

Cabin Systems Subcommittee

Meeting Agenda

November 1-3, 2016

Newark, Delaware

*Dale Freeman, DAL, Chairman
Gerald Lui-Kwan, Boeing, Co-Chairman
Rolf Gödecke, Airbus, Co-Chairman*

Cabin Systems Meeting Agenda

▶ Introductions

- Special Notes
 - ▶ Intellectual Property (Patent & Copyrights)
 - ▶ APIM Guidelines
 - ▶ Members and Corporate Sponsors
- Acceptance of Previous Meeting Report (16-122/CSS-584)
- Current Drafts
 - ▶ Draft 3 of Supplement 1 to ARINC 800 Part 2
 - ▶ Draft 3 of Supplement 1 to ARINC 800 Part 3
 - ▶ Draft 2 of Supplement 3 to ARINC 664 Part 2
 - ▶ Draft 2 of ARINC Project Paper 836A
 - ▶ Draft 1 of Supplement 8 to ARINC 628 Part 1
 - ▶ Draft 1 of Supplement 9 to ARINC 628 Part 2
- Working Papers Identification
 - ▶ Approved revised APIMs – 13-014B, 12-004C, and 08-011B
 - ▶ Approved APIM for New Cabin LAN (APIM 16-011)
 - ▶ Airbus-proposed APIM on Air-to-Ground
 - ▶ More To be Added

Objectives

- ▶ Review of Current CSS Program
- ▶ Connectors and Cables
 - Supplement 1 to A800 Part 2 (Specification of Connectors)
 - 10 Gbps Ethernet 8ax Contact Concepts
 - Supplement 1 to A800 Part 3 (Specification of Cables)
 - Fiber Optic Connectors
- ▶ ARINC 836A – mini-modules
- ▶ PP648 -- Guidance for Seat Production Testing
- ▶ Supplement 8 to ARINC 628 Part 1
 - HD Landscape Camera and 4K Video
 - CWAP Automatic Region Code Adaptation
- ▶ USB 3.1 Updates to A628P2
- ▶ Supplement 5 to ARINC 628 Part 9
- ▶ Project Paper 820 (Wireless Networks)
- ▶ New Business
- ▶ New Cabin LAN Definition
 - ARINC 664, Part 2
 - Seat Interfaces – PP 8XX, Part 1
 - Lighting Interfaces – PP 8XX, Part 2
- ▶ ARINC 664 Part 2 (10 Gb Ethernet)
- ▶ Agenda and Location for Next Meeting

Tuesday, 9:00 AM – 5:00 PM

- ▶ **Current CSS Program**
 - Review of current program
 - ▶ **ARINC 800, Part 2 (Specification of Connectors)**
 - Provide strawman for octo-ax geometry (A800P2-96)
 - Propose Strawman for Octo-ax section for ARINC 800 Part 2 (A800P2-100)
 - Review the definition of the gauge 24 contact for the 16-02 insert. (A800P2-101)
 - ▶ **10 Gbps Ethernet 8ax Contact Concept Updates**
 - Positronic
 - Amphenol/Radiall
 - ▶ **ARINC 800, Part 3 (Specification of Cables)**
 - Define material type for 4b foil shield in figure 4-7 (A800P3-33)
 - Review Section 4.1.1.3 data cable temperature - 200 degrees C vs 135 degrees C (A800P3-34)
 - Revise tables in section 2.2 to include US customary units (A800P3-35)
 - ▶ **Fiber Optic Connectors (PP845 and PP846)**
 - Verify the 125C temp requirement is adequate for MT termini (FOWG-20)
 - Propose hybrid MT insert configuration to the CSS (FOWG-21)
 - Provide new requirements matrix for the MT insert configuration (FOWG-22)
 - Provide response to FOS on input for the 4165 MT fiber insert (FOWG-23)
 - ▶ **ARINC Project Paper 836A (Mini-MRP)**
 - Provide proposed simplified drawings for the A836 Mini-MRP (836-43)
 - Propose parameters associated with blind mating for each connector type (836-52)
 - Obtain original drawings for A836 and provide to IA (836-54)
 - Incorporate bonding measurement point in MM drawing (836-55)
 - Create new MM drawings with only the interface dimensions (836-56)
- Delta/IA**
CSS
CSS/CWG
Amp/Radiall
IA
TEC
CSS
- CWG**
TEC
Airbus/Boeing
IA
CSS
Boeing
Airbus
Airbus
IA
CSS
Molex
Suppliers
Airbus
Molex
IA/Molex

