

Emerging Flight Data and Locator Technology

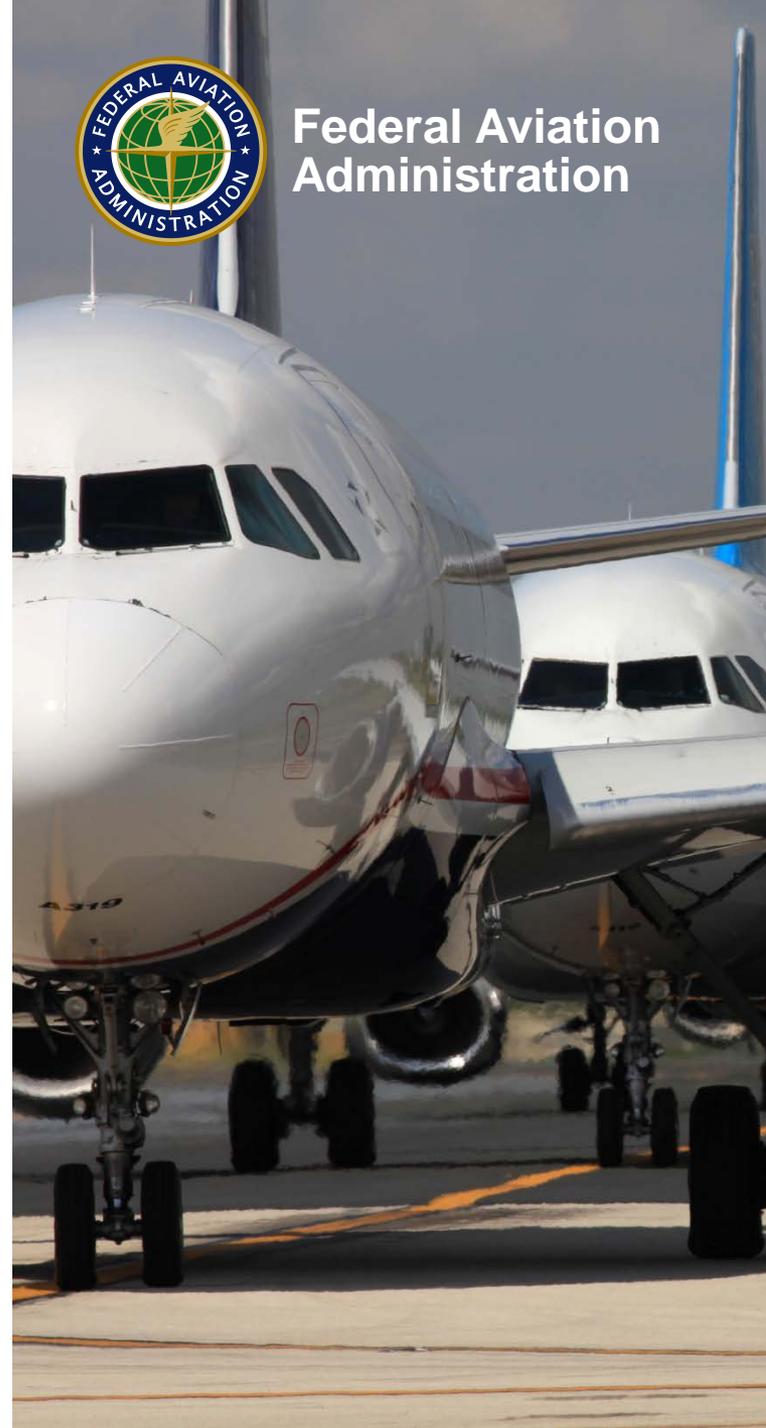
Presented to: NTSB

**By: FAA - Tim Shaver, Manager,
Avionics Maintenance Branch**

Date: October 7, 2014



**Federal Aviation
Administration**

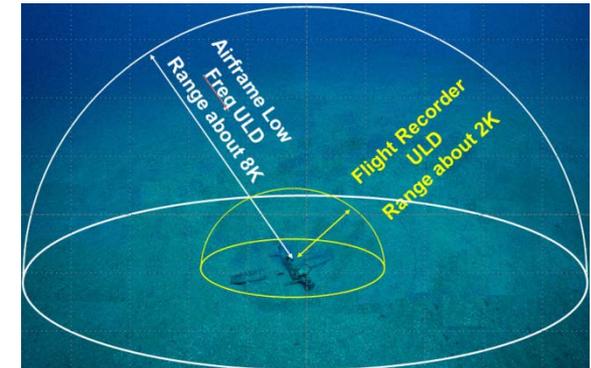


FAA - Flight Data and Locator Technology

- The FAA establishes the regulations, policies and guidance for the certification and continued airworthiness of the flight data and locator technologies.
- Flight data recorder installation was mandated to provide data for accident and incident investigation.
- Other flight data systems have been developed to support proactive review of data to correct problems before accidents, incidents or failures occur.
 - Flight Operations Quality Assurance (FOQA)
 - Flight Data Monitoring (FDM)
 - Engine Trend Monitoring Systems (ETMS)

New Underwater Location Technology

- **Underwater Locator Devices**
 - Regulations require ULD installed on or near recorders.
 - Recorder ULD Technical Standard Order (TSO) changed to extend battery life from 30 to 90 days.
 - Developed TSO for low frequency airframe ULD. This ULD has not been mandated.



Non-required recorder technologies

- **The FAA has developed standards and guidance for non-required recorder equipment to support voluntary adoption of this equipment.**
 - Deployable Recorders
 - Issued TSOs
 - Support evaluation and installation of systems.
 - Image Recorders
 - Issued TSO
 - Accomplished proof-of-concept study for aircraft
 - Support evaluation and installation of systems.



In Summary, the FAA promotes:

- **Enhancing data recorder and aircraft location technology**
- **Working with international community to develop a performance based approach for the purpose of locating aircraft wreckage**
- **Minimizing the certification burden for recorder and location system alterations through:**
 - Risk based decision making
 - Right sizing certification requirements
 - Standardizing policy and guidance.