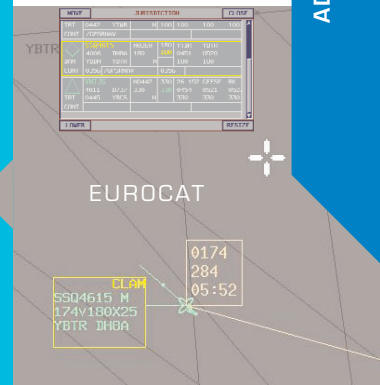## INSTALLED, FIELD PROVEN PRODUCTS

Thales ADS-B capable products are in use or under order by a range of customers throughout the world:

AS 680 ADS-B Ground Station / MAGS
Germany, Italy, Spain, Australia

EUROCAT ATM SYSTEM
Australia, China, Fiji, South Korea, South Africa…

Streams
Germany, France, Italy, Poland, Ukraine, Mexico, South Korea

Mosquito
Italy, France, Australia

STREAMS

MAGS

EUROCAT

>> **We supply all the elements of a seamless integrated solution for ADS-B air-ground applications; ground stations, air traffic control systems, A-SMGCS and mobile units such as transponders and vehicle transmitters.**

ADS-B Ground Station

AS 680

Provides the ground segment of an ADS-B air traffic control surveillance system for en-route, terminal area and surface movement control. Using 1090 Mode S Extended Squitter datalink, the system outputs decoded data as Asterix category 21 to an attached network.

> A low cost, compact, remotely monitored ground station as the basis for multiple applications

Air Traffic Control

EUROCAT

Displays ADS-B data fully integrated on the same screen as flight plan data, radar data & ADS-C data.

> Increased safety in non-radar airspace including automated alerts and warnings

A-SMGCS

STREAMS

Fuses data from multiple sensors, including AS 680 ADS-B Ground Station and Mode S Airport Ground Sensor (MAGS) signals. Includes automatic provision of alerts and warnings, as well as traffic routing capabilities.

> Improved controller situational awareness and increased traffic movement capacity

Multilateration

MAGS

A passive co-operative sensor system, with full ADS-B capability, for surveillance and identification of suitably equipped aircraft and vehicles.

> High precision identification with no increase in radio load for greater safety and efficiency

Vehicle Management

SMART MOSQUITO

A multi-link transmitter for Vehicle Management providing position and identification information to the airport's A-SMGCS system through multiple signal outputs including Mode S.

> Accurate and comprehensive vehicle traffic information under all weather conditions for increased safety

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