AEEC

Together "We Set the Standard."

To	AEEC Members, Corporate Sponsors and Guests	**Date**	March 27, 2015
From	Paul J. Prisaznuk AEEC Executive Secretary	**Reference**	15-055/AGS-179 lth
Subject	**AEEC General Session**		
When	April 27-30, 2015		
Where	Hilton Hotel Prague, Czech Republic		

MEETING AGENDA
AEEC/AMC 2015 PRAGUE

Time	Monday, April 27	Tuesday, April 28	Wednesday, April 29	Thursday, April 30
0830	---	**5. DATA COMMUNICATION** 5a. DataLink Users Forum 5b. DataLink, MIAM, AOC 5c. Air/Ground Comm 5d. SELCAL	**9. SYSTEMS & ARCHITECTURES** 9a. SAI Subcommittee 9b. Surveillance, ADS-B, Traffic Computer 9c. GNSS Evolution	**AEEC Advisory Session** *AEEC Executive Committee members only*
0900	**1. OPENING SESSION** • Welcome/Introductions • Keynote Address • Awards			
1010	Break	Break	Break	Break
1030	**2. SYMPOSIUM** ***SESAR AND NEXTGEN AIRSPACE INITIATIVES***	**6. SYMPOSIUM** ***COMMUNICATION TECHNOLOGIES***	**10. SYMPOSIUM** ***ADS-B DEVELOPMENTS***	**AEEC Advisory Session** *AEEC Executive Committee members only*
1200	*Lunch - provided by AAI*			
1330	**3. CABIN SYSTEMS** 3a. Ku/Ka-Band Satcom 3b. Cabin Systems 3c. Galley Inserts	**7. FLIGHT DECK** 7a. Cockpit Displays 7b. Navigation Database 7c. Airport Map Database 7d. Terrain and Obstacle	**11. SPECIAL TOPICS** 11a. Data Loading 11b. Fiber Optics 11c. APEX Software	***Adjourn***
1500	Break	Break	Break	
1520	**4. SYMPOSIUM** ***MOVING BEYOND THE FLOPPY DISC – AMC***	**8. DATA NETWORKS** 8a. EFB Users Forum 8b. EFB Subcommittee 8c. NIS Subcommittee 8d. CANbus	**12. SPECIAL TOPICS** 12a. Cockpit Voice Recorder 12b. Locator Beacon 12c. Other topics TBA	
1700	**Supplier Hospitality**	**Supplier Hospitality**	**Supplier Hospitality**	
1830		**AAI Reception – 6:00pm**		
2100		**Supplier Hospitality**		

The AEEC Opening Session will convene in the Hilton Lower Ballroom starting at 0900 Monday.
The AEEC General Session will convene in the Hilton Grand Ballroom starting at 1030 Monday.

AEEC/AMC takes great pride in giving back to the local community. ***Bátor Tábor*** *"a serious fun camp" for children* has been selected as the charity for Prague. Please donate generously to this worthy cause.

AEEC EXECUTIVE COMMITTEE

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IATA	Jens Bjarnason	**AEEC Executive Secretary**	Paul Prisaznuk

WELCOME TO PRAGUE

King Charles IV laid the cornerstone of the historic Charles Bridge in Prague 500 years before the world would ever see Orville and Wilbur Wright's first powered flight in 1903, and 658 years before Prague became home to the AEEC/AMC in 2015.

In contrast to the historic Charles Bridge, the Czech Republic is a relatively new country, formed in 1993 as part of the peaceful dissolution of Czechoslovakia. A few of the famous Czechs you might know include:

- Psychologist, Sigmund Freud
- US Secretary of State, Madeline Albright
- Hockey players, Jaromír Jágr and Dominik Hašek
- Tennis greats, Martina Navratilova and Ivan Lendl
- Ivana Trump

Václav Havel, the first President of the Czech Republic and the last President of Czechoslovakia, marked a new beginning for the people of the Czech Republic in 1993: *"This is the moment when something begins visibly to happen, something truly new and unique, something truly historical, in the sense that history again demands to be heard."*

In some ways, aviation and the AEEC are also in a new beginning. New fuel-efficient aircraft are being entered into service at rates that are at a historical high. Over 1300 transport category aircraft entered service in 2014. That number is expected to grow in 2015. The AEEC recognizes that aviation is in a constant state of change. Mergers, acquisitions, startups, and new entries are a constant force in the aviation industry. So, we have to be on our toes, watch the signals, and plan accordingly.

The agenda for the AEEC General Session highlights emerging airspace initiatives, SESAR and NextGen. The agenda will focus on how the airlines will prepare for related equipage requirements. The agenda also recognizes the trend toward connecting these aircraft to the airlines' IT infrastructure using internet connectivity.

The AEEC provides a collaborative environment for creating avionic systems standards. Your inputs are most welcome, they are invited, and they are appreciated. In the end, the AEEC provides a product that no single organization could deliver on its own. This is what AEEC does best. This is what AEEC has done for over 65 years.

Paul J. Prisaznuk
AEEC Executive Secretary & Program Director
ARINC Industry Activities

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Your Badge and Registration

Welcome to Prague. The AEEC/AMC registration desk will be open from 2:00pm to 5:00pm on Sunday. It will be open 7:45am to 4:00pm on Monday, Tuesday, and Wednesday. If you have pre-registered for the meeting, a name tag will be ready for you. Please be prepared to provide a business card to our registration staff. This will complete the registration process.

An advance copy of the pre-registration list is available at:

http://www.aviation-ia.com/AeecAmc/index.html

Sunday Welcome Reception

A Welcome Reception will take place at the Hilton Prague on Sunday April 26 in the ***Chez Louis Suite*** from 5:00pm to 7:00pm. All AEEC/AMC attendees and their guests are invited to attend. Welcome Reception Sponsors:

- *Av-DEC*
- *Cobham*
- *Esterline CMC Electronics*
- *Gables Engineering*
- *HEICO*
- *Rockwell Collins*
- *STS Aviation Group*
- *Teledyne Controls*
- *Thomas Global Systems*
- *UTC Aerospace Systems*

Meeting Materials

This agenda and working papers for the meeting are available at: *http://www.aviation-ia.com/aeec/general_session/index.html* two weeks prior to the meeting.

You are invited to download all documents and print those that you might want to refer to during the meeting. Hardcopies of meeting materials will not be available at the meeting.

Speak to the Issues

All attendees are invited to participate in the discussion on the floor. Your input will clarify the issue at hand and assist the AEEC Executive Committee members in their decision making.

When you wish to speak to an issue, please move to one of the floor microphones. When you are recognized, please state your name and affiliation, and then proceed with your remarks. Please be aware that your comments are being recorded.

