



8 August 2017

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Meeting Announcement

Committee: TC-2; Electromagnetic Compatibility (EMC) Measurements
Place: Gaylord Hotel
Date: 8 August 2017 (Tuesday)
Time: 7:00 to 8:30 AM
Room: Chesapeake JK
Continental breakfast available

MINUTES

1.0 Call to Order/Introductions

Meeting was opened by Chair, Don Heirman, at 7:15AM. All in attendance introduced themselves and signed roster.

Table with 3 columns: Name, Company, Member. Lists attendees such as David Arnett, Ross Carlton, Zachary Crane, etc., and their attendance status (Y/N).

2.0 Approval of [2016 Minutes](#) from IEEE EMC TC-2 meeting (26 July 2016) in Ottawa, Canada at the IEEE EMC+SIPI Symposium.  
Approved by unanimous vote.

### 3.0 Committee Membership Status

#### 3.1 Removal of non-active participants from membership roster.

Membership indicates that you have attended the TC-2 committee meeting at least two (2) or more times in the last four (4) years; candidates are shown as attending a single meeting on or after 2013 and no other. By committee rules, these candidates are not members of TC-2 unless they attend a second face-to-face symposium meeting within a four year period.

All attendees will initial the sign-in roster. After the National Harbor TC-2 meeting, those that have not attended a face-to-face TC-2 meeting since 2014 will no longer be a TC-2 member but will remain on the list for one additional year to receive meeting announcements. Those that have not attended a face-to-face TC-2 meeting since 2013 will be removed from the list.

(See the 2017 membership list which is also the meeting sign-in roster.)

### 4.0 Current Symposium Activity, August 2017

4.1 Symposium paper review status (top paper, top TC-2 paper, Round 2 reviewing, etc).  
TC2 reviewed 32 papers and accepted 22 (18 presentations; 4 posters). Rejection rate 32%. TC2 sponsored four half-day technical sessions and one half-day workshop/tutorial.

### 5.0 Standards Sponsorship Support Review

Below is an excerpt of information from the full matrix from the EMC Society Standards Development and Education Committee (SDECom) web site.

Ed Hare, VP for Standards, briefly presented each of the standards topics in the list below. The purpose was to familiarize TC2 members that the vast majority of the society standards deal with measurements in some way and that TC2 should continue to support this cooperation and coordination. It was noted that many TC2 members are on the working groups for most of these standards. This emphasizes the cooperative nature between SDECom and TC2.

During the meeting, TC2 identified the priorities of TC2 engagement on these standards. This discussion is captured in the added last column.

IEEE Standard	Title	Expiration Date	Status	Chair and Sponsor Contact	Priority
Std.139-1988	IEEE Recommended Practice for the Measurement of RF Emission from ISM Equipment on User's Premises	Expires: 12/31/2022	Status: Current standard: Status: Reaffirmed 2012	Sponsor contact: <a href="#">Ed Hare</a> Past Chair: Daniel Weinberg	Low
Std. 187-2003 Project 187	Standard Measurement Methods of Emissions from FM and Television Broadcast Receivers in the Frequency Range of 9 kHz to 40 GHz	Expires: 12/31/2018	Status: Current standard Status: Reaffirmed 2008 Status: Being updated	Chair: <a href="#">David Traver</a> Vice Chair: Mark Arthurs Secretary: Sponsor contact: <a href="#">Ed Hare</a>	High
Std. 299-2006	IEEE Standard Method for Measuring the Effectiveness of Shielding Enclosures (ANSI Recognized)	Expires: 12/31/2022	Status: Current standard Status: Reaffirmed 2012	Sponsor contact: <a href="#">Ed Hare</a> Past Co-Chair: <a href="#">Dale Svetanoff</a> Past Co-Chair: <a href="#">Maria Sarto</a>	Low

