

## **Attachment No. 1**

### **Minutes of the CE-2.1 Subcommittee on Test Procedures 28 – 29 April 2009 New Orleans, LA**

Subcommittee Chair Carl Fritz welcomed everyone, and said that the meeting would be conducted following the published agenda.

#### **1. Approval of the 6 – 7 October 2008 Minutes**

The minutes of the 6 – 7 October 2008 meeting in Salt Lake City, UT were approved. Moved by Don Chambers and seconded by Ralph Antonelli. The motion was unanimously moved and approved.

It is noted that all actions taken by the subcommittee will be simultaneously approved by the CE-2.0 committee.

#### **2. TEST PROCEDURE PROJECTS (BY PROJECT NUMBER)**

##### **A. PN-4943, TP-65, MFG (Max Peel)**

Carl Fritz reported, for the record, that a Letter ballot was issued 10 July 2003. Confirmation with ECA indicated the project number is still good and can be used for the SP ballot. Carl Fritz presented a revised draft of the subject standard to the committee.

The committee reviewed the revised draft prepared by Max Peel. Frank Ruffino indicated that he had several other comments to be considered for clarification. He will provide those comment to Max Peel. It was also discussed to consider replacing the existing cleaning process with a specific ASTM procedure. The project leader will consider incorporating comments provided by Frank Ruffino as well as considering the ASTM cleaning process.

It was moved by John Healey and seconded by Don Chambers to send the standard to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

Frank to provide Max with his comments on the most recent copy. Carl provided Frank with the latest marked copy of the file dated 6oct08.

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B. SP-5083, TP- ~~5, 7, 8, 24, 25, 27, 37, 40, 44, 79, 85, 87, 88, 93, 94, 97, 98~~ (J. Toran)\*\*

Carl notified EIA that TP-25 should be reaffirmed as well. At the time the letter was sent to reaffirm the standards TP-25 was under review for revision. Since then the project leader has officially withdrawn any recommended changes and the project is cancelled at the April 2007 meeting.

Notified EIA on 9 November 2008 that there was no need to reaffirm TP-87 since it is being revised under SP-5181.

Notified EIA on 12 March 2009 that there was no need to reaffirm TP-37B since it is being revised under SP-5184.

Standards TP-05B, 08B, 24B, 25C, 27B and 40B were published on 3 March 2009 and received by US Mail on 27 March 2009.

Standards TP-79, 85 and 93 were published on 10 March 2009 and received by US Mail on 27 March 2009.

Standard TP-88 was published on March 11, 2009, TP-94 and 98 were published on 25 March 2009, and TP-98 was published on 23 March 2009 and all were received by US Mail on 11 April 2009.

TP-44 needs to be reaffirmed.

C. SP-5107, EIA-364-1002, Test Methodology for Assessing the Performance of Compliant Contact Terminations Used as Free Standing Contacts or in Electrical Connectors and Sockets (Max Peel)

Carl Fritz reported that the standard was published on 8 October 2008 and received by US Mail on 10 November 2008.

D. SP-5108, TP- ~~2, 3, 9, 13, 14, 26, 28, 35, 38, 42, 50, 54, 95, 99, 100, 102 and 103~~ (C. Fritz)\*\*

Carl Fritz reported that after checking the web that TP-14B was reaffirmed Mar 27, 2006 and TP-28E was revised August 2006.

This should close out SP-5108.

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E. SP-5143-1, EIA-364-1000, Environmental Test Methodology for Assessing the Performance of Electrical Connectors and Sockets Used in Controlled Environment Applications (John Healey)

*Carl Fritz reported that confirmation with EIA following the meeting confirmed that there were 7 approved ballots received by the ballot expiration date.*

Sent the standard and cover memo (mccwil357) to EIA for EDEC ballot on 6 November 2008.

Standard was published 11 December 2008 and received by US Mail on 31 December 2008.