Wednesday, 9:00 AM – 5:00 PM

▶ **PP648 - Guidance for Seat Production Testing**

- Develop input for sections 1.1 and 1.2. Include Airbus seat testing strawman material (648-1)
- Provide a block diagram of testing that can be performed at the Seat Supplier. (648-7)
- Review Thales document on a data driven seat process for seat acceptance (648-11)
- Clarify/revise page 5 subparagraphs 2 & 3 and integrate with Zodiac diagrams (648-14)
- Prepare ATP template, remove supplier-specific references (648-15)
- Revise Figure 1-1 (648-20)
- Propose a draft of Section 2.0 Introduction (648-22)
- Draft Section 2.3.1 – IFE (648-23)
- Provide a draft of Section 3.2.1 – IFES (648-30)
- Contact Amsafe to address Sections 2.3.5 and 3.2.5 (Airbags) (648-32)
- Section 1.5 - specify what each review contributes to seat testing. (648-35)
- Section 2.1 Develop initial prose for this section (648-36)
- Update figure in 2.2.7.2 to reflect correct voltages. Add in use light (648-37)
- Propose new wording for replacing troubleshooting and rework (648-38)
- Add a note to LRU flow for direct signals from the aircraft (e.g., emergency lights) (648-39)

▶ **Supplement 8 to ARINC 628 Part 1 – CWAP GCOM/HD Landscape Camera**

- Review and revise Att 17 video formats and integrate APEX EETWG requirements (628 P1-195)
- Consider the addition of 10Gb interface to the CWAPs (fiber vs copper) (628 P1-196)
- Provide substantiation for the 5 mbps stream rate for h.265 4K format - 17.2.6.1.1 (628P1-199)
- Review draft of HD Video Camera video formats/support of H.265 Profile 5 (628P1-200)
- **GCOM Updates**

CSS

Panasonic
IFE Suppliers
IFE suppliers
Thales
IA/BE
IA
IA
Thales/PAC/Zii
PAC/Thales/Zii
IA
IA
IA/ZSF/BEA
Astronics
IA
IA

CSS

Thales
Suppliers
Latecoere
IFE suppliers
Zii

Wednesday, 9:00 AM – 5:00 PM (continued)

- ▶ **Gore Capability Center Tour**
- ▶ **Supplement 9 to A628P2 (USB 3.1)**
 - Propose USB 3.1 and Power Delivery (PD, rev 2.0) text for 628P2 and 809 (628-P2-25)
 - Provide requirements matrix for inline disconnect and associated cable (628-P2-26)
 - Review section 2.2.12.1 with regards to seat retraction and extension timing (628-P2-27)
- ▶ **Supplement 5 to ARINC 628 Part 9**
 - Review IP address allocations for new 100baseT1 seat devices (A628P9-12)
 - Revise figure, include 172.16.xxx.xxx to 172.19.xxx.xxx (A628P9-13)
- ▶ **Project Paper 820 (Wireless Network)**
 - Propose power consumption value for section 2.2.1 assuming POE for CWAPs (820-11)
 - Add reference to A852 in section 4.3 (820-14)

CSS

CSS

Airbus/Thales

Th/A/B/PAC

DAL

CSS

Thales

Boeing

CSS

RCI

Boeing

Thursday, 9:00 AM – 12:00 Noon

▶ **New Business**

- Cabin & cargo video surveillance system
- Propose a behavior document for wireless systems (CSS-M-1)
- Airbus-proposed APIM on A2G Communications

▶ **Supplement 4 to ARINC 664, Part 2 (New Cabin LAN)**

- Discuss Needs and Requirements for 100/1000 BASE T1 Definition
- New IEEE Standard 802.3bz for LANs with 2.5 and 5 GBit/s

▶ **New Cabin LAN (Seat Interfaces) – Project Paper 8XX Part 1**

- Initiate project for definition of Seat Interfaces for new cabin LAN standard

▶ **New Cabin LAN (Lighting Interfaces) – Project Paper 8XX Part 2**

- Initiate project for definition of Lighting Interfaces for new cabin LAN standard

▶ **Supplement 3 to ARINC 664, Part 2 (10 Gb Ethernet)**

- Propose revision to ARINC 664 Part 2 Appendix I for 26 AWG (664P2-6)
- Incorporate existing Quad cabling for 10 Gb links of limited distance (664P2-7)
- Update test plan section in A800 P2 to include the Cat 6a channel specification (664P2-8)
- Add voltage ranges to Table 3-1 (664P2-10)

▶ **Discuss agenda and locations for next meetings**

▶ **Adjourn CSS**

CSS

Latecoere

RCI

Airbus

CSS

CSS

Airbus

CSS

CSS

CSS

CSS

CSS

Boeing

Boeing

IA

IA

All

2016-2017 CSS Meetings Planning (Tentative)

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
CSS S/C	1 – 3 Newark			21-23 Tempe, Arizona			16-18 Sedan, FR (tentative)			22-24 Riga, Latvia (tentative)	
Connector WG	Same as CSS			Same as CSS			Same as CSS			Same as CSS	
Ku/Ka SatCom SC			10-12 Cocoa Beach (tentative)								
GAIN S/C	No Meetings Planned										
NIS	15-17 Portland, OR										
FOS			24-26 St. Augustine								
SAI											
APEX											
AEEC							1-4 General Session Milwaukee				