If you cannot hear someone who is speaking, use the standard “speak louder” signal, i.e., raise your hand and move it in a small horizontal circle.

Smart phone users, please set your phone to silent operation when you are in the meeting room. Side conversations should be conducted outside the meeting room, so not to disturb the discussion in progress.

AAI Reception – Tuesday Evening

The Airline Avionics Institute (AAI) cordially invites airline representatives, AAI members, and their guests to the AAI Reception to be held **Tuesday, April 28 starting at 6:00pm.**

Mr. Ray Frelk, AAI Business Manager
PO Box 320345
Franklin, Wisconsin 53132
1+941-313-0471 (Mobile)
Email: ray@airlineavionics.org
AAI website: *www.airlineavionics.org*

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Prague Guest Program – Sponsored by Teledyne

Tuesday, April 28, 2015
Prague Grand City Sightseeing Tour – Prague Experience
Your tour starts with a coffee social in the hotel lobby at 9:30am
The bus will leave the hotel at 11:15 and return at approximately 3:00pm

Look for more information to be provided at:

http://www.aviation-ia.com/AeecAmc/index.html

Children's Charity

The AEEC/AMC takes great pride in giving back to the local community. ***Bátor Tábor*** has been selected as the charity for Prague. ***Bátor Tábor*** *"a serious fun camp" offers therapeutic recreation for ill children.* Please consider how fortunate you are to be participating in this conference and, as the basket is passed, please give generously to this worthy cause.

ARINC Industry Activities Membership

Membership fees are used to fund the majority portion of the ARINC Standards activities. Airlines that are not yet members of ARINC Industry Activities are invited to join. Your membership spreads the costs fairly among airlines. Your membership will enable the AEEC to continue to prepare standards that benefit aviation as a whole. For more information, please visit:

http://www.aviation-ia.com/MembershipAndSponsor/index.html

ARINC Industry Activities Corporate Sponsorship

Is your organization a Corporate Sponsor? A list of Corporate Sponsors is available at the registration desk and on the ARINC Industry Activities website. If your organization has not signed-up to be an ARINC Corporate Sponsor, we invite you to do so.

Corporate Sponsorship enables you to fully participate in AEEC standards development activities, attend the AEEC/AMC conference for free, and gain access to ARINC Standards and many other valuable products. For more information, please visit:

http://www.aviation-ia.com/MembershipAndSponsor/index.html

Doing Business at the AEEC/AMC Conference

Everyone knows the AEEC General Session is an excellent place to meet valuable contacts and to conduct business. There are many opportunities for marketing presentations outside of the ballroom. Marketing and sales pitches inside the meeting rooms are prohibited.

The AEEC General Session Meeting Report

The AEEC General Session report will be available to Members and Corporate Sponsors approximately four weeks after the meeting. Others may purchase the AEEC General Session report for a nominal fee.

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1. AEEC/AMC OPENING SESSION

MONDAY, APRIL 27 – 9:00 AM – HILTON MAIN BALLROOM

AMC Chairman, Marijan Jozic, KLM, will welcome attendees to Prague.

AEEC Chairman, Jürgen Lauterbach, Lufthansa, will welcome attendees.

Dr. David Schutt, CEO of SAE International will provide the keynote address.

The AEEC Trumbull Award will be presented by the AEEC Chairman-Elect, Robert Swanson, FedEx.

The Volare Awards will be presented by the Airline Avionics Institute (AAI).

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2. SESAR AND NEXTGEN AIRSPACE INITIATIVES – 10:30AM – GRAND BALLROOM

Thierry Harquin, Airbus, will lead a symposium on airspace planning. Air Traffic Service (ATS) providers will describe emerging airspace initiatives leading to fundamental changes to Communications, Navigation, and Surveillance. Highlights of SESAR and NextGen programs will be presented.

FAA has been invited to speak on the NextGen airspace initiative and how airplanes are expected to transition in the coming years.

The SESAR Joint Undertaking (SJU) has been invited to speak on European initiatives and harmonization between the stakeholders.

TBD will speak on the topic: “NextGen Airspace, Aircraft Operations, Avionics, and their Evolution.”

Questions and comments from the floor are invited.

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3a. Ku/Ka-Band Satellite Communications

ARINC 791, ARINC Project Paper 792, ARINC Project Paper 848
Chairman: Peter Lemme, Totaport
Secretary: Tom Munns, *tmunns@sae-itc.org*

APIM 14-007: Small Form Factor Ku/Ka Band Satcom System
APIM 14-008: Satcom Functional Interface Standard

Goal: The Ku/Ka Satellite Communications Subcommittee is developing standards for broadband satellite equipment hardware, electrical/electronic interfaces, and network interface protocols for installation onto all commercial transport aircraft.

Summary: ARINC Project Paper 792: *Second Generation Aviation Ku-Band and Ka-Band Satellite Communication System*, will define Ku-band and Ka-band systems in a modular manner that take advantage of technology improvements to reduce cost, weight, and complexity while enhancing performance of connectivity systems. An abstracted antenna installation will be developed that offers a simplified antenna mounting standard independent from the underlying airplane fittings or penetrations. These definitions will be included in a new ARINC Standard.

ARINC Project Paper 848: *Broadband Satellite System Functional Interface Standard*, will define common network protocols and interfaces between broadband satcom systems and aircraft IP networks. This new ARINC Specification will be applicable to multiple broadband systems. Band-specific information currently included in ARINC 791 Part 2 will be preserved.

AEEC Adoption Items: (none proposed)

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3b. Cabin Systems Subcommittee (CSS)

ARINC 404B, ARINC 628, ARINC 664, ARINC 800, ARINC 832
ARINC Project Paper 820 and ARINC Project Paper 836A
Chairman: Dale Freeman, Delta Air Lines
Secretary: Tom Munns, *tmunns@sae-itc.org*

APIM 08-011A: Cabin Enclosures – Mini Modules for Modular Rack Concept
APIM 10-005D: Cabin Equipment and Communications Interfaces
APIM 11-006: Standardization of Cabin Wireless Access Point (CWAP)
APIM 12-004A: 10 Gb Ethernet Interface (ARINC 664P2)
APIM 13-010: 4th Generation Cabin Network (4GCN)
APIM 13-014A: Cabin Cables and Connectors
APIM 14-001: Cabin Architecture for Wireless Distribution System

Goal: The objective of this activity is to define a cost-effective cabin infrastructure that will support evolving technologies and enable airlines to install equipment that exceeds passenger expectations.