F. SP-5174-1 (previous designation PN-3787), EIA-364-1004, Environmental Test Methodology for Verifying the Current Rating of Free-Standing Power Contacts or Electrical Connectors and Sockets (Max Peel)

*Confirmation with EIA following the meeting confirmed that there were 6 approved ballots and 3 rejections received by the ballot expiration date. The rejections were received from John Healey, Frank Ruffino and Vince Pascucci.*

- The following e-mail was received from John Healey on 6 October 2008.

In a message dated 10/6/2008 6:02:31 P.M. Eastern Daylight Time, hjhealey@us.ibm.com writes:

Cecelia, Here's my negative ballot. The major reasons for my disapproval are 1) I still do not agree with the sample sizes selected; 2) para. 3.1.7 and Table 1 cause confusion over which test sequences are appropriate; and 3) there is no means for determining the test parameters that should be used for a particular application.

- The following e-mail reply was sent by Max Peel to John Healey on 15 October 2008 on his negative ballot.

John,

This is to acknowledge receipt of your negative ballot. I have reviewed your comments and the following is the disposition of same.

1) Sample size: Not accepted. No alternative was indicated. The document allows the sample size to be whatever the user agency desires. All they have to do is to specify what they want. The numbers in the document are simply default levels

2) I will clarify the statements in 3.1.7 and Table 1. If changes are required they will be classified as clarification.

3) Test Parameters: Not accepted. The intent of this document is not to set test parameters or create a performance document. It was initiated to establish a test sequence that would be common. The test parameters has to come from the user agencies. The reason for this is that there are no dominate set of parameters or requirement that is in use. It appears that the severity levels, durations and requirements are based on the desires of each individual company and their own preferences based on specific applications. In other words, they are all different.

Regards,

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Carl reported that after Max Peel reviews and replies to all negative ballots and revise the standard to resolve the issues. It was moved by Frank Ruffino and seconded by Dave Bouzek to sent out the revised standard on a short 30-day SP ballot. The motion was unanimously approved.

G. SP-5175, EIA-364-75, Lightning Strike Test Procedures for Electrical Connectors (Don Chambers)

*Confirmation with EIA following the meeting confirmed that there were 6 approved ballots and 1 abstains received by the ballot expiration date.*

Sent the following e-mail and Memorandum to those present at the October 2008 EIA-CE-2.0 meeting on 2 December 2008.

Good morning Gentlemen, I hope you all had a wonderful and filling Thanksgiving. I have attached a memorandum to move the subject standard to EDEC ballot since it was not noted in the minutes. The memorandum should be self explanatory. Please indicate your preference on the attached memorandum and send to Cecelia Yates @ [cyates@ecaus.org](mailto:cyates@ecaus.org) and copy me @ [lumby73@aol.com](mailto:lumby73@aol.com). I am trying to keep

projects moving and do not want this to wait until next spring. If you would please do it  
I would appreciate it. I have sent this to all present at the October 2008 meeting.

**now**

Kind regards Carl Fritz, secretary EIA CE -2.0 committee.

Sent standard and cover memo (mccwil366) to EIA for EDEC ballot on 10 December 2008 on behalf of Don Chambers.

Standard was published on 13 January 2009 and received by US Mail on 26 January 2009.

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### MEMORANDUM TO CE-2.0 NATIONAL CONNECTOR STANDARDS COMMITTEE

To: EIA CE-2.0 committee members

Re: Draft Proposal of EIA-364-75A "Lightning Strike Test Procedure for Electrical Connectors"

As Chairman of the CE-2.1 subcommittee I am requesting that the subject standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

The following is from the minutes of the October 2008 EIA CE-2.0 committee, chaired by Mr. Frank Ruffino, as part of the EIA-CE-2.1 subcommittee report.

SP Ballot issued 20 August 2008 with a ballot expiration date of 20 October 2008.

Carl reported that EIA had received 6 approved ballots thus far.

*Confirmation with EIA following the meeting confirmed that there were 6 approved ballots and 1 abstains received by the ballot expiration date.*

As reported in the minutes of the October 2008 meeting, and confirmed with EIA following the meeting, there were sufficient approved ballots received, and no rejections, to move the standard to EDEC ballot. In the interest of time it is my desire to respect the wish of the project leader and move the standard to EDEC ballot. However, since that motion was not included in the October 2008 minutes a poll of the members present at the October 2008 meeting is required.

