

ARINC IA Project Initiation/Modification (APIM)

Name of proposed project

APIM #: 08-015

ARINC Report 67X: “Industry Guideline for the Use of RFID Technology for Aircraft Components”

Suggested Subcommittee assignment

Form new FCM Working Group to address RFID application requirements discussed during AMC Open Forum sessions.

Project Scope

The purpose of this task is to develop an ARINC Guideline to provide program guidance for the introduction and usage of RFID by utilizing references to international industry standards and current developments. The report will define the minimum requirements for data elements to be stored on RFID chips to facilitate improvements for the handling, logistics, and management of component maintenance within the airline logistics and maintenance operations. Besides the specific data elements defined, the guideline will contain provisions for a limited scope of additional data elements in order to support custom tailored solutions for RFID users.

This report will be used by Aircraft and Equipment Manufacturers, Airlines, and Repair Organizations. In addition, the task group has to consider implications and redundancies concerning the current ATA activity “Life Cycle Management for Aircraft Parts”.

Project Benefit

The ARINC document will provide guidance and best industry practices for the implementation of state-of-the-art RFID technology (passive UHF-RFID) for the application on aircraft and components utilizing benefits for maintenance and logistic chains.

The proposed requirements, processes, and procedures will provide uniform guidance for all rotatable and repairable components - not limited to avionics - and will facilitate accessing essential component data from distance without requiring any readings and manual interventions.

The document will provide RFID acceptance and standardization throughout the industry by involvement of all parts of the air transport industry.

Airlines supporting effort

Lufthansa (willing to chair the meeting)

FedEx

American Airlines

Northwest

Delta

Air France

Japan Airlines

tbd

Other Organizations supporting effort

- Airbus
- Boeing
- Erie Aviation
- Gables Engineering
- Aircraft Engineering and Installation Services

Issues to be worked

1. Define the data elements to be stored on the RFID (basic and optional)
2. Define basic processes for UHF-RFID implementation
3. Identify and select international industry specifications on UHF-RFID.
- ~~4. Identify and remove redundant information in existing ARINC guidelines~~
- 5.4. Define roles and responsibilities.
- 6.5. Define the boundaries with the current ATA RFID activity
- 7.6. Ensuring reference of ARINC guideline is included in ATA iSpec 2200.

Recommended Coordination with other groups

ATA –WG: Life Cycle Management for Aircraft Parts

Projects/programs supported by work

Regulatory compliance.

Timetable for projects/programs

Immediately

Documents to be produced and date of expected result

ARINC 67X, 2nd Quarter 2009

Comments

This guidance document will reference industry standards. Therefore, the user should ensure program compliance following updates of the referenced industry standards.

Meetings

The following table identifies the number of meetings and proposed meeting days needed to produce the documents described above.

Activity	Mtgs	Mtg-Days
ARINC 67X	4	8

For IA staff use

IA staff assigned: Sam Buckwalter

Forward to committee(s) (AEEC, AMC, FSEMC): AMC

Potential impact: B

(A. Safety B. Regulatory C. New aircraft/system D. Other)

Committee resolution: _____

(1. Authorized 2. Deferred 3. More detail needed 4. Rejected)

08-013

Assigned Priority: A

A. – High (execute first) B. – Normal (may be deferred for A.)