Summary: The Status of the following documents will be reported:

- Supplement 4 to **ARINC Specification 628, Part 9:** *Cabin Equipment Interfaces, Cabin Information Network*
- Supplement 1 to **ARINC Specification 800, Part 2:** *Cabin Connectors and Cables: Specification of Connectors, Contacts, and Backshells*
- Supplement 1 to **ARINC Specification 800, Part 3:** *Cabin Connectors and Cables: Specification of Cables*
- **ARINC Project Paper 800, Part 4:** *Cabin Connectors and Cables: Standard Ethernet Cable and Connector Test Methodology*
- **ARINC Project Paper 820:** *Cabin Architecture for Wireless Distribution System*
- Supplement 1 to **ARINC Specification 832:** *Cabin Equipment Interfaces, 4GCN Cabin Management and Entertainment System, Cabin Distribution System*
- **ARINC Project Paper 836A:** *Cabin Standard Enclosures*

AEEC Adoption Items: AEEC will consider the following:

- Draft 2 of Supplement 2 to **ARINC Specification 404B**: *Connectors, Rack and Panel, Rectangular Rear Release Crimp Contacts* as circulated with reference letter 15-001/CSS-552.
- Draft 2 of Supplement 3 to **ARINC Specification 628 Part 0**: *Cabin Equipment Interfaces: Cabin Management and Entertainment System – Overview* as circulated with reference letter 15-044/CSS-558.
- Draft 7 of Supplement 7 to **ARINC Specification 628 Part 1***: Cabin Equipment Interfaces: Cabin Management and Entertainment System – Peripherals* as circulated with reference letter 15-043/CSS-557.
- Draft 1 of Supplement 8 to **ARINC Specification 628 Part 2**: *Cabin Equipment Interfaces: Cabin Management and Entertainment System – Seat Interfaces* as circulated with reference letter 15-008/CSS-553.

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APIM Approvals: AEEC will consider the following:

- **APIM 12-004B:** Aircraft Data Network – 10 GbE Physical and Data Link Layer
  This APIM proposes development of Supplement 3 to **ARINC Specification 664 Part 2:** *Aircraft Data Network: Ethernet Physical and Data Link Layer Specification* to include the physical and data layer for 10 GbE interface for commercial aircraft. The scope is expanded to include definition of a fiber optic link to support 10 GbE. A mature draft is expected in April 2016.
- **APIM 15-001: Requirements and Recommended Practices for Cabin Seat Testing**
  This APIM proposes a new ARINC Report to define requirements and recommended practices for seat testing to be performed at the seat manufacturers facilities prior to the shipment of the seats to the airframe manufacturers, MRO, or operators for installation in the aircraft. A mature draft is expected by October 2016.

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3c. Galley Insert (GAIN) Subcommittee

ARINC 810
Co-Chairman: Ralph Schnabel, Airbus
Co-Chairman: Scott Coburn, Boeing
Secretary: Tom Munns, *tmunns@sae-itc.org*

Goal: The goal of the GAIN Subcommittee is to standardize the physical dimensions and electrical interfaces for galley Inserts. The primary areas for standardization include:

- Form and Fit
- Standard wiring
- Electrical connectors
- Interfaces, both physical and data
- Galley mounting rails

APIM Approvals: AEEC will consider the following:

- **APIM 15-002:** GAIN Size 6 Definition
  This APIM proposes development of Supplement 5 to **ARINC Specification 810:** *Definition of Standard Interfaces for Galley Insert (GAIN) Equipment, Physical Interfaces* to provide a definition of Size 6 (Microwave Oven) equipment. A mature draft is expected by March 2016.

AEEC Adoption Items: (none proposed)

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4. MOVING BEYOND THE FLOPPY DISK

Monday, April 27 – Starting at 3:20pm

A joint AEEC/AMC Symposium

Hilton Convention Center – Main Ballroom

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ADJOURN MONDAY

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AEEC GENERAL SESSION

TUESDAY, APRIL 28 – 8:30AM – HILTON GRAND BALLROOM

5a. Datalink Users Forum

Co-Chairman: Colin Gallant, British Airways
Co-Chairman: (open position)
Secretary: Vic Nagowski, *vnagowsk@sae-itc.org*

Goal: The Datalink (DLK) Users Forum promotes continuous improvements to datalink system performance in a way that maximizes the operational benefit to the user community.

Summary: Colin Gallant, British Airways, will summarize the DLUF activities and its future plans. The DLUF provides coordination among airlines and cargo carriers, civil aviation authorities, air traffic service providers, aircraft manufacturers, avionics suppliers, datalink service providers, and other interested parties. Economic benefits are obtained through the exchange of technical information and through the resolution of common problems. The DLUF monitors the direction and schedule of new Air Traffic Service (ATS) datalink programs.

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5b. Datalink Systems, MIAM and AOC Message Exchange

ARINC 618, ARINC 631, ARINC 633, ARINC 841
DLK Chairman: Bob Slaughter, American Airlines
AOC Chairman: Dirk Zschunke, Lufthansa German Airlines
Secretary: José Godoy, *jgodoy@sae-itc.org*

APIM 09-001A: Media Independent Aircraft Messaging (MIAM) – ARINC 841
APIM 10-013: VHF Digital Link Mode 2 Implementation Provisions – ARINC 631
APIM 11-011: AOC Air-Ground Data and Message Exchange Format – ARINC 633
APIM 13-013: Air/Ground Character-Oriented Protocol – ARINC 618

Goal: Develop and maintain Datalink (DLK) standards that improve communications between the aircraft and ATS, DLK Service Providers (DSP), and other DLK Ground Users. The Subcommittee meets jointly with RTCA SC-214 VDLSG and EUROCAE WG-92.

Summary: Bob Slaughter, American Airlines, will present the activities and future plans of the DLK Systems Subcommittee. The Subcommittee meticulously follows NextGen – Data Comm program and Single European Sky (SES) Data Link Service (DLS) Implementation Rule as they will impact DLK documentation.

ARINC Specification 631: *VHF Digital Link (VDL) Mode 2 Implementation Provisions* specifies the VHF Digital Link needed to exchange air-ground bit-oriented data. Through coordination with the FAA, Eurocontrol, RTCA, and EUROCAE industry VDL documents (i.e., ICAO VDL Technical Manual, RTCA/EUROCAE VDL MOPS and MASPS) are now aligned with ARINC Specification 631-6.

Supplement 7 to ARINC Specification 631: Multi-Frequency functionality is being defined in support of multi-frequency operation in Europe and USA. Supplement 7 is dependent on the schedule of Multi-Frequency deployment in Europe and expected recommendations from the SESAR Provider Aborts investigation. The following will be added to the supplement:

- Expansion of Frequency Management Sections (Recovery and Handoff)
- Guidance on the Allocation of VDLM2 Ground Stations
- Channel Utilization definition
- Message Sequence Charts updates

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APIM Approval: AEEC will consider the following:

- **APIM 10-013A –** Updates the scope and schedule of Supplement 7 to **ARINC Specification 631:** *VHF Digital Link (VDL) Mode 2 Implementation Provisions.* A mature draft is expected to emerge in October 2016.