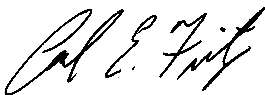
**I have prepared this memorandum to move and approve this standard to EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.**

[ ] I approve of this action : (Name: \_\_\_\_\_).

[ ] I disapprove of this action: (Name: \_\_\_\_\_).

**Please take the time right now to return this memorandum stating your preferred action to Cecelia M. Yates and Carl Fritz at [cyates@ecaus.org](mailto:cyates@ecaus.org) and [lumby73@aol.com](mailto:lumby73@aol.com) respectively.**

Thank you for your assistance in this matter.



APPROVED: Carl E. Fritz, Chairman CE-2.1 Subcommittee

DATE: 2 December 2008

Distribution (Members present at the October 2008 EIA CE-2.0 meeting):

Ralph Antonelli (*Approved 2 December 2008*)  
David Bouzek (*Approved 2 December 2008*)  
Don Chambers (*Approved 2 December 2008*)  
Carl Fritz (*Approved 2 December 2008*)  
H. John Healey, PhD (*Approved 2 December 2008*)  
Kevin Rickard (*Approved 2 December 2008*)  
Frank Ruffino (*Approved 2 December 2008*)  
Ken Lim (*Attended as Guest*) (*No reply*)

cc: Don Chambers

Request for EDEC approval EIA -364-75A

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H. SP-5176, Standards Due for 5-Year Review, EIA-364, TP-04, 16, 30, 33, 69, and 78 (C. Fritz)

*Carl Fritz reported that confirmation with EIA following the meeting confirmed that there were 9 approved ballots received by the ballot expiration date.*

Sent letter (mccwil358) to EIA for EDEC ballot to reaffirm all listed standards on 7 November 2008.

Received all standards as reaffirmed by US mail on 14 March 2009.

I. SP-5177, TP-03A, Altitude Immersion Test Procedure for Electrical Connectors (C. Fritz)

Carl reported that he sent standard and cover memo (mccwil361) to EIA for EDEC ballot on 11 November 2008. Sent letters acknowledging the unofficial comments that were received from Dave Bouzek for [Ronnie Peterson (SAE) mbouzek4] and [Eric Shelpler (SAE) mbouzek5].

Standard was published on 3 March 2009 and received by US Mail on 23 March 2009.

J. SP- 5179, TP-112, Effective Resistance of Parallel Circuits Test Procedure for Electrical Connectors and Sockets (Frank Ruffino)

Carl reported that he sent standard, cover memo (mccwil369), and Background Data Sheet to EIA for a SP ballot on 5 March 2009 on behalf of Frank Ruffino.

SP Ballot issued 10 March 2009 with a ballot expiration date of 11 May 2009.

During the meeting paragraph 1.3 and 3.2 were revised for clarification. See revised standard dated 28apr09.

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K. SP-5181, TP-87A, Nanosecond Event Detection (Max Peel)

Carl Fritz reported the he sent standard, cover memo (mccwil360), and Background Data Sheet to EIA for a SP ballot on 9 November 2008 on behalf of Max Peel.

Ballot issued 14 November 2008 with a ballot expiration date of 15 January 2009.

- Received the following approved ballot with editorial comments from Don Chambers by e-mail on 9 February 2009:

1. I suggest revising para 1.2.3 as follows: ..... mechanisms **then those** used for **t**he 1.0 microsecond ....

Reason: Readability

2. Revise para 3.1.1.1.1: Add space after 2 IEC 801-2, ed 2:91).

Reason: Readability

3. Revise para 3.1.3.1.3: .... determined on the **calibration** plot.

Reason: Not everyone reading this document will be familiar with US shorthand. Readability.

4. Revise para 3.1.4.4: .... 100 milliamperes **±** 20 milliamperes ....

Reason: Omission of ± symbol from tolerance.

