

AGENDA

MEETING NO. 148

SAE SUBCOMMITTEE G‑3A, AEROSPACE COUPLINGS

THURSDAY, 5 MAR 2015

1:15 p.m. – 2:30 p.m.

1. CALL TO ORDER

2. MEMBERSHIP REVIEW:

3. ROLL CALL OF MEMBERS

The secretary will call the roll of the committee members and record those present or represented. Members arriving late should notify the Secretary of their presence. All members and guests should check off or fill in their names on the computer roster sheet and informal attendance log that will be circulated during the meeting.

4. APPROVAL OF MINUTES OF MEETING NUMBER 147

5. NEW BUSINESS

5.1 New Items

Members, liaison members and guests are encouraged to introduce new items, questions, or simply present information felt to be of interest to the committee. All presentations of a complicated nature or more than a paragraph in length should be prepared in writing with approximately 30 copies available for distribution at the meeting.

5.2 New Projects – No New Projects were assigned since last meeting.

5.3 Panel Reports

5.3.1 AS1895 V-Coupling Panel – Dan Smith is requested to report on panel activities.

* + 1. Fuel Coupling Panel – C. Breay / G. Waugh is requested to report on panel activities.

6. DISCUSSION ITEMS – PROJECT REPORT

6.1 G3A05-05, Revise AS5355/1, /2,& /3

Sponsor: D. Tomsic

Scope: Revise AS53551/1, /2, /3 to resolve a passivation issue and add PRI/QPL data.

Status: D. Tomsic to report.

6.2 G3A06-01, Revise AS5131 Flange Tolerance

Sponsor: P. Hwang and R. Clements

Scope: Revise AS5131 with regard to tolerance on the flange.

Status: P. Hwang to report.

6.3 G3A09-01 High-Beam, All-Metal Self-Locking Hexagon Nuts for T-Bolt Band Clamps and V-Band Couplings

 Sponsor: J. Klamar

Scope: Establish a general specification for the High-Beam Segmented, All-Metal, Self-Locking Hexagon Nuts that are used on the T-bolts that tighten V-Band Couplings, band clamps, and strap assemblies.

 Status: J. Klamar to report

6.4 G3A10-01 Proposed T-Bolt and Eye Bolt, A-286 CRES, 1000 Degree F Fatigue Rated.

 Sponsor: D. Tomsic

 Scope: Bring the specification up-to-date with respect to references, add the QML/QPL requirement, add the requirement for a new size eye bolt and re-evaluate some tests.

 Status: D. Tomsic to report.

6.5 G3A10-02 AS4060 Torque Values

 Sponsor: Cliff Breay / Greg Waugh

 Scope: Review AS4060 Torque Values and Methodology

 Status: Project was cancelled at the Mar 2014 meeting.

6.6 G3A10-04 AS1895 add PRI-QPL.

 Sponsor: M. Scott – NEW SPONSOR NEEDED

 Scope: Add PRI-QPL/QML to the AS1895 procurement specification.

Status: M. Scott to report.

6.7 G3A10-05 AS1895 part standards add PRI-QPL, restore envelope definition for V-couplings.

 Sponsor: M. Scott – NEW SPONSOR NEEDED

 Scope: Add PRI-QPL/QML to part standards. Revise coupling standards to provide envelope control for electronic definition.

Status: M. Scott to report.

6.8 G3A11-03 Revise AS4735 to correct passivation note and add PRI-QPL requirements.

 Sponsor: R. Christianson

 Scope: Correct passivation specification and types and add PRI-QPL requirements.

Status: R. Christianson to report.

6.9 G3A11-04 Revise AS4157 to remove class 5000.

 Sponsor: G. Jenski

 Scope: Revise AS4157 to remove class 5000 since 5000 psi couplings are covered by AS1709.

Status: G. Jenski to report.

6.10 G3A11-05 AS1709 General Update.

 Sponsor: G. Jenski

 Scope: Revise AS1709 to provide general updates.

Status: G. Jenski to report.

6.11 G3A12-01 AS1650 Revision of Pressure Surge and Vibration test requirements and Setups

 Sponsor: C. Breay

 Scope: 1) Clarify the angular offset figure / description.

2) Add "o-ring" failure note. "An o-ring failure does not constitute a failure of the assembled coupling".

3) Change the offset angle between the attached ducts from three degrees to two degrees to match the design constraints for the assembled couplings for the pressure surge and vibration testing.

4) Change the clamp blocks in the pressure surge and vibration tests from the aluminum blocks to NAS1787 or similar nylon saddle clamps.

5) Clarify physical requirements for the axial bearing in the pressure surge test set up to limit rotation within the bearing length.

6) Set the pressure surge cycle requirement to 100,000 cycle for all sizes. -40 size would be changed from the Revision B 60,000 cycles to the same 100,000 cycle requirement as the other sizes.

7) Replace the pressure surge profile in Figure 1 (page 8) with the profile required for SAE AS5830 (Figure 12, page 32). Tighten tolerance envelope to match current technology.

8) Change the operational section of the vibration test to have the specimens filled with test fluid that will have pressurized and unpressurized sections (TBD)

Status: C. Breay to report.

6.12 G3A12-02 AS1650 Correct Typographical Errors

 Sponsor: C. Breay

 Scope: 1) Eliminate the current SAE AS5830 PRI QPL listing issue as soon as possible for PRI, suppliers, and possible customers.

2) Revise the document to establish assembled coupling configurations for light, medium, and heavy duty usage based on structural and functional system requirements.

3) Use the document to be a ‘test requirements and set up’ document for future reference similar to AS1820.

Status: Project cancelled Mar 2014.

6.13 G3A13-02 Update AS5830 QPL

Sponsor: A. Nash

Scope: Remove AS5830 QPL as it is empty and has remained so for some time.

Status: A. Nash to report.

6.14 G3A14-01 AS1718 Correct Drafting Error and Add New Dimension

 Sponsor: K. Chang

 Scope: Correct drafting error in Figure 1. The dimension .500 ±.015 in Section A-A was placed incorrectly. Add one dimensional data column to replace vendor defined dimension to control wall thickness of the AS1718 body. Use Column G from BACC42P, Rev C. (Revised July 2014)

 Status: K. Chang to report.

6.15 G3A14-02 AS1714 Add New Dimensions To Control Wall Thickness

 Sponsor: K. Chang/B. Lee

 Scope: Add two dimensional data columns to replace vendor defined dimensions. Use Columns E and F from BACN10KL.

 Status: K. Chang/B. Lee to report.

7. OLD BUSINESS

8. TIME AND PLACE OF NEXT MEETING

SAE G-3 – Fall Meeting

2015 Aug – Portland, OR

SAE G-3 – Spring Meeting

2016 March – Atlanta, GA

SAE G-3 – Fall Meeting

2016 Sep – Cincinnati, OH

SAE G-3 - Spring Meeting

2017 March – Munich, Germany

9. ADJOURNMENT OF MEETING