Supplement 8 to ARINC Specification 618: *Air/Ground Character-Oriented Protocol Specification,* per APIM 13-013. In an effort to Improve ACARS Performance so that GOLD RCP240 and RSP180 99.9% operational requirements are continually met, timers and counters defined in ARINC Specification 618 will be optimized. Satisfying RCP 240 and RSP180 is essential for obtaining 30/30 preferential airspace separation.

Supplement 3 to ARINC Specification 841: *Media Independent Aircraft Messaging (MIAM)*, is being developed per APIM 09-001A. ARINC 841 defines MIAM services, enabling the exchange of large volume of data over ACARS or broadband IP subnetworks. The existing standard specifies MIAM over ACARS, and MIAM over IP middleware. Supplement 3 will expand the document to include MIAM over TCP/IP. The DLK Subcommittee has prepared Draft 1 of Supplement 3 to ARINC Specification 841. The schedule for the development of Supplement 3 will be presented and discussed.

ARINC Specification 633 defines AOC communications shared by multiple operators on different aircraft types. AOC messaging applications (e.g., Flight Plan, Weather, Weight, and Balance) can be hosted on Electronic Flight Bags (EFB). Supplement 3 to **ARINC Specification 633:** *AOC Air-Ground Data and Message Exchange Format*, is being developed per APIM 11-011.

Supplement 3 is expected to add new Oceanic Track and Load Sheet XML schemas. Existing Flight Plan, MEL, and NOTAM schemas will be expanded. Lessons learned section will be included. Load Sheet development is coordinated with IATA Load Control Working Group. The schedule for the development of Supplement 3 will be presented.

APIM Approvals: AEEC will consider the following:

- **APIM 11-011A –** Re-schedule Supplement 3 to **ARINC Specification 633:** *AOC Air-Ground Data and Message Exchange Format.* A mature draft is proposed to be available in April 2016.

AEEC Adoption Item: (none proposed)

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5c. Air/Ground Communications Systems (AGCS)

ARINC Project Paper 771
Chairman: Kenny Blankenship, American Airlines
Secretary: José Godoy, *jgodoy@sae-itc.org*

APIM 13-011: Low-Earth Orbiting (LEO) Satcom System – ARINC Project Paper 771

Goal: The Air/Ground Communications Systems (AGCS) Subcommittee develops aircraft satellite communications (satcom) standards that meet airline operational requirements.

Summary: José Godoy, ARINC IA, will present the activities and future plans of the AGCS Subcommittee developing **ARINC Project Paper 771:** *Low-Earth Orbiting Aviation Satellite Communication System* per APIM 13-011.

ARINC Project Paper 771 will define aircraft installation provisions, configurations for the Iridium Certus satcom system (formally Iridium NEXT). Commonality with the existing Inmarsat SwiftBroadband (SBB) satcom installation provisions, defined in ARINC Characteristic 781, will be maintained. Cyber security guidance will be provided.

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The AGCS Subcommittee has prepared Draft 1 of ARINC Project Paper 771 defining:

- Form factor (2 MCU) and connectors (same as SBB) per **ARINC Characteristic 781:** *Aviation Satellite Communication Systems*
- Same Low Gain Antenna (LGA) footprint: An existing LGA or a new LGA design with an internal RF module can be utilized
- Satellite data unit (SDU) with or without an internal RF module
- SDU interfaces/pinout
- Coaxial and Cam Bus wiring between SDU and antenna

The schedule for the developing ARINC Project Paper 771 will be presented and discussed.

AEEC Adoption Item: (none proposed)

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5d. HF and VHF Selective Calling (SELCAL)

ARINC Project Paper 714A
Chairman: Robert Holcomb, American Airlines
Secretary: Paul Prisaznuk, *pjp@sae-itc.org*

APIM 14-003: Mark 4 Selective Calling (SELCAL)

Goal: Improve HF and VHF communication using SELCAL in integrated audio systems and traditional federated avionics equipment.

Summary: The AEEC launched the SELCAL activity to improve communication over HF and VHF, and in particular, to rectify the problems associated with duplicate SELCAL assignments. A 32-tone SELCAL system is being defined in conjunction with RTCA SC-232.

ARINC Project Paper 714A: *Mark 4 Airborne Selective Calling (SELCAL)* is in development. The draft document will include:

- Guidance for SELCAL integration in audio management systems
- Traditional form, fit, function, and interface definitions for SELCAL decoder
- Aircraft interwiring definition
- Tone code acceptance and rejection criteria

A mature draft is expected in September 2015.

AEEC Adoption Item: (none proposed)

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6. EMERGING COMMUNICATION TECHNOLOGIES

Tuesday, April 28, Starting at 10:30am

Hilton Grand Ballroom

Moderator – Dennis Zvacek, American Airlines

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7a. Cockpit Display Systems (CDS) Interfaces

ARINC 661
Chairman: Chad Weldon, Rockwell-Collins
Secretary: Peter Grau, *pgrau@sae-itc.org*

APIM 08-004A: ARINC 661 Cockpit Display System Interface Standard

Goal: Prepare flight deck display interface standards for new airplane development programs that focus on transport category aircraft: business, regional, general aviation, and military aircraft are considered as well.

Summary: A summary report of Draft 1 to Supplement 6 to **ARINC Specification 661:** *Cockpit Display System Interface to User Systems* will be provided. Supplement 6 is intended to ensure growth for CNS/ATM applications that provide advanced operational concepts that will increase aviation safety, capacity, and efficiency. This particular supplement will add touchscreen, synthetic vision and three-dimensional vision capabilities. Completion of Supplement 6 to **ARINC Specification 661** is anticipated in April 2016.

AEEC Adoption Item: (none proposed)

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7b. Navigation DataBase (NDB)

ARINC Specification 424
ARINC Project Paper 424A
Chairman: Chuong Phung, FedEx
Secretary: Sam Buckwalter, *sbuckwalter@sae-itc.org*

APIM 11-005A: Navigation Data Base

Goal: The scope of this project is to identify, evaluate, and document the recommended standards for the preparation of airborne navigation system reference data for use in the air transport industry.

Summary: A status report will be provided on activities to update **ARINC Specification 424**: *Navigation System Database* and the development of ARINC Project Paper 424A.