*Confirmation with EIA following the meeting confirmed that there were 5 approved ballots, 1 abstains and 1 approved ballot with comments from Don Chambers received by the ballot expiration date.*

Sent the standard and cover memo (mccwil371) to EIA for EDEC ballot on 20 February 2009. Sent letter accepting the favorable ballot with editorial comments from Don Chambers (mchambers) on behalf of Max Peel

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L. SP-5183, EIA-364-1000.01, Environmental Test Methodology for Assessing the Performance of Electrical Connectors and Sockets Used in Controlled Environment Applications (John Healey)

Supersede standard by EIA-364-1000.

Sent cover memo (mccwil359) and PINS form to EIA requesting a project number on 9 November 2008 on behalf of John Healey.

Received project number PN-5183 on 11 November 2008.

Sent the standard, cover memo (mccwil362), Background Data Sheet, and draft ballot to EIA for SP ballot on 13 November 2008 on behalf of John Healey.

Ballot issued 13 November 2008 with a ballot expiration date of 13 January 2009.

*Confirmation with EIA following the meeting confirmed that there were 8 approved ballots received by the ballot expiration date.*

Sent the following e-mail and Memorandum to those present at the October 2008 EIA-CE-2.0 meeting on 18 February 2009.

Sent standard and cover memo (mccwil370) to EIA for EDEC ballot on 19 February 2009 on behalf of H. John Healey.

Standard was published on 24 February 2009 and received by US Mail on 23 March 2009.

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**MEMO TO CE-2.0 NATIONAL CONNECTOR STANDARDS COMMITTEE**

To: EIA CE-2.0 committee members

Re: SP-5183 EIA-364-1000.01A: Environmental Test Methodology for Assessing the Performance of Electrical Connectors and Sockets Used in Controlled Environment Applications

The Chairman of the CE-2.1 subcommittee is requesting that the subject standard be sent to EIA for EDEC ballot and publication as an EIA Standard indicating that it has been superseded by EIA-364-1000. In addition the standard should also be submitted to ANSI for publication as an American National Standard indicating that it has been superseded by EIA-364-1000.

Normally the formal committee action to approve the document for EDEC ballot would occur during a stated committee meeting. The project leader has informed the CE-2.1 subcommittee chairman that there has been 6 approved ballots received, and no rejections or comments, to SP-5183, that expired on 13 January 2009. It is the opinion of the chairman of the CE-2.1 subcommittee that this should not wait until the next stated meeting in April 2009 for EDEC ballot approval.

**In order that we can proceed to EDEC ballot to supersede this standard without further delay, I ask that you vote to approve proceeding to EDEC ballot.**

**Please take the time right now to return your email stating your preference to Cecelia M. Yates at [cyates@ecaus.org](mailto:cyates@ecaus.org), by 25 February 2009.**

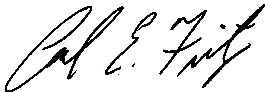
I approve this action.

I disapprove this action.

Name: \_\_\_\_\_

Thank you for your assistance in this matter.

Carl E. Fritz, Chairman CE-2.1 Subcommittee



DATE: 18 February 2009

- Ralph Antonelli (*Approved 18 February 2009*)
- David Bouzek (*Approved 18 February 2009*)
- Don Chambers (*Approved 18 February 2009*)
- Carl Fritz (*Approved 18 February 2009*)
- H. John Healey, PhD (*Approved 18 February 2009*)
- Kevin Rickard (*Approved 18 February 2009*)
- Frank Ruffino (*Approved 18 February 2009*)

cc: H. John Healey (IBM)  
F. Ruffino (Chairman EIA CE-2.0 Committee)

Distribution (Members present at the October 2008 EIA CE-2.0 meeting):

Request for EDEC approval EIA -364-1000.01A

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M. SP-5184, TP-37C, Contact Engaging and Separating Force (Carl Fritz)

Carl reported that he sent cover memo (mccwil363) and PINS form to EIA requesting a project number on 13 November 2008.