Std. 299.1-2013	IEEE Standard Method for Measuring the Shielding Effectiveness of Enclosures and Boxes Having Dimensions Between 0.1 and 2m	Expires: 12/31/2023	Status: Current Standard	Sponsor contact: <a href="#">Ed Hare</a> Past Chair: <a href="#">Maria Sarto</a>	Low
Project 370	Electrical Characterization of Printed Circuit Board and Related Interconnects at Frequencies up to 50 GHz	New project	Status: In progress	Chair: Xiaoning <a href="#">Ye</a> Vice Chair: <a href="#">Sam Connor</a> Vice Chair: <a href="#">Brice Achkir</a> Secretary: <a href="#">Alistair Duffy</a> Sponsor contact: <a href="#">Ed Hare</a>	Medium
Std. 377-1980	IEEE Recommended Practice on the Measurement of Spurious Emissions from Land-Mobile Comm. Transmitters (ANSI Recognized)	Expires: 12/31/2018	Status: Current standard	Sponsor contact: <a href="#">Ed Hare</a> Past Chair: Joseph Koepfinger	Low
Project 473	Recommended Practice for an Electromagnetic Site Survey (10 kHz to 40 GHz)	Withdrawn New project	Status: Withdrawn 2005 Status: In progress	Chair: <a href="#">Chad Kiger</a> Vice Chair: <a href="#">Karen Dyberg</a> Secretary: <a href="#">Ed Hare</a> Sponsor contact: <a href="#">Ed Hare</a>	High
Std. 475-2000	Measurement Procedure for Field Disturbance Sensors, 300 MHz to 40 GHz (ANSI Recognized)	Expires: 12/31/2022	Status: Current standard Status: Reaffirmed 2012 Status: See note[i]	Past Chair: Hugh Denny Sponsor contact: <a href="#">Ed Hare</a>	Medium
Std. 1128-1998	IEEE Recommended Practice for RF Absorber Evaluation in the Range of 30 MHz to 5 GHz	Expires: 12/31/2022	Status: Current standard Status: Reaffirmed 2012	Past Chair: Jose Perini Sponsor contact: <a href="#">Ed Hare</a>	Medium
Std. 1140-1994	Test Procedures for the Measurement of Electric and Magnetic Fields from Video Display Terminals from 5 Hz to 400 kHz	Expires: 12/31/2016	Status: Current standard Status: Reaffirmed: 2006 Status: See note[i][j]	Past Chair: Dheena Moongilhan Sponsor contact: <a href="#">Ed Hare</a> Thomas (TC7 Chair) is interested.	Low
Std. 1302-2008 Project 1302	Guide for the Electromagnetic Characterization of Conductive Gaskets in the Frequency Range of DC to 40 GHz	Expires: 12/31/2018	Status: Current standard. Status: Revision in progress	Chair: <a href="#">Davy Pissoor</a> Vice Chair: Secretary: Sponsor contact: <a href="#">Ed Hare</a>	Low
Std. 1309-2013	Standard for Calibration of Electromagnetic Field Sensors and Probes, Excluding Antennas, from 9 kHz to 40 GHz	Expires: 12/31/2023	Status: Current Standard	Past Chair: <a href="#">Zhong Chen</a> Sponsor contact: <a href="#">Ed Hare</a>	Low
Std. 1560-2013	Methods of Measurement of Radio Frequency Interference Filter Suppression Capability in the Range of 100 Hz to 10 GHz	Expires: 12/31/2023	Status: Current standard	Past Chair: Kermit Phipps Sponsor contact: <a href="#">Ed Hare</a>	Low
Std. 1597.1-2008 Project 1597.1	Standard for validation of CEM Computer Modeling (CEM) and Simulation	Expires: 12/31/2018	Status: Current standard Status: Revision in progress	Chair: <a href="#">Alistair Duffy</a> Vice Chair: Secretary: Sponsor contact: <a href="#">Ed Hare</a>	Low
Std. 1597.2-2010	Recommended Practice for Computational Electromagnetics (CEM) Computer Modeling and Simulation Applications	Expires: 12/31/2020	Status: Current standard	Past Chair: <a href="#">Andy Drozd</a> Sponsor contact: <a href="#">Ed Hare</a>	Low
Std. 1642-2015	Recommended Practice for Protecting Public Accessible Computer Systems from Intentional EMI	Expires: 12/31/2025	Status: Current Standard	Past Chair: <a href="#">Bill Radasky</a> Sponsor contact: <a href="#">Ed Hare</a>	Low
Std. 1688-2016	Standard for Module Electromagnetic Interference (EMI) Testing	Expires: 12/31/2026	Status: Current Standard	Past Chair: <a href="#">Fred Heather</a> Sponsor contact: <a href="#">Ed Hare</a>	Low
Project 1848	Techniques & Measures to Manage Risks With Regard to Electromagnetic Disturbances	New project	Status: In progress	Chair: <a href="#">Keith Armstrong</a> Vice Chair: <a href="#">Alistair Duffy</a> Secretary: Niklas Brist Sponsor contact: <a href="#">Ed Hare</a>	Low
Project 1897	Resolution of Power-Line Gap-Noise Reports	New project	Status: In progress	Chair: <a href="#">Mike Gruber</a> Vice Chair: Brian Cramer Secretary: Jerry Ramie Sponsor contact: <a href="#">Ed Hare</a>	Low
Project 2425	Standard for Electromagnetic Compatibility Testing of Electrical and Instrumentation and Control	New project	Status: In progress Sponsor: <a href="#">Nuclear Power Engineering</a>	Chair: <a href="#">Suresh Channarasappa</a> Vice Chair: Secretary:	Medium