- ARINC 424 presentation will address current updates to the standard and future implementations.
- ARINC Project Paper 424A presentation will outline the development of the UML model for all types of navigation data. This model is being defined in a way that allows it to hold all existing specifications, documentation, and requirements from the existing ARINC Specification 424, as well as additional data expected for growth. The timeline for development of ARINC Project Paper 424A will be presented.

AEEC Adoption Item: (none proposed)

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7c. Airport Mapping DataBase (AMDB)

ARINC 816
Chairman: Brian Gilbert, Boeing
Secretary: Peter Grau, *pgrau@sae-itc.org*

APIM 09-008A: Airport Mapping DataBase Definition

Goal: Improve pilot situational awareness in the airport surface environment and ease the taxi phase of operation. This will improve safety and reduce fuel burn, resulting in lower operating costs.

Summary: A summary of draft 1 to Supplement 3 to **ARINC Specification 816:** *Embedded Interchange Format for Airport Mapping Database* will be presented. Supplement 3 is intended to provide data encoding standards for preferred taxi routes, taxi holding positions, taxiway marking, and other surface characteristics. The document will be aligned to the latest versions of **RTCA DO-272D/EUROCAE ED-99:** *User Requirements for Aerodrome Mapping Information*, as well as **RTCA DO-291C /EUROCAE ED-119:** *Interchange Standards for Terrain, Obstacle and Aerodrome Mapping Data.* A mature draft Supplement 3 to **ARINC Specification 816** is anticipated in September 2015.

AEEC Adoption Item: (none proposed)

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7d. Terrain and Obstacle Database (TODB) and XML Encoding and Compression

ARINC Project Paper 814, ARINC Project Paper 815
Chairman: Brian Gilbert, Boeing
Secretary: Peter Grau, *pgrau@sae-itc.org*

APIM 12-006: Terrain and Obstacle DataBase Definition
APIM 12-007: XML Encoding and Compression Standard

Goal: Improve pilot situational awareness in flight and enable future development of synthetic vision. This will improve safety and reduce fuel burn, resulting in lower operating costs.

Summary: A summary of **ARINC Project Paper 815:** *Embedded Interchange Format for Terrain and Obstacle Database* will be provided. ARINC Project Paper 815 was initiated in 2012. It is intended to define an open encoding format for terrain and obstacles that is directly loadable into airborne systems. The document will be aligned to the latest versions of **RTCA DO-276B/EUROCAE ED-98:** *User Requirements for Terrain and Obstacle Data* and **RTCA DO-291C/EUROCAE ED-119:** *Interchange Standards for Terrain, Obstacle and Aerodrome Mapping Data*. A mature draft of **ARINC Project Paper 815** is expected in April 2016.

A summary of **ARINC Project Paper 814:** *Extensible Markup Language (XML) Encoding and Compression Standard* will be provided. ARINC Project Paper 814 was initiated in 2013. This standard defines an XML encoding and compression standard that can be referenced by other ARINC standards to optimize storage and processing efficiency on the aircraft side. Several existing industry methods were evaluated for modification to suit this purpose. A single ARINC XML encoding and compression standard will insure uniform application of this approach across the many ARINC standards wherein XML is deployed. A mature draft of **ARINC Project Paper 814** is expected in September 2015.

AEEC Adoption Item: (none proposed)

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8a. Electronic Flight Bag (EFB) Users Forum

Co-Chairman: Phillip Haller, Austrian Airlines
Co-Chairman: Will Ware, Southwest Airlines
Secretary: Peter Grau, *pgrau@sae-itc.org*

APIM 09-009B: Electronic Flight Bag (EFB) Users Forum

Goal: The EFB Users Forum coordinates the development of EFB technology and capability among airlines, manufacturers, suppliers, and regulators.

Summary: A report of the EFB Users Forum activities will be provided. The Rome, Italy event addressed the FAA Airworthiness Directive (AD) which may limit EFB connectivity on some aircraft types. In addition, the display of own-ship position on an EFB was discussed with further action expected to come. The EFB Users Forum has proven to be instrumental to the airlines in their evaluation of a wide range of EFB products and software applications. The forum provides a venue where interested parties can exchange information, present challenges, and resolve issues being confronted by the industry with this rapidly evolving technology. AEEC General Session participants are invited to propose new topics for discussion in the EFB Users Forum.

Next EFB Users Forum: The next EFB Users Forum will be held June 3-4, 2015 in Denver, Colorado. The meeting will be hosted by Jeppesen. The meeting will be preceded by an EFB Expo, to be held on June 2, 2015.

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8b. Electronic Flight Bag (EFB) Subcommittee

ARINC 828, ARINC 834
Co-Chairman: Sonja Schellenberg, Lufthansa
Co-Chairman: Maurice Ingle, American Airlines
Secretary: Peter Grau, *pgrau@sae-itc.org*

APIM 11-012B: Supplement 5 to **ARINC Specification 834:** *Aircraft Data Interface Function (ADIF)*
APIM 13-002: Supplement 4 to **ARINC Specification 828:** *Electronic Flight Bag (EFB) Standard Interface*

Goal: The EFB Subcommittee develops standards applicable to EFB installation. These encompass all classes of EFBs that may be utilized by the airlines on multiple aircraft types.

Summary: Maurice Ingle will summarize the effort to develop Supplement to 5 to **ARINC Specification 834:** *Aircraft Data Interface Function (ADIF).* The Generic Aircraft Parameter Service (GAPS) was updated to enable avionics read and write access and to correct known errors within this protocol stemming from recent implementations.

The development of Supplement 4 to **ARINC Specification 828:** *Electronic Flight Bag (EFB) Standard Interface* is underway, proposing the addition of two new EFB connectors for power and Ethernet. A mature draft is expected in September 2015.

AEEC Adoption Item: AEEC will consider the following:

- Draft 1 of Supplement to 5 to **ARINC Specification 834:** *Aircraft Data Interface Function (ADIF)* as circulated with reference letter 15-035/EFB-049. Supplement 5 contains enhancements and modifications to the Generic Aircraft Protocol Services (GAPS).

APIM Approval: AEEC will consider the following:

- **APIM 11-012C:** Supplement to 6 to **ARINC Specification 834:** *Aircraft Data Interface Function (ADIF)*. Modifications and enhancements to enable ACARS-like messaging capability are proposed. A printer interface will be included. A mature draft is expected to be available in April 2016.

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8c. Network Infrastructure and Security (NIS)

ARINC Project Paper 822A and ARINC Project Paper 8xx
Co-Chairman: Jean-Paul Moreaux, Airbus
Co-Chairman: Steve Arentz, United Airlines
Secretary: Vanessa Mastros, *vmastros@sae-itc.org*

APIM 13-003A: On-Ground Aircraft Wireless Communication
APIM 13-005: IP Security Data Logging

Goal: Prepare aircraft network and information security data logging standards.