Received project number PN-5184 on 20 November 2008.

Sent the standard, cover memo (mccwil364), Background Data Sheet, and draft ballot to EIA for SP ballot on 25 November 2008.

Ballot issued 9 December 2008 with a ballot expiration date of 9 February 2009.

- Received the following e-mail from Dave Bouzek on 15 December 2008:

Karl,

Here is a comment from SAE, Glenair, regarding EIA-364-37. We can discuss at our next meeting and I'll send any more should they come in.

Dave

The following is the contents of the attached letter:

Date: 15-Dec-08

To: EIA Committee

From: Alan Miklos / Pat Oakes - Glenair, Inc.

Subject: Review of EIA-364-37 Rev B, Contact engagement and separation force

Reference: Comments / Change Recommendations

The following changes and supporting rationale statements are intended to communicate recommendations for consideration and incorporation into the subject specification to help minimize any potential industry issues with respect to the requirements stated within the body of this document. The specific recommended wording or technical changes to be addressed are shown in blue font for ease of identification.

### **EIA test methods A, B, and C:**

**1). Technical:** The different test methods in this procedure, paragraph 4.1, Method A, paragraph 4.2, Method B, and paragraph 4.3, Method C, do not align with the procedures in MIL-STD-1344, test method 2014. 2014 identifies the different methods as procedure I and procedure II. Many tier component specifications including AS39029 either call out the basic 2014 method or procedure I or procedure II, which leaves no traceable path between the EIA methods and the 1344 procedures.

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Current Wording: Paragraph 4.1, Method A, gauges-Paragraph 4.1, Method B, approved mating component-Paragraph 4.3, Method C, gauge force.

Recommended Wording: The following cross reference table should be added to the document.

MIL-STD-1344 2014 Test method	EIA 364-37 Test method
Procedure I	Method A
Procedure II	Method B
	Method C

Rationale: The additional cross reference table will link the previous 1344 procedures to the appropriate EIA methods.

- My reply to Dave Bouzek on 16 December 2008:

Dave, I just checked and the comment submitted by Alan Miklos is correct. I did not notice a mismatch in procedure/method designations in this standard. We should be able to add the table as an annex in the standard like we have done in others at the next meeting. The addition of the annex is non-technical and would be added for clarification and not require a new ballot. Regards and happy holidays, Carl

*Confirmation with EIA following the meeting confirmed that there were 8 approved ballots received by the ballot expiration date. In addition there was 1 unofficial comment received from Dave Bouzek on behalf of SAE. To be discussed at the April 2009 meeting.*

It was moved by Don Chambers and seconded by Kevin Rickard to add the cross reference to the standard as an informative annex for clarification. The motion was unanimously approved.

See revised standard dated 28 APR 09

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N. SP-5185, TP-52B, Test Procedure for Solderability of Contact Terminations Use in Connectors / Sockets (Max Peel)

Carl reported that he sent cover memo (mccwil367) and PINS form to EIA requesting a project number on 15 December 2008 on behalf of Max Peel.

Received project number PN-5185 on 16 December 2008.

Sent the standard, cover memo (mccwil368) and Background Data Sheet to EIA for SP ballot on 5 January 2009.

Ballot issued 9 January 2009 with a ballot expiration date of 9 March 2009.

*Confirmation with EIA following the meeting confirmed that there were 8 approved ballots received by the ballot expiration date. There were no comments or unfavorable ballots received.*

Sent standard and cover memo (mccwil372) to EIA for EDEC ballot on 16 March 2009 on behalf of Max Peel.

Standard was published on 1 April 2009 and received by US Mail on 13 April 2009.

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O. SP-5180, TP-41E, Cable Flexing (Max Peel)

Sent Max marked copy of draft form Don Chambers to review on 22 February 2009.

- The following is my reply to Max's e-mail of 24 February 2009:

Max, I will not do anything until I hear from you. I have looked over the standard and offer the following from my recollection of discussions at the meeting.

