

ARINC Project Initiation/Modification (APIM)

1. Name of Proposed Project

APIM: 09-003A

Supplement 1 to ARINC Specification 840: Electronic Flight Bag (EFB) Application Control Interface (ACI) Standard.

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: AirCell, **American Airlines**, Astronautics Corporation of America, **Delta Air Lines**, Gables Engineering, Goodrich, Lufthansa Systems, NavAero, **Ultramain**, [others, TBI]

2.3. Commitment for resources (directly from participant)

Organizations: Astronautics Corporation of America, **American Airlines**, **Delta Air Lines**, Gables Engineering, Goodrich, Lufthansa Systems, **Ultramain**, [others, TBI]

2.4. Recommended Coordination with other groups

The following activities are relevant to this topic:

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

3. Project Scope

3.1 Description

The rapid development and acceptance of Electronic Flight Bags (EFB) by the aviation industry has led to many companies providing platform specific and application specific hardware and software solutions.

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 834 establishes the interface for handling avionic data between system software and applications. That standard creates a level of EFB platform independence in which the specifics of the system software implementation are hidden from the applications. Consistent with the objective of platform independence, it is the purpose of this APIM to address application control. Currently, there is no way to ensure that an application can be launched and controlled by an application control component (ACC) on a given EFB platform. The only means to control an application currently is by individual interfacing agreements made between the manufacturer of the "Main Menu" application and the EFB application developer.

- EFB Applications that meet the ACI standard will integrate seamlessly with any ACC software that meets this standard.
- Suppliers of EFB “Main Menu” application software will have the same control they now have over the nature of the GUI and the same licensing rights while abiding by the standard.
- Published standard will enforce common understanding for all EFB application and Suppliers of EFB “Main Menu” Software
- EFB application developers will benefit from being platform independent.
- Guidance on application characteristics for EFB ACC

4.3 Benefit for Airlines

This standard will provide several benefits to Airlines:

- Airlines would benefit from being able to run the same EFB applications on different platforms and with different “electronic kiosk” software.
- Airlines would also benefit from a wider selection of software that would support this standard.
- Airlines would benefit from lower integration costs, times and risks.
- Better and more consistent integration of applications leads to better user acceptance.

4.4 Benefit for Airframe Manufacturers

- Flexibility to add new applications / functionality to the aircraft
- Reduced integration time to verify new applications

4.5 Benefit for EFB Equipment and Application Suppliers

- Flexibility for EFB suppliers to add new applications
- Reduced integration time for EFB suppliers to validate new applications
- Reduced integration for third party application developers to integrate into different EFB platforms
- Applications will be inter-operable across different EFB platforms

5. Documents to be Produced and Date of Expected Result

Supplement 1 to ARINC Specification 840: Electronic Flight Bag (EFB) – Application Control Interface (ACI) Standard - October 2011

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
EFB-ACI	4	4(x2) 8 days total	Jan 2009	April 2010
Supplement 1 to ARINC 840	3	3 X 2	Nov 2010	Oct 2011

6.1 Expiration date for this APIM

October 2011

7. Comments

Any other information deemed useful to the committee for managing this work.

For AEEC staff use only:	
Date Received:	AEEC staff:
Potential impact: New Acft	<i>(New aircraft/system)</i>
Resolution:	Date of Resolution: First:
	Rev A:
<i>(Withdrawn, Authorized, Deferred, More detail needed, Rejected)</i>	