ARINC Project Initiation/Modification (APIM)

1. Name of Proposed Project
   Aircraft EFB Users Forum (EFB UF)

   Note: This APIM is an update to APIM 09-009 which initiated the EFB Users Forum.

2. Suggested Subcommittee Assignment (who acts)

2.1 Identify AEEC group
   This APIM proposes the continuation of the EFB Users Forum activity for three years, i.e., through December 2020. The activity is a joint activity with IATA EFB Task Force.

2.2. Support for the activity (all to be confirmed)
   Airlines: Air France, Alaska, American, ANA, Austrian, British Airways, Delta, FedEx, Hawaiian, Icelandair, JAL, Lufthansa, Swiss, TAP, Southwest, United, UPS and others.
   Airframe Manufacturers: Airbus, Boeing, Bombardier, Embraer
   Suppliers: ASG, Astronautics, Astronics, Avionica, CarlisleIT, Cobham, CMC Electronics, Comply365, Global Eagle Entertainment, GoGo, Hewlett-Packard, Honeywell, Inmarsat, Jeppesen, Lufthansa Systems, Microsoft, NavAero, Pace, Sabre, SITA, Teledyne, Thales, Rockwell Collins, Ultramain, UTC Aerospace, and others.

2.3. Commitment for resources (directly from participant) (all to be confirmed)
   Chairman: Philipp Haller (Austrian) and Will Ware (Southwest)
   Airframe Manufacturers: Airbus and Boeing
   Suppliers: ASG, Astronautics, Avionica, CarlisleIT, Cobham, CMC Electronics, Gogo, Hewlett-Packard, Honeywell, Inmarsat, Jeppesen, Lufthansa Systems, Microsoft, Rockwell Collins, Teledyne, Thales, Ultramain, UTC Aerospace, and others.

2.4. Recommended Coordination with other groups
   The following activities and standards are relevant to this topic:
   - ADB (ARINC 814, 816)
   - AOC (ARINC 633)
   - ANFS (ARINC 763, 821, 822)
   - EFB (ARINC 759, 828, 834, 840)
   - NIS Subcommittee
   - SAI Subcommittee
3. Project Scope

3.1 Description

This activity provides a unified forum for airlines, EFB system integrators, EFB hardware providers, EFB application providers, regulatory authorities, and other interested parties to present, discuss and find solutions to issues of interest to the EFB user community. This includes but is not limited to EFB topics as follows:

- Aircraft installation issues
- Application software
- Communication interfaces (e.g., media, provider, connectivity)
- Cyber security
- Data input devices, terminals, displays, interactive devices
- Electrical interfaces, including power
- Operational issues
- Regulatory issues

It should be noted that the EFB User Forum activity is not intended to create any new standard. Should such a desire arise during an EFB Users Forum meeting it would be forwarded to the AEEC Executive Committee.

The joint AEEC/IATA EFB Users Forum involves regulatory authorities both in the Americas and in Europe, as well as ICAO. These regulators have attended past meetings and are seeking feedback and input from the EFB Users Forum regarding proposed changes and future regulation.

3.2. Planned usage of the envisioned specification

(Not Applicable)

3.3. Issues to be worked

The main issues are:

- Provide a forum where EFB system integrators and EFB hardware/software providers can present their product development plans with airline users
- Provide a venue for regulators to present and discuss pending regulatory changes and their impact on airline operators.
- Provide a forum for airlines to share current EFB experiences along with future expectations
- Enable the industry to identify common EFB services that need to be supported over the aircraft interfaces
- Identify any new avionics parameters which are useful for EFBs and the need for data structures to support the avionics interfaces
- Provide a forum for IT services providers to describe their efforts in this area.

Ensure one or more methods are available to enable the EFBs to access wired
and/or wireless air/ground links, onboard servers and to internet services in general.

- Others (TBI)

4. Benefits envisioned

4.1. Basic benefits

Modeled after the Data Link Users Forum, the EFB Users Forum attracts users, regulators and suppliers in a neutral industry setting. The activity identifies industry trends both operationally and technically. The overall goal is to exchange information and experience and to find standardized methods to resolve issues early and improve EFB services - for the benefit of all.

The rapidly evolving EFB market benefits from this platform and helps deal with key issues:

- Support Operational enhancements (reduction in DOC)
- Clarify in-service issues
- Support Interchangeability of EFB applications
- Identify potential improvements to existing interface and protocol standards as well as opportunities for new standards development
- Inform and discuss products offered from suppliers (competitive environment)
- Support hardware and software development as open market items

4.2 Specific project benefits

Extension of this activity is proposed in recognition of the ability for EFBs to meet a wide-variety of airline operational needs and to provide a neutral forum to discuss these needs. Airlines are moving quickly to install EFBs, many that are extensible to include all types of flight deck operations and data communications functions.

A properly executed effort will allow airlines and suppliers to be on the same page, reduce risk and provide the desired products to the marketplace.

4.3 Project Benefit for Airlines

- Enable airlines to influence EFB product evolution to suit their operational needs, leading to greater commonality across fleets.
- Provide a venue for airlines to have input in forming regulations that govern EFB usage.
- Common processes for EFB including software handling.
- Ensure flexibility when updating EFB, selecting and installing EFB products in a way that fits airline operations.
- Cost reduction in airline EFB programs.

4.4 Project Benefit for Airframe Manufacturers

Airframe manufacturers will benefit from being able to offer new aircraft models with
EFBs and EFB provisions that meet the broadest needs of their customers. Airframe manufacturers can continue to offer Class 1, 2 or 3 EFBs and point out to their customers that there is an easy upgrade / downgrade path between the classes. Airframe manufacturers can rely on EFB equipment suppliers and choose not to develop EFBs themselves.

4.5 Project Benefit for EFB Suppliers
Opens market opportunities for EFB suppliers to provide desired equipment
Will simplify supplier effort to equip different aircraft models
Easier to certify and to get operational approval due to commonality and familiarity

5. Documents to be Produced and Date of Expected Result
- Reports will be provided for each meeting.
- APIMs may be developed where the need arises.

5.1 Meetings/Expected Document Completion
The EFB Users Forum is expected to convene once per year in the May or June timeframe. Beyond this schedule, meetings may be organized on an as-needed basis as the EFB Leadership Team and the AEEC Executive Committee deems appropriate.

<table>
<thead>
<tr>
<th>Meeting Days</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFB Users Forum</td>
<td>2 (+2)</td>
<td>2 (+2)</td>
<td>2 (+2)</td>
<td>2 (+2)</td>
</tr>
</tbody>
</table>

6.0 Comments
(None)

6.1 Expiration date for this APIM
December 2020