Regarding the 360 degrees. Paragraph 2.1.1.1 is addressing 2 issues. The first issue is indication that the cyclic rate is 12 - 14 cycles per minutes. The second issue dealing with the 360 degrees is defining what 1 cycle constitutes. It constitutes going for example from left horizontal to vertical 90 degrees then to right horizontal, and finally returning through the vertical to left horizontal. The total excursion is 4 time 90 degrees or 360 degrees.

Regarding the weight. Paragraph 3.2.1.3. This paragraph is attempting to address very large cables having multiple conductors. These assemblies normally contain very large metal shell connectors. The intent here was to establish a weight as a function of a given length of length. Hanging a weight of 1 pound on this would have no effect.

Both issues may require some wordsmithing. I hope this is of some help.

Regards, Carl

- The following is Max's reply to my e-mail of 24 February 2009:

In a message dated 2/23/2009 4:32:32 PM Eastern Standard Time, MaxConRes writes:

Carl,

I have reviewed the revision and cannot agree at this time to submit it for a vote. Looks like some changes have been made which changes the objective of the document beyond my intention, For example, the total angle of bend should be 180 not 360 degrees The second one deals with the weight determination which I have no idea where that comes from. The intent of the 1 pound weight is simply is to take the slack out of the cable not to put stress on the cable. So I will have to review the proposal and straighten it out. Please do not submit this document for a vote until I accomplish this. Should be able to do this within a week.

Regards,

Carl notified the committee that he will submit revised draft as is for SP ballot. Don Chambers agreed to comment on SP ballot .

\*\* Past due for 5-year review

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### 3. TEST PROCEDURES AWAITING PROJECT NUMBERS (BY TP NUMBER)

#### A. EIA-364-31D, Humidity Test Procedure for Electrical Connectors and Sockets (Max Peel)

Carl Fritz reported that sent Max Peel draft working copies that split this standard into 2 standards on 11 December 2008.

#### B. TP-79, Insert Bond Strength (Don Chambers)

Kevin Rickard has agreed to take this on as a new project. It was moved by Don Chambers and seconded by Kevin Rickard to obtain a project number and send to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

### 4. OTHER BUSINESS

#### A. Current overload

There is a need for this procedure. Max has requested that a project leader be established. In new mil dwg 89065? And a series of contacts the NAC was involved in and referenced in the blade and tuning fork spec.

The committee has agreed to consider this in the future.

#### B. Check 38999 that are not covered by a test procedure. 26482? See what tests are not unique to a specific specification. Consider developing a TP only if it has multiple applications.

This includes adding a vibration sweep method to the vibration TP-28. This is for residence surge. Spelled out in 38999 clause 4.5.23.2.3.

Electrolytic erosion, spelled out in 38999 clause 4.5.35.

Ralph Antonelli has agreed to provide Carl with a list of tests contained in 38999 that are not covered by a test procedure. Carl has agreed to prepare a draft for the next meeting.

#### C. TP-66, Shielding Effectiveness (Ralph Antonelli)

Received comments from Deutsch via Don Chambers that were presented at the SAE meeting in October 2008, see TP-66 comments from Deutsch.  
**(See Attachment No. 9 for Deutsch comments).**

Ralph reported that he has requested a copy of a report written by M. L. Crawford and J. M. Ladbury from IEEE that was the basis for TP-66. He will make comparisons and try and resolve any difference after he has an opportunity to review the report.

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D. TP-23, Low Level Contact Resistance (Carl Fritz)

*The following comment was received from Frank Ruffino following the meeting as a result of reviewing the draft minutes.*

*The options for correcting for thermal EMF's are a requirement and are not meant to be informative. The test lab must use one of the options. The sentence in 4.0 states "One of the following options shall be used to correct for thermal EMF's. " We do not want to change that. Thermal EMF's need to be corrected when making the LLCR measurement.*

The committee unanimously agreed with Frank Ruffino's assessment. No further action is required and this project is closed.