Summary: ARINC Project Paper 822A: *On-Ground Aircraft Wireless Communication* will update guidance on gatelink services using broadband communications systems and Internet Protocols (IP), for example, Wi-Fi and cellular. Additionally, this document is intended to provide guidance on the best practices addressing the necessary cyber security measures needed to ensure the connection is accessed only by authorized users to ensure the integrity of the data transmission, using both public and private networks. Draft 1 is expected to emerge in 2015.

ARINC Project Paper 8xx: *Guidance for Security Data Logging in an IP Network Environment*, is intended to provide guidance for IP-based onboard networks and systems residing in the Airline Information Systems (AIS) and Passenger Information and Entertainment System (PIES) domains. Additionally, this document is intended to establish a common set of security related data elements and format(s) that can be used by Airline IT and/or avionic supplier ground tools in the analysis of aircraft security log file data. Draft 1 is expected to emerge in 2015.

AEEC Adoption Item: (none proposed)

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8d. CANbus

ARINC 825
Chairman: Thomas Joseph, GE Aviation
Secretary: Vanessa Mastros, *vmastros@sae-itc.org*

APIM 13-004A: Supplement 3 to **ARINC Specification 825**: CANbus

Goal: Update CANbus standards to support new aircraft programs and major retrofit programs.

Summary: Supplement 3 to **ARINC Specification 825:** *General Standardization of CAN (Controller Area Network) Bus Protocol for Airborne Use* has been prepared in response to a specific Boeing request to update ARINC Specification 825 to support a near-term need for the B-777X airplane program and provide clarification of requirements. High level topics addressed are: Periodic Health Status Message (PHSM), Peer-to-Peer Message Structure, Parameter Terminology, Functional Status Methodology, High Integrity Messages and quiet bus behavior.

AEEC Adoption Item: AEEC will consider the following:

- Draft 3 of Supplement 3 to **ARINC Specification 825** as circulated by reference letter 15-045/CAN-009.

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ADJOURN TUESDAY

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AEEC GENERAL SESSION

WEDNESDAY, APRIL 29 – 8:30AM – HILTON GRAND BALLROOM

9a. Systems Architecture and Interfaces (SAI) Subcommittee

Co-Chairman: Bob Semar, United Airlines
Co-Chairman: Reinhard Andreae, Lufthansa
Secretary: Paul Prisaznuk, *pjp@sae-itc.org*

APIM 11-013A: Airport Surface Communication using AeroMACS

Goal: NextGen and SESAR airspace initiatives are driving the need for the SAI Subcommittee to develop avionics architecture recommendations and new communications mediums for aircraft in service and for future airplane types.

Summary: The SAI Subcommittee is working with FAA, Eurocontrol and many others to further identify equipment requirements for CNS/ATM. Airframe manufacturers and avionics suppliers have provided substantial input to the discussion and recommendations. This includes the recent development of **ARINC Report 660B:** *CNS/ATM Avionics Architectures Supporting NextGen/SESAR Concepts* in 2013. ARINC Report 660B has already identified the need to update several ARINC Standards in the coming years in preparation for NextGen and SESAR.

ARINC Characteristic 702A: *Advanced Flight Management Computer System*, has been identified as a document that should be updated to support Trajectory Based Operations (TBO) and enable accurate 4D navigation. To that end, FMS suppliers are leading the effort to develop inputs to the SAI Subcommittee. A report will be provided.

Airport Surface Communication is being discussed by the SAI Subcommittee. APIM 11-013A calls for the development of a broadband airport surface communication medium using the RTCA DO-345 profiles and the RTCA DO-346 MASPS for AeroMACS. It will operate in protected Aeronautical Safety Services spectrum. A report will be provided.

APIM Approvals:

The SAI Subcommittee has been the focal point for discussing Safety Services using the Internet Protocol Suite (IPS). AEEC will consider the following:

- **APIM 15-004: Safety Services Using Internet Protocol Suite (IPS)**

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9b. Traffic Surveillance, ADS-B

Chairman: Jessie Turner, Boeing
Secretary: José Godoy, *jgodoy@sae-itc.org*

APIM 14-005: Hybrid Surveillance – Supplement 2 to ARINC Characteristic 735B

Goal: Develop and maintain traffic surveillance standards to enhance flight crew situational awareness and ensure safety.

Summary: The activities and future plans of the Traffic and Surveillance Working Group will be presented. ADS-B applications enhance safety, enable efficient Air Traffic Management, augment flight crew situational awareness, and facilitate time and fuel saving operation at optimum altitudes and flight paths.

ADS-B applications include In Trail Procedures (ITP), Hybrid Surveillance, Interval Management, Continuous Descent, Spacing and Merging, Airport Surface Surveillance, and Runway Incursion Avoidance.

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Supplement 2 to ARINC Characteristic 735B: *Traffic Computer TCAS and ADS-B Functionality,* per APIM 14-005. Supplement 2 adds Hybrid Surveillance functionality that satisfies new FAA AC 20-151B and TSO-119d requirements.

- Status pin definitions are updated
- TCAS system failure annunciations are heightened
- Sensor status inputs are added to the Traffic Computer

These inputs are needed to support Hybrid Surveillance passive tracking.

AEEC Adoption Item: AEEC will consider the following:

- Draft 1 of **Supplement 2 to ARINC Characteristic 735B:** *Traffic Computer TCAS and ADS-B Functionality* as circulated with reference letter 15-046/SAI-027.

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9c. Global Navigation Satellite System (GNSS)

The evolution of Global Navigation Satellite System (GNSS) satellite constellations will be discussed. AEEC will consider the need for changes to GPS equipment to support this evolution. A report will be provided. Questions and comments from the floor are invited.

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10. ADS-B DEVELOPMENTS

Wednesday, April 29, Starting at 10:30am

Hilton Grand Ballroom

Moderator Jürgen Lauterbach, Lufthansa

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11a. Software Data Loading

ARINC 665, ARINC Project Papers 641, 843, 844, 849
Co-Chairman: Ted Patmore, Delta Air Lines
Co-Chairman: Rod Gates, American Airlines
Secretary: Scott Smith, *smitty@sae-itc.org*

APIM 10-016B: Target Implementation Considerations for ARINC 615-3 and ARINC 615-4 Hardware Targets
APIM 11-008: Central Maintenance Computer Configuration Reports
APIM 13-006: Logical Media Set Format – Guidance for storage of Loadable Software Aircraft Parts (LSAP) on mass storage devices in lieu of physical media
APIM 13-007: Shop Loading of Software – Software data loading specification requirements for the avionics shop environment

Goal: Develop and maintain software data loading standards that will minimize resources and the time required to securely transfer databases and software to an aircraft.

