

Cabin Systems

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

Meeting Agenda

*November 11-13, 2014
Menlo Park, California*

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

Cabin Systems Meeting Agenda

- ▶ Introductions
 - Special Notes
 - ▶ Status of ARINC Industries Activities Transition to SAE
 - ▶ Intellectual Property (Patent & Copyrights)
 - ▶ APIM Guidelines
 - ▶ New Members and Corporate Sponsors
 - Acceptance of Previous Meeting Report (14-137/CSS-547)
 - Current Drafts
 - ▶ Draft 1 of Supplement 2 to ARINC 404B - New
 - ▶ Draft 6 of Supplement 7 to ARINC 628 Part 1 (CWAP) – New
 - ▶ Draft 1 of Supplement 1 to ARINC 832
 - ▶ Draft 1 of Supplement 4 to ARINC 628 Part 9
 - Working Papers Identification
 - ▶ Airbus/IA Strawman for Supplement 1 to ARINC 836 (mini modules)
 - ▶ Boeing Strawman for Project Paper 800 Part 4 (Ethernet Testing)
 - ▶ Draft APIM for Seat Production Testing Guidance
 - ▶ Current CSS Work Program

Objectives

- ▶ Discuss Current CSS Work Program
- ▶ Provide Guidance to the CWG
 - Supplement 1 to A800 Part 2 (Specification of Connectors)
 - Strawman for PP800 Part 4 (Ethernet Testing)
 - Goals and Requirements for 10 GbE Contact
 - Draft 1 of Supplement 2 to ARINC 404B
- ▶ Fiber Optic Hybrid Connectors/Cables
- ▶ Supplement 1 to A836 (Mini-MRP)
- ▶ Discuss Options for Supplement 7 to A628 P1 (CWAP)
- ▶ Project Paper 820 (Wireless Network)
- ▶ Supplement 3 to A628 Part 0
- ▶ Review Seat Integration Activities
 - FAA/EASA Outlet Protection (A809/A832/A628P2)
 - Supplement 1 to A832 (Copper/FO Hybrid)
 - New Proposal for Seat Production Testing APIM
- ▶ 10 GbE – ARINC 664 Part 2
- ▶ Supplement 4 to A628 P9 (Cabin Information Network)
- ▶ Summary from CWG
- ▶ Agenda and Location for Next Meeting

Tuesday-Wednesday, 9:00 AM – 5:00 PM

▶ **CSS Work Program**

▶ **CSS/CWG Joint Session**

– **ARINC 800, Part 2 (Specification of Connectors)**

- ▶ Provide graphic for the 30-23 insert for Figure 4-1b (A800P2-65)
- ▶ Revise the reference datum of the fixation groove to the front of the flange (A800P2-69)
- ▶ Revise drawings and notes on Figures A-7a and A-7b (A800P2-70)
- ▶ Add diameter range for 22, 24, and 26 AWG wire for data interconnect (A800P2-71)
- ▶ Verify voltage range, dielectric max voltage, and max current for 30-23 RM (A800P2-72)
- ▶ Provide justification for inclusion of the 30-23 insert (A800P2-74)

– **Review Strawman of PP800, Part 4 (Cable Testing)**

- ▶ Review proposed test configurations and perform adapter cable testing (A800P4-2)
- ▶ Add a note to Table 3-1 to identify why specific cells are highlighted (A800P4-3)
- ▶ Schedule test adapter cable verification criteria discussion (A800P4-4)
- ▶ Develop a draft of A800P4 for review at the next meeting (A800P4-5)

– **Proposed Supplement 2 to ARINC Specification 404B**

- ▶ Verify that the table in Fig 3 for single connector measurements are correct (A404B-1)

– **Discuss Goals and Requirements for 10 GbE Contact**

– **Fiber Optic (Project Paper 845)**

- ▶ Provide use cases for implementation of MT termini (CWG-11)
- ▶ Distribute the latest draft of A845 to IFES suppliers (CWG-13)
- ▶ Review latest draft of A845 for FO xcvs interoperability with EB termini (CWG-14)

– **Supplement 1 to ARINC Specification 836 (Mini-MRP)**

- ▶ Review proposal for PCB spatial location and connector external position (A836-28)
- ▶ Distribute the Molex MMRP slot location presentation from Gdansk (A836-29)
- ▶ Consolidate the weight information in section 4.1 into a table (A836-30)
- ▶ Add wording in section 5 re: floating plug on tray/ fixed receptacle on enclosure (A836-31)
- ▶ Develop first strawman for A836 supplement 1 (A836-32)

