

ARINC Project Initiation/Modification (APIM)

1. Name of Proposed Project

APIM 17-006A

~~Supplement 3 to~~ ARINC Specification 840A: Electronic Flight Bag (EFB) Application Control Interface (ACI) Standard **for tablet EFB**.

Software specification only

yes no

2. Subcommittee Assignment and Project Support

2.1 Identify AEEC group

Electronic Flight Bag (EFB) Subcommittee.

2.2. Support for the activity

Organizations: Airbus, American Airlines, Astronautics, Astronics, Boeing, British Airways, Comply365, Delta Air Lines, FedEx, Jeppesen, L2 Aviation, Lextech, Lufthansa Airlines, Lufthansa Systems, PACE, Rockwell Collins, Sabre, Southwest Airlines, TAP Portugal Teledyne, Thales Avionics, UPS, United Airlines, UTC Aerospace, [others, TBI]

2.3. Commitment for resources (directly from participant)

Organizations: Airbus, American Airlines, Astronautics, Astronics, Boeing, British Airways, Comply365, Delta Air Lines, FedEx, Lextech, Lufthansa Airlines, Lufthansa Systems, PACE, Rockwell Collins, Sabre, Southwest Airlines, Teledyne, United Airlines, UTC Aerospace, [others, TBI]

2.4. Recommended Coordination with other groups

The following activities are relevant to this topic:

- ARINC 633 AOC Messaging Application
- ARINC 759 Aircraft Interface Device (AID)
- ARINC 828 Electronic Flight Bag (EFB)
- ARINC 834 Aircraft Data Interface Function (ADIF)

3. Project Scope

3.1 Description

The software components installed on an EFB can be distinguished either as being underlying system software (e.g. operating system or system services such as input / output service) or as being applications for specific purposes (e.g. electronic charting, document viewers, technical logbooks).

ARINC Specification 840 presently defines a standard for the Application Control Interface (ACI) that exists between the Application Control Component (ACC) software and EFB applications in all classes of EFB. The standard is intended for implementation by each ACC software provider and each EFB application developer. It provides the means to launch and control applications on different EFB platforms without change to any other EFB system software, "Main Menu" application, or the application itself.

The rapid acceptance and deployment of low cost, mobile COTS tablets and smartphones has revolutionized EFB development in commercial aviation. This has led to numerous developers providing unique applications intended to address single tasks. Airline operators in turn, select various applications which, although well suited for their specific task, may not function well together and are difficult to use in concert. The goal of this APIM is to provide a new standard that provides a unified user experience for the application based, tablet EFB environment most airlines operate in today.

Material on the following topics will be added to the standard:

- Inter-application navigation for users
- Blending of multiple applications into a single workflow
- Single data entry with data shared across applications

3.2. Planned usage of the envisioned specification

New aircraft developments planned to use this specification yes no

New avionics equipment for major retrofit programs yes no

Mandate/regulatory requirement yes no

Please specify program and date: Not Applicable

Modification/retrofit requirement yes no

Please specify: Not Applicable

Airframer and/or airline projects to use this specification yes no

Once established, it is expected to be used by airframer and/or airline projects using EFB ACC or application software.

Is the infrastructure standard for the aircraft defined? yes no

When is the ARINC standard required?

Are 18 months (min) available for standardization work? yes no

If 'No' please specify solution:

Patent(s) involved? yes no

If 'Yes' please describe:

There are no known patents, however, the objective of the proposal is to reach an industry consensus on a standard, and this could involve conflicts with existing proprietary non-standard interfaces.

3.3. Issues to be worked

The main issues are:

- Application to application workflow, data sharing, and navigation
- Interface to be hardware and architecture agnostic
- Interface to be operating system independent

- Reduced integration time to validate new applications
- Reduced integration for third party developers to integrate on different COTS EFB platforms and aircraft specific hardware.
- Single data entry removes hurdles to new EFB application adoption as the number of applications available continues to grow.
- Applications will be inter-operable across different COTS EFBs.

5. Documents to be Produced and Date of Expected Result

~~Supplement 3 to~~ ARINC Specification 840A: Electronic Flight Bag (EFB) – Application Control Interface (ACI) Standard - April 201~~98~~

6. Meetings/Expected Document Completion

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

Activity	Mtgs	Mtg Days (Total)	Expected Start Date	Expected Completion Date
Supplement 3 to ARINC 840A	4	2 x 1 (w/EFBUF) 2 x 3 (dedicated) 8 total days	June 201 87	April 201 98

6.1 Expiration date for this APIM

October 201~~98~~

7. Comments

(none)