Summary: Advances in mass-storage devices and data bus architectures have driven the need for new standards that will improve software data loading using standardized data loading hardware, as well as data buses and networks. A status report will be provided.

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ARINC Project Paper 641: *Logical Media Set Parts Format*
This project provides guidance for airlines to format, store, and distribute loadable software parts without memory constricted physical media (floppy disks). The format is critical to allow data loaders to recognize the software required for specific avionics units, as well as standardize an industry process for software storage and distribution using mass storage devices.

ARINC Project Paper 843: *Aircraft Software Common Configuration Reporting*
This project defines Central Maintenance Computer Configuration Report retrieval and formats. Standardized equipment configuration reports are desired for aircraft fleet management. A standard is needed to provide this information to airlines as well as airframe manufacturer and regulatory authorities.

ARINC Project Paper 844: *Guidance for Target Hardware Design, Part 1, Airborne Computer High Speed Data Loader (ARINC 615-3)*
This project provides guidance for Hardware Target developers that implement ARINC 429 data loading to produce equipment that is software loadable using the ARINC 615-3 standard. The obsolescence of floppy based media and the use of mass storage devices require revised processes by data loader suppliers and target hardware suppliers to data load over an ARINC 429 data bus.

ARINC Project Paper 844: *Guidance for Target Hardware Design, Part 2, Airborne Computer High Speed Data Loader (ARINC 615-4)*
This project provides guidance for Hardware Target developers that implement ARINC 429 data loading to produce equipment that is software loadable using the ARINC 615-4 standard. The obsolescence of floppy based media and the use of mass storage devices require revised processes by data loader suppliers and target hardware suppliers to data load over an ARINC 429 data bus.

ARINC Project Paper 849: *Avionics Shop Loading of Line Replaceable Units*
The SDL Subcommittee is developing guidance for requirements and processes to allow shop loading of aircraft software parts. Modern avionics may require stimulus from other systems to allow operational or database loading, and must be emulated in an avionics repair facility environment.

AEEC Adoption Items: AEEC will consider the following:

- Draft 3 of **ARINC Project Paper 641**: *Logical Software Part Packaging for Transport* circulated with reference letter 15-033/SDL-092.
- Draft 3 of **ARINC Project Paper 843:** *Aircraft Software Common Configuration Reporting* circulated with reference letter 15-039/SDL-094.

APIM Approval: AEEC will consider the following:

- **APIM 15-003: Supplement 4 to ARINC Report 665:** *Loadable Software Standards.* The document requires modification to update references, incorporate errata, and add material from technical working papers.

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11b. Fiber Optic Interfaces

ARINC 801 through ARINC 807 and ARINC Project Papers 845 and 846
Chairman: Robert Nye, Boeing
Secretary: Scott Smith, *smitty@sae-itc.org*

APIM 13-008: Fiber Optic Expanded Beam Technology
APIM 13-009: Fiber Optic Mechanical Transfer Technology

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Goal: The goal is to develop and maintain ARINC Standards (801-807) that address physical characteristics, design guidelines, component criteria, and testing and maintenance procedures for fiber optic components and interfaces. The objective is to promote a high-level of fiber optic interface performance while minimizing the costs of procurement, installation, and maintenance. The standards describe the latest technological advances for the use of fiber optics independent of the aircraft application or environment.

Summary: A status report will be provided. Two project papers are being developed on new fiber optic connectors, and subsequently ARINC Standards 801 through 807 are being updated with specific material for the design, testing, installation, and maintenance of these connectors and associated cables, resulting in:

- **Supplement 4 to ARINC Specification 801:** *Fiber Optic Connectors*
- **Supplement 3 to ARINC Specification 802:** *Fiber Optic Cables*
- **Supplement 4 to ARINC Report 803:** *Fiber Optic Design Guidelines*
- **Supplement 2 to ARINC Report 804:** *Fiber Optic Active Device Specification*
- **Supplement 5 to ARINC Report 805:** *Fiber Optic Test Procedures*
- **Supplement 6 to ARINC Report 806:** *Fiber Optic Installation and Maintenance*
- **Supplement 4 to ARINC Report 807:** *Fiber Optic Training Requirements*

ARINC Project Paper 845: *Fiber Optic Expanded Beam Termini*. This project defines a new fiber optic Expanded Beam (EB) contact for use in connectors with frequent disconnect/connect operations and/or in harsh environments. This work may require modifications to one or more of the existing ARINC Fiber Optic Standards.

ARINC Project Paper 846: *Fiber Optic Mechanical Transfer Termini*. This project intends to define a new fiber optic Mechanical Transfer contact for use in connectors with frequent disconnect/connect operations and/or in harsh environments. This work may require modifications to one or more of the existing ARINC Fiber Optic Standards.

AEEC Adoption Items: (none proposed)

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11c. Application/Executive (APEX) Software Interface

ARINC 653
Co-Chairman: Frederic Aspro, Airbus
Co-Chairman: Gordon Putsche, Boeing
Secretary: Scott Smith, *smitty@sae-itc.org*

APIM 08-003B: Avionics Application Software Standard Interface

Goal: Develop and maintain **ARINC Specification 653:** *Avionics Application Software Standard Interface* that defines a standard interface between avionics application software and Real Time Operating Systems (RTOS).

Summary: ARINC 653 is used extensively on new civil aircraft and new military aircraft produced by Airbus, Boeing, and others. Avionics suppliers have expressed the desire to use ARINC 653 RTOS on regional, business, and private aircraft. ARINC 653 enables application software to be developed concurrently and independent of the RTOS. This will enable avionics functional updates to be made with minimal impact on the underlying computing platform.

A status report will be provided. ARINC 653 consists of:

- **ARINC Specification 653:** *Part 0, Overview of ARINC 653*
- **ARINC Specification 653:** *Part 1, Required Services*
- **ARINC Specification 653:** *Part 2, Extended Services*
- **ARINC Specification 653:** *Part 3A, Conformity Test Specification for Required Services*

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- **ARINC Specification 653:** *Part 3B, Conformity Test Specification for Extended Services*
- **ARINC Specification 653:** *Part 4, Subset Services*
- **ARINC Specification 653:** *Part 5, Core Software Recommended Capabilities*

AEEC Adoption Items: AEEC will consider the following:

- **Draft 1 of ARINC Specification 653: Part 0,** *Overview of ARINC 653* as circulated with reference letter 15-048/SWM-139. Part 0 describes the organization of ARINC Specification 653 and serves as a common repository of material common to all parts of ARINC 653.
- **Draft 1 of Supplement 4 to ARINC Specification 653: *Part 1, Required Services*** as circulated with reference letter 15-049/SWM-140. Part 1 defines required services for operating systems and executive software for air transport avionics systems.
- **Draft 1 of Supplement 3 to ARINC Specification 653: *Part 2, Extended Services*** as circulated with reference letter 15-050/SWM-141. Part 2 defines extended services for operating systems and executive software for air transport avionics systems.