### 5. NEW BUSINESS

A. Standards Due for 5-Year Review, SP-XXXX, EIA-364, TP-51, 58, 80, 96 and 109

### 5 Standards Due for 5 Year review

Test	EIA-364 TP	Rev	Date of last issue	5 Year due date	Years past due	Comments
Ice resistance of mated connectors	51	A	November-02	October-07	1	Published Nov 02
Temperature life (with mechanical loading for connectors with removable contacts)	58	A	July-03	June-08	1	Published Jul 03
Low frequency shield strength	80		<del>November-02</del>	<del>October-07</del>	4	<del>Published Nov 02</del>
Plating through hole integrity	96		October-02	October-07	1	Published Nov 02
Loop Inductance (1 nH - 10 nH)	109		May-03	April-08	1	Published May 03

NOTE: Document format up to date on all of the above listed standards for 5-year review.

It was moved by Don Chambers and seconded by Ralph Antonelli to obtain a project number to reaffirm the listed standards, and send to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard. TP-80 will be revised as a separate project.

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### B. TP-80, Kevin Rickard

Kevin Rickard has requested to revise the subject standard to address the 1 ohm resistance as part of the reference measurement. It was moved by Kevin Rickard and seconded by Don Chambers to obtain a project number, and send the standard to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

### C. EIA-364-45A Firewall flame Test

- Carl Fritz reported that he received the following inquiry from Bob Willis on 13 January 2009 from:

Chris Kieser  
Special Projects Engineer

Environ Laboratories LLC  
9725 Girard Avenue South  
Bloomington, MN 55431-2621  
www.environlab.com  
Direct Line: 952-567-2308  
Phone: 952-888-7795  
Toll Free: 1-800-826-3710  
Fax: 952-888-6345

The inquiry was as follows:

I would like to speak with someone on this stands committee (CE -2.0 National Connector Standards Committee) to get clarification of some test equipment required (specifically the burner required and where they may be acquired).

- Carl Fritz reported that he provided the following reply to Chris Kieser that he received from Kevin Rickard on 26 January 2009:

We use a Maxon Premix (Muncie, Indiana) Turistick TITE #928 with a Matheson Regulator model 8L350. I believe both companies are still in business but the model numbers are old and may require contact with the appropriate companies for their replacement model numbers. We use a large cylinder of Methane for the fuel. I hope this helps. The real trick of this test is getting just the right placement of the thermal couple. Also do not expect a steady state flame temperature. Shoot for the average.

Carl Fritz proposed that the committee may wish to consider adding this information to the test standard for clarification.

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The unanimously agreed to take this on as a new project. Don Chambers has agreed to accept the review as project leader. It was moved by Don Chambers and seconded by Frank Ruffino to obtain a project number, and send the standard to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

### D. EIA-364-10E, Fluid Immersion

Carl Fritz reported that he received an e-mail from Trevor William (UK) via Don Chambers on 15 December 2008 regarding the addition of a new test fluid for deicing aircraft runways.

Don Chambers and Dave Bouzek will discuss this with Trevor Williams at the SAE meeting in May.

- Carl Fritz sent the following e-mail to Trevor Williams following the meeting.

*Trevor Williams, I presented your request to add a new test fluid for deicing aircraft runways at the EIA CE-2.0 meeting on 26 April 2008. Don Chambers and David Bouzek have agreed to discuss this with you at the May 2009 SAE meeting. The committee will act on their recommendation at the October 2009 EIA CE-2.0 meeting. Kind regards, Carl Fritz*

- The following reply was received from Trevor Williams on 1 May 2009.

*Hi Carl*

*Thank you for your response.*

*I look forward to meeting with Don and Dave (I know both of them well) and I am sure that we will have meaningful discussions.*

*For interest, the same fluid is causing concern to the cable committees because it is reported to be aggravating arc tracking of cable looms.*

*Best regards*

### E. J-STD-075 (Requested by Frank Ruffino)

Discuss the merits of developing a TS standard to outline tests necessary to evaluate connectors and determine the PSL (Process Sensitivity Limits) Level in J-STD-075.

J-STD-075 has PSL levels for Wave and Reflow compatible connectors, however there is no evaluation method or criteria specifically for connectors.

