

Cabin Systems

(CEI / 3GCN / 4GCN/ SI / CC)

Meeting Agenda

February 9-11, 2016

Tucson, Arizona

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 (15-169/CSS-571)
- Current Drafts
 - ▶ Draft 5 of Supplement 1 to ARINC 832 - New
 - ▶ Draft 2 of Supplement 1 to ARINC 800 Part 2 - New
 - ▶ Draft 2 of Supplement 1 to ARINC 800 Part 3 - New
 - ▶ Draft 1 of Supplement 3 to ARINC 664 Part 2
- Working Papers Identification
 - ▶ New APIM 16-XXX for Multiple Standards
 - ▶ A800P2 Bulkhead connector requirements - Carlisle
 - ▶ Data Sheet for Glenair 10 Gbps Ethernet Octo-ax Contact
 - ▶ Status of Project Paper 845 – FOS
 - ▶ Status of Project Paper 846 – FOS
 - ▶ Strawman Input for Mini-MRP – Molex
 - ▶ Response to Action Item 836-44 – TE
 - ▶ Response to Action Item 836-45 – TE
 - ▶ Strawman for ARINC 628P1 HD Landscape Camera – Latecoere
 - ▶ Updated Strawman for Project Paper 820 - Boeing

Objectives

- ▶ Review of Current CSS Program and Consideration of New Work Proposals
- ▶ Connectors and Cables
 - Supplement 1 to A800 Part 2 (Specification of Connectors)
 - 10 Gbps Ethernet Octo-ax Contact
 - Supplement 1 to A800 Part 3 (Specification of Cables)
 - Fiber Optic Connectors
- ▶ ARINC 836A – mini-modules
- ▶ PP648 -- Guidance for Seat Production Testing
- ▶ HD Landscape Camera – A628 Part 1
- ▶ CWAP Automatic Region Code Adaptation – A628 Part 1
- ▶ Project Paper 820 (Wireless Networks)
- ▶ Supplement 1 to A832 (Copper/FO Hybrid)
- ▶ 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
 - Support for proposed APIM (HD Landscape Camera, USB 3.1, 628P9)
 - Consider Proposal for standard lighting system interfaces
 - ▶ **ARINC 800, Part 2 (Specification of Connectors)**
 - Create a drawing for A800P2 16-10 insert for inclusion in the specification (A800P2-86)
 - Contact Glenair on their interest in standardizing their Oct 10Gb contact design (A800P2-88)
 - New section that references A845 Expanded Beam fiber contact (A800P2-89)
 - Provide EN4165 references to replace drawings for accessories and shells (A800P2-90)
 - Revise Figures A-10a and A-10b to remove reference to number of fiber termini (A800P2-91)
 - Revise table A-1 to indicate nominal weight for 90 degree inserts (A800P2-92)
 - Review requirement for hermetic sealing for Ku/Ka bulkhead connector
 - ▶ **10 Gbps Ethernet Octo-ax Contact**
 - ▶ **ARINC 800, Part 3 (Specification of Cables)**
 - Include values of transfer impedance into sections 4.1.4 and 4.1.5 (A800P3-23)
 - Provide reference to the transfer impedance appendix (A800P3-24)
 - Review the proposed electrical properties for sections 4.1.4 and 4.1.5 (A800P3-25)
 - Provide derating factor for IL and RL of two braided shields and foil braid/100m (A800P3-26)
- Delta/IA**
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Airbus
CSS/CWG
Amp/TEC
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CWG
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IA
Boeing
Boeing

Tuesday, 9:00 AM – 5:00 PM (Continued)

▶ **Fiber Optic Connectors (PP845 and PP846)**

- Distribute the latest draft of A845 to IFES suppliers (CWG-13)
- Determine whether their FO xcvrs are compatible with A845 termini (CWG-14)
- Add design guidance for placement of fiber termini in an insert to A803 (CWG-15)
- Notify FOS to specify specific insert arrangement for A600 connector (CWG-16)
- Fix references to A809 in the specification (CWG-17)
- Section 2.4 needs to reference the same fiber types as the previous table. (CWG-18)

▶ **ARINC Project Paper 836A (Mini-MRP)**

- Review Strawman Input for mini-modules
- Send IP disclosure paperwork to SQS (836-38)
- Intermateability requirements of connectors in the mini-MRP (836-41)
- Provide proposed simplified drawings for the A836 Mini-MRP (836-43)
- Provide information on the proposed connectors (836-44)
- Provide information on insertion distances, insertion and removal forces (836-45)
- Define grounding concepts (836-46)
- Provide 3D models of mini-MRP connectors to SQS (836-47)

CSS

IA
IFE Suppliers
FOS/IA
IA
IA
IA

CSS

Molex
IA
TEC, Mx, Amp
Molex
Suppliers
TEC
Airbus
Radiall, Amp

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)
- Develop a flow sequence for the seat testing (648-8)
- Provide equipment/wiring configuration and testing flow for example seat installation (648-9)
- Revise first diagram/revise text of proposed section to reflect general case supply chain (648-10)
- Review Thales document on a data driven seat process for seat acceptance (648-11)
- Propose ATP template (648-12)

CSS

Panasonic
IFE Suppliers
ZSF
ZSF
Thales
IFE suppliers
BEA

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

- Review Latecoere proposed revisions to A628P1 for HD Landscape (628 P1-193)
- Provide markup of proposed revisions to A628P1 (628 P1-194)
- **GCOM Discussion Items**
 - ▶ CWAP Test Mode
 - ▶ Status of Regulatory Situation/Coordination

CSS

IFE Suppliers
Latacoere

▶ **Project Paper 820 (Wireless Network)**

- Review proposed strawman and provide comments (820-2)
- Add commentary that loopback may not be needed based on configuration (820-8)
- Add decompression discrete to wiring table (820-9)
- Review connector insert C to consider alternate insert configuration (820-10)
- Propose power consumption value for section 2.2.1 assuming POE for CWAPs (820-11)

CSS

Airbus
CSS

CSS

Suppliers
Boeing
Boeing
Boeing
RCI

Thursday, 9:00 AM – 12:00 Noon

- ▶ **Supplement 1 to A832 (copper/FO hybrid)**
 - Propose fiber location in 16-10 insert/ cross section of hybrid fiber-copper cable. (832-167)
 - Move the Fiber Optic termini from the outboard cavity locations to the middle cavities (832-169)
 - Reword or remove the notes following the figures for the seat to seat wiring diagrams (832-170)
- ▶ **Review Draft 1 of ARINC Specification 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)
- ▶ **Discuss agenda and locations for next meetings**
- ▶ **Adjourn CSS**

Airbus

TEC

IA

IA

CSS

Boeing

Boeing

IA

All

2016 CSS Meetings Planning (Tentative)

	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT
CSS S/C			9-11 Tucson			10-12 Lisbon			23-25 TBD		
Connector WG			Same as CSS			Same as CSS			Same as CSS		
Ku/Ka SatCom SC		13-15 Cocoa Beach			TBD			TBD			
GAIN S/C	No Meetings Planned										
NIS		12-14 Cocoa Beach									
FOS		26-28 Oxnard CA									
SAI			9-11 Coral Gables, FL								
APEX						10-11 TEC					
AEEC				23-24 General Session Atlanta							TBD Mid-Term Session