

ARINC Project Initiation/Modification (APIM)

Name of proposed project

APIM #: 07-012

Supplement to ARINC Report 667, *Guidelines for the Management of Field Loadable Software*

Suggested Subcommittee assignment

New ARINC Working Group under AMC and AEEC

Project Scope

The purpose of this document is to open a project for update of ARINC 667. The ARINC specification covers guidance for the management of software that is loadable aboard aircraft, referred to as Field Loadable Software (FLS).

New technologies, shifts in maintenance practices, policies in handling and management of Field Loadable Software (FLS), comprising both Loadable Software Aircraft Parts (LSAP) and Aeronautical Data Bases or (ADB) and recent update to Electronic Distribution of Software, drive the need for this specification to be re-opened.

Project Benefit

Aircraft operations involving software part management and maintenance for current generation aircraft and next generation aircraft are increasingly becoming more complex. The existing revision of ARINC 667 is nearly five years old and its defined processes do not address current and next generation software part handling methodologies. As it is important that new methods and technologies be incorporated into ARINC 667.

Airlines supporting effort

Delta Air Lines
American Airlines
SAS (Scandinavian Airlines System)
Lufthansa

Additionally, the following airframe manufactures, airlines and suppliers supported the effort at the 2007 AMC:

Airbus
Boeing
Honeywell,
Rockwell-Collins
Smiths Aerospace (now GE Aero)
Tech SAT

Issues to be worked

Update and standardization of software configuration management process, to maintain the basic premise of ARINC 667: Airlines desire processes and guidelines that will assure that the correct FLS is loaded into the target hardware on every aircraft at all times.

Assessment of revisions to the standard based upon experiences gained through implementation of the standard.

Revisions to the standard driven by revision and creation of peripheral and related standards (ARINC 615A, 615-4, 664, 665, 666, Project Paper 827)

Recommended Coordination with other groups

The proposition is to extend the results of the work on ARINC Report 667, Guidelines for the Management of Field Loadable Software. The intent of the proposed work is to update the existing standard and to coordinate with other groups that may have interest in software configuration management practices and improvements in the FLS recommended process specification.

Coordinate with all new recipients of new Airbus A380, A350, and Boeing B787.

Projects/programs supported by work

The proposed work supports all existing and peripheral ARINC standards concerning data loading and FLS/LSAP: ARINC 615A, 615-4, 664, 665, 666, and Project Paper 827.

Timetable for projects/programs

The proposed work would start in January 2008. A mature draft would be targeted for the January of 2009.

Documents to be produced and date of expected result

Supplement (or Revision) to ARINC Report 667, *Guidelines for the Management of Field Loadable Software*

Comments

The proposed work is a necessary activity and due to the increased complexity and use of software configurable avionics, new data loading methods and network topologies. I.

Meetings

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

Activity	Mtgs	Mtg-Days
Develop Revision or Supplement to ARINC 667	4	8

For IA staff use

IA staff assigned: Sam Buckwalter

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

Potential impact: C

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

Committee resolution: 1

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

Assigned Priority: A

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