	Equipment at Nuclear Power Generating Stations and Other Nuclear Facilities		<a href="#">Committee (PE/NPE)</a> Co-sponsor: <a href="#">EMS Society</a> SDECom	Sponsor contact: Co-Sponsor contact: <a href="#">Ed Hare</a>	
Project 2710	Electromagnetic Shielding Performance of Enclosures for Portable Electronic Devices	New project	Status: In progress	Chair: <a href="#">Alistair Duffy</a> Vice Chair: Secretary: Sponsor contact: <a href="#">Ed Hare</a>	Medium
Project 2715	Guide for the Characterization of the Shielding Effectiveness of Planar Materials	New project	Status: In progress	Chair: <a href="#">Alpesh Bhoje</a> Vice Chair: Secretary: Sponsor contact: <a href="#">Ed Hare</a>	Medium (Topic has much press.)
Project 2716	Guide for the Characterization of the Effectiveness of Printed Circuit Board Level Shielding	New project	Status: In progress	Chair: <a href="#">Davy Pissort</a> Vice Chair: Secretary: Sponsor contact: <a href="#">Ed Hare</a>	Low
Project 2717	Low level Intermodulation	New Project	Status: Forming WG	Sponsor contact: <a href="#">Ed Hare</a>	Low
Project 2718	Nearfield Emissions	New project	Status: Forming WG	Sponsor contact: <a href="#">Ed Hare</a>	Low

Additional details available at the below web address.

[http://www.emcs.org/standards/sdecom/Standards\\_Matrix.html](http://www.emcs.org/standards/sdecom/Standards_Matrix.html)

which will be updated after the symposium.

## 6.0 iNARTE Exam Question Review Activity

Professional test writing service is nearing completion of a draft test update, but we have no updates or requests for assistance.

## 7.0 Future Symposium Activity

7.1 Future topics for IEEE conferences in Singapore 14-17 May 2018 and in Long Beach, CA, on July 30 – August 3, 2018.

### 7.2 Technical Program Responsibilities and session chair reminders

If you would like to be on the paper review committee, please let Don know what your areas of expertise are so he can send appropriate papers to you for review. We attempt to have three to four people review each paper. Note that for the joint meeting with APEMC2018 in Singapore there will be double the normal number of papers and hence the addition to the reviewer pool of approximately twice as many reviewers. Don will be a co-chair with a chair from APEMC2018. Long Beach will refer back to the way we normally do once a year paper reviews. But note that in 2018 we will do two sets of paper reviews to cover both symposia.

### 7.3 Paper Review Deadlines

#### 7.3.1 Singapore (<http://apemc.org/>)

Preliminary full paper submission is 18 August 2017

Preliminary full paper and abstract review ends 24 November 2017.

Acceptance notification will be issued by January 2018.

Final paper is due 28 February 2018.

#### 7.3.2 Long Beach ([http://www.conference.city/conference.php?e\\_id=133882](http://www.conference.city/conference.php?e_id=133882) )

Preliminary full paper submission is TBA 2017

Preliminary full paper and abstract review ends TBA 2017.

Acceptance notification will be issued by TBA February 2018.

Final paper is due \_\_ May 2018.

#### 7.4 Paper reviewers

TC2 members are welcome to be paper reviewers. Don has a reviewer list from the past. But there is always need for reviewers. The attendees that were interested in being in the reviewer “pool” should send their names to the secretary along with their biography to show what technical paper subjects they are comfortable to review. In addition there will be a need for session chairs for TC2 sponsored sessions for Singapore and Long Beach. Again contact the secretary with your willingness to volunteer for these positions.

#### 7.5 New membership

We are always looking for more members.

#### 7.6 New areas of interest

None cited due to lack of meeting time.

#### 8.0 Set meeting and agenda for next meeting(s)

8.1 Singapore, Tuesday, May 15, 2018

8.2 Long Beach, CA, Tuesday, July 31, 2018

#### 9.0 Adjournment

Meeting adjourned at 8:32AM.

Monrad L. Monsen  
Secretary, IEEE EMC TC-2

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