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12a. Cockpit Voice Recorder

ARINC 757 and ARINC 757A
Chairman: Robert Swanson, FedEx
Secretary: Paul Prisaznuk, *pjp@sae-itc.org*

APIM 10-003A: ARINC 757 and ARINC 757A Cockpit Voice Recorder Update

Goal: Develop and maintain Cockpit Voice Recorder (CVR) standards to meet the needs of new aircraft development programs, supplier programs, and to reflect changes in the regulatory areas.

Summary: Cockpit Voice Recorder (CVR) standards continue to evolve. Changes to ARINC Characteristic 757 and ARINC Characteristic 757A will be presented.

AEEC Adoption Items: AEEC will consider the following:

- **Draft 2 of Supplement 6 to ARINC Characteristic 757:** *Cockpit Voice Recorder (CVR)* as circulated with reference letter 15-027/DFDR-177.
- **Draft 2 of Supplement 1 to ARINC Characteristic 757A:** *Cockpit Voice Recorder (CVR)* as circulated with reference letter 15-028/DFDR-178.

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12b. Low Frequency Underwater Locator Beacon (LF-ULB)

ARINC Project Paper 677
Chairman: Robert Swanson, FedEx
Secretary: Paul Prisaznuk, *pjp@sae-itc.org*

APIM 13-012: Aircraft Installation Standards for LF-ULB

Goal: Define aircraft installation standards for an 8.8 kHz locator beacon intended to be installed on all aircraft operating over water having a take-off mass of 27,000 kg or more.

Summary: ARINC Project Paper 677: *Installation standards for Low Frequency Underwater Locator Beacon (LF-ULB)* was prepared to define aircraft installation standards that will enable interchangeability and allow freedom of choice in the LF-ULB supplier. The ARINC Standard includes:

- Definition of the LF-ULB mounting points
- Standardization of the maximum space envelope

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- Maximum acceleration of LF-ULB to remain attached to the local structure

AEEC Adoption Item: AEEC will consider the following:

- **Draft 4 of ARINC Project Paper 677:** *Installation Standards for Low Frequency Underwater Locator Beacon (LF-ULB)* as circulated with reference letter 15-031/SAI-026.

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13. Announcements and Adjournment

The AEEC Executive Committee will discuss any other items of interest.

Dates and location of the 2016 AEEC/AMC will be announced.

The AEEC Chairman will adjourn the AEEC General Session.

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AEEC ADOPTION ITEMS

Agenda Item	Activity	Reference	Title	Pink Pages	Adopted Yes/No
3b	CSS	15-001/CSS-552	Draft 2 of Supplement 2 to **ARINC Specification 404B:** *Connectors, Rack and Panel, Rectangular Rear Release Crimp Contacts*		
3b	CSS	15-044/CSS-558	Draft 2 of Supplement 3 to **ARINC Specification 628:** *Cabin Equipment Interfaces, Part 0, Cabin Management and Entertainment System - Overview*		
3b	CSS	15-043/CSS-557	Draft 7 of Supplement 7 to **ARINC Specification 628:** *Cabin Equipment Interfaces (CEI), Part 1, Cabin Management and Entertainment System – Peripherals*		
3b	CSS	15-008/CSS-553	Draft 1 of Supplement 8 to **ARINC Specification 628:** *Cabin Equipment Interfaces, Part 2, Cabin Management and Entertainment Systems – Seat Interfaces*		
8b	EFB	15-035/EFB-049	Draft 1 of Supplement 5 to **ARINC Specification 834:** *Aircraft Data Interface Function (ADIF)*		
8d	CAN	15-045/CAN-009	Draft 3 of Supplement 3 to **ARINC Specification 825:** *General Standardization of CAN (Controller Area Network) Bus Protocol for Airborne Use*		
9b	ADS-B	15-046/SAI-027	Draft 1 of Supplement 2 to **ARINC Characteristic 735B:** *Traffic Computer TCAS and ADS-B*		
11a	SDL	15-003/SDL-092	Draft 3 of **ARINC Project Paper 641:** *Logical Software Part Packaging for Transport*		

AEEC ADOPTION ITEMS

Agenda Item	Activity	Reference	Title	Pink Pages	Adopted Yes/No
11a	SDL	15-039/SDL-094	Draft 3 of **ARINC Project Paper 843:** *Aircraft Software Common Configuration Reporting*		
11c	APEX	15-048/SWM-139	Draft 1 of Supplement 1 to **ARINC Specification 653:** *Avionics Application Software Standard Interface, Part 0 – Overview of ARINC 653*		
11c	APEX	15-049/SWM-140	Draft 1 of Supplement 4 to **ARINC Specification 653:** *Avionics Application Software Standard Interface, Part 1 - Required Services*		
11c	APEX	15-050/SWM-141	Draft 1 of Supplement 3 to **ARINC Specification 653:** *Avionics Application Software Standard Interface, Part 2 – Extended Services*		
12a	CVR	15-027/DFDR-177	Draft 2 of Supplement 6 to **ARINC Characteristic 757:** *Cockpit Voice Recorder (CVR)*		
12a	CVR	15-028/DFDR-178	Draft 2 of Supplement 1 to **ARINC Characteristic 757A:** *Cockpit Voice Recorder (CVR)*		
12b	ULB	15-031/SAI-026	Draft 4 of **ARINC Project Paper 677**: *Installation Standards for Low Frequency Underwater Locator Beacon (LF-ULB)*		

AEEC PROJECT PROPOSALS – APIMs

Agenda Item	Proposed Activity	APIM Number	APIM Description	Approved Yes/No
3b	CSS	12-004B	10Gb Ethernet Connectors - ARINC 664, 803, 804	
3b	CSS	15-001	Cabin Passenger Seat Test Requirements (new 8xx)	
3c	GAIN	15-002	Supplement 5 to ARINC 810 Galley Insert Size 6 - Microwave Oven	
5b	DLK	10-013A	Supplement 7 to ARINC 631 VDL-2 Implementation Provisions	
5b	DLK	11-011A	Supplement 3 to ARINC 633 AOC Message Exchange	
8b	EFB	11-012C	Supplement 6 to ARINC 834 EFB ACARS messaging and printer interface	
9a	SAI	15-004	Safety Services using Internet Protocols (IP) (new 8xx)	
11a	SDL	15-003	Supplement 4 to ARINC 665 Loadable Software Parts	