CSS

All

CWG

Amphenol
TEC/Amphenol
TEC
Thales
Thales
Thales

Boeing

Suppliers
Boeing
Boeing/IA
Boeing/IA

IA

Suppliers

CSS/CWG

CWG

Airbus/Thales
IA
IFE Suppliers

CSS

Suppliers
IA
Airbus.
Airbus
IA/Airbus

Wednesday, 9:00 AM – 5:00 PM

▶ **Options for Supplement 7 to A628 P1 (CWAP)**

- Update Figure 18-7 in Attachment 18 and Figures 18-6 and 18-5 (628P1-190)
- Revise figure 18-2 to pin 4=Y, pin 5=R, pin 9=B, pin 10=G. Revise table wording (628P1-191)
- Revise Attachment 18 to incorporate changes to the wiring to the DOM (628P1-192)
- Revert section 16.3 to the version in draft 6 (628P1-193)
- Revise figure 17-1 to remove colors from the ethernet interconnects (628P1-194)
- Incorporate revised figures and tables for CWAP connector pin assignments (628P1-195)

CSS

Boeing/IA

IA

IA

IA

IA

IA

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

CSS

▶ **Discuss Supplement 3 to A628P0**

CSS

▶ **Supplement 4 to A628, Part 9 (Cabin Information Network)**

PAC

- Use cases and configuration for multi domain, single control panel use. (A628P9-4)
- Investigate possible development of USB port control requirements (A628P9-5)

CSS

Boeing/PAC

Thursday, 9:00 AM – 12:00 PM

▶ **Seat Integration Issues**

– **Seat Production Test Guidance**

- ▶ Review Airbus proposal for ARINC Report seat production test requirements (CSS-1)

– **FAA/EASA Outlet Protection (A809/ A832/ A628P2)**

- ▶ Revise APIM 10-005C to update Section 2.2 to include new power guidance (628P2-23)

– **Supplement 1 to A832 (copper/FO hybrid)**

- ▶ Review Sections 2.0 and 5.0 to verify ethernet wiring in overhead network (832-162)
- ▶ Revise Figures 5-10 and 5-11 to show DOMs/CWAPs in the overhead network (832-163)

– **Supplement 4 to A485P2 and Supplement 3 to 485P1 (BITE)**

- ▶ Revise message sequence diagrams E-1 through 3/ ECU option to soft boot (485-P2-17)
- ▶ Develop coordination Draft 2 of 485P2 for distribution (485-P2-18)
- ▶ Develop coordination Draft 1 of 485P1 for distribution (485-P1-12)

▶ **ARINC Specification 664, Part 2 (10 Gb Ethernet)**

- 10 Gbe Matrix - POE power compared to the IEEE specification (CWG-10)
- Develop first draft of supplement 3 for 10 GbE requirements (664P2-4)
- Prepare briefing to FOS for updates to A803 and A804 (664P2-5)

▶ **Summary Report from the CWG Work (A800, PP845, and A664P2)**

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

CSS

CSS

OEM/Suppliers

CSS

IA

AB/Thales

Airbus

Airbus

AB/Th/PAC

PAC

IA

IA

CSS

AB/B/Thales

Boeing

IA/Lumexis

CWG

All

Thursday, Post-meeting (Optional)

- ▶ Tour of TE Connectivity Menlo Park Laboratories
 - Aerospace Advanced Development (R&D) Activities
 - ▶ Carbon Nano Tube Technologies
 - ▶ Composite Materials
 - ▶ Thermal Modeling
 - ▶ Aircraft Antennas
- ▶ Pizza Dinner – Hosted by TE Connectivity (details TBD)

Connector Working Group

- ▶ **Tuesday:**
Meet with the CSS to discuss connector issues needing further guidance
- ▶ **Wednesday-Thursday**
Continue meeting to develop recommendations for Gigabit Ethernet test methods, A832 connections, hybrid fiber optic connectors, and 10Gb Ethernet
 - See the CWG agenda distributed separately

2014-2015 CSS Meetings Planning (Tentative)

	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL
CSS S/C	12-14 Warne- münde Germany			11-13 Menlo Park			9-11 Cocoa Beach (tentative)			TBD		
Connector WG	Same as CSS			Same as CSS			Same as CSS			Same as CSS		
Ku/Ka SatCom SC						20-22 Cocoa Beach						
GAIN S/C	No Meetings Planned											
NIS		23-25 Renton, WA					11-13 Cocoa Beach (tentative)					
FOS				4-6 Newark, Delaware			Same as CSS					
SAI			20-21 Brussels									
APEX		15-18 EXPO Anaheim, CA		17-18 TC						12-13 TC		
AEEC			24 Mid-Term Session Brussels							27-30 General Session Prague		