Implementing Solutions for NextGen
Key Technology Partner to FAA for NextGen
THALES’S AUTOMATION SOLUTIONS SUPPORT TODAY AND TOMORROW’S AVIATION SYSTEM

MAJOR CONTRIBUTOR TO NEXTGEN AND SESAR
Thales, as a ground, airborne and space systems supplier deeply involved in both SESAR and NextGen initiatives, is facilitating worldwide cooperation in building tomorrow’s aviation system:

- Contributing to a greater integration and global harmonization of the Air Traffic Management systems.
- Assisting with the interoperability of the air and ground ATM/CNS systems that enable the operational improvements from key innovative concepts such as:
  - Trajectory Based Operations
  - Green navigation and control procedures
  - New ways of assuring the aircraft separation
  - ATM data and System Wide Information Management System
  - Efficient and safe Surface Traffic Management

Contributing expertise to standards bodies and working groups enabling the implementation of the NextGen and SESAR programs strategy, such as RTCA and EUROCAE.

ADS-B INNOVATIONS ACCOMPLISHING NEXTGEN OBJECTIVES
Thales has provided more than 1,200 ADS-B radios for nationwide coverage across the US, as well as the multi-sensor tracking function, TopSky - Tracking, as part of the Exelis team.

- Pilots will benefit from improved situational awareness.
- Controllers will be able to reduce aircraft separation and increase airspace capacity.
- Aircraft will fly more direct routes, reducing fuel burn.

ADS-B TECHNOLOGY ON THE GROUND AND ON-BOARD AIRCRAFT IS CREATING NEW PATHS OVER THE GULF OF MEXICO
JetBlue can now use ADS-B to reroute over the Gulf to avoid thunderstorms on its twice-daily flight from Los Angeles to Fort Lauderdale. Without ADS-B technology, flights reroute north of Florida adding 1.5 minutes to the journey and burning an extra 60 gallons of jet fuel.

SE2020
Systems Engineering 2020 (SE2020) is a contract that enables close industry-FAA collaboration for advancing NextGen concepts. SE2020 allows the FAA to access industry’s leading subject matter experts to facilitate research, analysis, systems engineering, concept development, and demonstrations activities.

Thales is a key contributor on both the Exelis team and the Metron team. Thales leverages its experience with global ATM solutions from key innovative concepts such as: WAAS, RNAV, RNP, and GBAS, the backbone of the NAS navigation system to reduce G&amp;M costs, and providing new, low cost systems is a major focus for Thales.

INCREASING CAPACITY WITH DATA COMM
Data Comm allows digital information to be exchanged between air traffic control and pilots, enabling the auto-load of information directly into the aircraft flight management system. This allows aircraft to receive departure clearances and airborne reroutes digitally.

Modernizing and maintaining infrastructure for navigation
As the FAA develops NextGen navigation capabilities such as WAAS, RNAV, RNP, and GBAS, the backbone of the NAS navigation system remains the VOR, DME and ILS systems that Thales has supported for decades. Maintaining these systems, developing innovative ways to reduce G&amp;M costs, and providing new, low cost systems is a major focus for Thales.

THALES’S DATA COMM TECHNOLOGY WILL ENABLE THE FAA TO ENHANCE AIR TRAFFIC SAFETY, REDUCE GROUND DELAYS AND IMPROVE TRAFFIC MANAGEMENT EFFICIENCY
PARTNERING WITH EXELIS AND THE FAA TO PROVIDE THE FOUNDATION OF NEXTGEN THROUGH NATIONWIDE ADS-B COVERAGE

Generalized AGL Surveillance Coverage (AGL feet):
- 0 - 500
- 500 - 1,000
- 1,000 - 3,000

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