The unanimously agreed to take this on as a new project to develop a document to determine the PSL (Process Sensitivity Limits) of connectors as related to J-STD-075. Frank Ruffino has agreed to accept the review as project leader. It was moved by Frank Ruffino and seconded by Kevin Rickard to obtain a project number, and send the standard to EIA for a SP ballot. The

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motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

F. TP-78A, Cavity – to – Cavity Leakage Bonding Integrity Test Procedure for Electrical Connectors

- Received this e-mail from Don Chambers on 17 March 2009:

In a message dated 3/16/2009 6:04:18 PM Eastern Daylight Time, Don.Chambers4@ngc.com writes:

Carl,

I was looking at TP-78 and noticed something curious. Are the connector end seal plugs supposed to be the same as MS27488?

- My reply to Don on 17 March 2009:

Good morning Don, I am glad to see that you are reading these things. It beats reading the dictionary or phone book. I checked in the original release of TP-78 dated September 1991 and found indeed that in clause 2 it stated that "The appropriate electrical connector end seal plugs similar to MS27488 are suitable for this purpose." I think the reasoning at the time was to include what was in MS27488 in the standard and not chase someone to another document. Also by having the information directly in the standard we would have control of the content, in the event that the military changed MS27488. We did not want to get into the "chicken and egg" situation as to which takes precedence. I think the intent was also to verify that the compliance to the MS is there when this standard is revised. I guess it would not hurt if we indicated the association in the TP as reference information. Worthy of consideration. Hope this answers your question. Carl

The unanimously agreed to take this on as a new project to revise the standard. Don Chambers has agreed to be project leader. It was moved by Don Chambers and seconded by Kevin Rickard to obtain a project number, and send the standard to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

G. EIA-364-88 Residual Magnetism (Carl Fritz)

Carl Fritz indicated that this standard in its present form belongs in a museum. The standard is so old that it unavailable in electronic form. Need to revise format and create an electronic version. Request permission to obtain a project number to revise and send out on SP ballot. Also request permission that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard. (See draft revision dated 15 April 2009.)

## Attachment No. 1

The unanimously agreed to take this on as a new project to revise the standard. Carl Fritz has agreed to be project leader. It was moved by Don Chambers and seconded by Kevin Rickard to obtain a project number, and send the standard to EIA for a SP ballot. The motion was unanimously approved. It was also unanimously moved and approved that if there are sufficient ballots and no rejections received that the standard be sent to EIA for EDEC ballot and publication as an EIA Standard. In addition the standard should also be submitted to ANSI for publication as an American National Standard.

### H. EIA-364-91 Dust Test

There appear to be a problem obtaining the dust specified in this standard.

Contact: Jeff Fredericks, (952) 894-8737, [Jeff@powdertechnologyinc.com](mailto:Jeff@powdertechnologyinc.com)

This company is considering making the dust.

#### **POWDER TECHNOLOGY, INC.**

14331 Ewing Avenue, South  
Burnsville, MN 55306  
PH: (952) 894-8737  
Fax: (952) 894-0734  
Toll Free: (800) 718-8737

Other supplier: Sun Belt has not replied to numerous calls.

The committee has agreed to take this under advisement if the supplier agrees to make the dust.

### I. TP-83, Shell - to - Shell Conductivity (Kevin Rickard)

The unanimously agreed to take this on as a new project to revise the standard. Kevin Rickard has agreed to be project leader. It was moved by Kevin Rickard and seconded by Don Chambers to obtain a project number for the purpose revising the standard and send out on letter ballot or SP as determined by the project leader. Kevin will present a draft revision at the next meeting.

### J. New TP for Ultra Violet Radiation (Don Chambers)

The unanimously agreed to take this on as a project to create a new TP. Don Chambers has agreed to be project leader. It was moved by Don Chambers and seconded by Kevin Rickard to obtain a project number and send out on letter ballot or SP as determined by the project leader.

Respectfully submitted,

Carl Fritz, Chairman CE-2.1