

TC3 Electromagnetic Environment

Technical Committee Meeting

Place: Austin Convention Center (<http://www.emc2009.org>)

Date/Time: Wednesday, 19 August 2009, Noon – 1:30PM (Lunch provided)

1. **Welcome & Introductions** Chair (vice-chair acting)
 - 1.1. **Sign In Sheet** All
 - 1.1.1. Sign-in sheet was routed to the 16 participants to the meeting and they introduced themselves and identified their organization and interest in TC3 activities. See Appendix 1 for attendees.
 - 1.1.2. D. Southworth, Vice-chair, noted that with the absence of the Chair (Bill Strauss was called away on work travel) and Secretary (John Archer is vice-chairing the TC4 which is at the same meeting time), that he was chairing the meeting and providing secretarial support, too.
2. **Review of Draft Agenda (revisions highlighted)** All
 - 2.1. Draft agenda with revisions highlighted in red was reviewed, moved to accept by G. Tait, and seconded by C. Bunting, then approved by unanimous vote.
3. **Announcements** Secretary (vice-chair acting)
 - 3.1. **Patent Review Slides** – shown as required by EMCS board of directors.
 - 3.2. **TAC Discussion on potential new TC organization** – Chair briefly discussed and then later Elya Joffe discussed in more detail the presentation which was given to TAC earlier on Monday. All members of TC3 concurred with the concept of the proposed five clusters of TCs with the addition of two new TCs on low and high frequency phenomena. R. Jost noted that the clusters should not have their TCs scheduled during the same time slots at EMC symposiums so that interaction could occur.
4. **Last Meeting Minutes** Secretary (vice-chair acting)
 - 4.1. 2008 meeting minutes were reviewed, no changes noted, then moved to accept by C. Bunting, and seconded by B. Farmer, then approved by unanimous vote.
5. **Review Action Items** Secretary (vice-chair acting)
 - 5.1. **IEEE 473 Standard Review/Comment/Update**
 - 5.1.1. E. Joffa noted that the update files had been passed to Vil Arafiles and that he would complete the initial update that was started some time ago. Arafiles will then email out to the interested TC3 members the draft IEEE Std 473 for their review and comments. The draft to be emailed out by Nov 2009 and then comments should be sent back to him in Feb 2010. Details will be provided in the email from Arafiles.
 - 5.2. **TC3 Officer Succession**
 - 5.2.1. Elect new Secretary (2010-2012) – no volunteer at meeting ☹
 - 5.2.2. Vice-Chair becomes Chair (D. Southworth)

5.2.3. Secretary becomes Vice-Chair (J. Archer)

5.3. Past meeting (2008) action items:

<u>Action</u>	<u>Assigned to:</u>	<u>Due:</u>
1. Define TC3 Review committee for EM document Review and pass list to Vil Arafiles (Done, 6 members identified for reviews)	Southworth	30 Sep 2008
2. Send out the original and Draft IEEE 473, “Recommended Practice for an Electromagnetic Site Survey (10 kHz to 10 GHz)” to TC3 for review and comment. Comments due date in email. (OBE, not done, see new actions below)	Vil Arafiles	1 Nov 2008
3. Pass old TC3 Minutes for posting on TC3 web site to Southworth (Done and old meeting minutes now on web site)	Vil Arafiles	30 Sep 2008
4. 2009 Newsletter article on Urban EM Workshop Unknown, probably not done.	Bill Strauss	As required
6. Old Business		
6.1. 2009 Paper Review Report	Chair (vice-chair acting)	
6.1.1. Five papers reviewed by 4 reviewers and all were approved for the 2009 EMC Symposium. TC3 members were encouraged to volunteer to review papers for the 2010 conference. If interested please email a TC3 officer. This activity usually occurs late in the year and into Feb 2010.		
6.2. TC3 Subcommittees Report	Subcommittees	
6.2.1. Addressed by IEEE Std 473 report above.		
6.3. TC3 Web Site Activity	Secretary (vice-chair acting)	
6.3.1. TC3 was updated prior to the 2009 EMC Symposium with current meeting minutes and agendas.		
6.4. Review TC3 Committee 5 Year Plan	Chair (vice-chair acting)	
6.4.1. Addressed below in paragraph 7.1.5.		
7. New Business		
7.1. Symposium 2010 (Fort Lauderdale, Florida)		
7.1.1. EM Technical Session	Chair (vice-chair acting)	
7.1.1.1. A TC3 EM session was a part of the call for papers for the 2010 conference, so EM Technical session will occur if sufficient papers are received and accepted by the review process.		
7.1.2. EM Workshop	Chair (vice-chair acting)	
7.1.2.1. This will be skipped for 2010 and addressed in 2011.		
7.1.3. EM Tutorial	Chair (vice-chair acting)	
7.1.3.1. It was suggested by the Chair that a tutorial be done on the IEEE Std 473 update. Another suggestion by R. Jost was to have a tutorial on EM Environment basics which could cover all types of environments (lightning, indoor, outdoor, etc.) and the measurement techniques to establish them. This would also spur interest in the TC3 activities. This was concurred that would be a good idea to follow-up. R. Jost noted that he would be willing to work on some slides for next year on this. Others are welcome to volunteer to address this area.		
7.1.4. Student Activities	Chair (vice-chair acting)	
7.1.4.1. None planned at this time.		

- 7.1.5. Update TC3 Committee 5 Year Plan Secretary (vice-chair acting)
7.1.5.1. Addressed see attached in Appendix 2.
- 7.1.6. Newsletter Article Secretary (vice-chair acting)
7.1.6.1. New chair (D. Southworth) will take as action to draft a newsletter article for the IEEE EMCS Newsletter about the upcoming EM Environment Tutorial.

8. Review Meeting Action Items Secretary (vice-chair acting)

8.1. This meeting (2009) action items:

<u>Action</u>	<u>Assigned to:</u>	<u>Due:</u>
1. Completed initial IEEE Std 473 draft and send out for review by TC3 members who have expressed interest.	V. Arafiles	30 Nov 2009
2. TC3 members send comments on IEEE Std 473 to Vil Arafiles as defined in his email.	Reviewers	12 Feb 2010
3. Submit Tutorial Proposal to EMC 2010 committee	Southworth	1 Nov 2009
4. Draft Tutorial slides on EM Environment basics for next year's EMC Symposium in 2010.	Jost, Southworth	30 Apr 2010

9. Adjourn Chair (vice-chair acting)

- 9.1. Meeting was adjourned at 1:20PM, as moved by R. Jost and seconded by G. Tait. (Meeting minutes drafted by D. Southworth)
- 9.2. Following the meeting, a special presentation was given by Professor Takeo Yoshino (University of Electro-Communications, Tokyo, Japan) on Sunspot activity and effects on radio noise, cooling of earth (as seen with the current low sunspot activity) and historical relationship to plagues, pestilence, and colder winters. We are currently in a historical very low sunspot activity period which could potentially last 100 years as have other unique times have occurred in ancient history.

NOTE: TC-3 Officers:

2010 Chair: Dave Southworth, <d.southworth @ieee.org>,
 2010 Vice-Chair: John Archer, <archerj@ieee.org>,
 Past-Chair, Bill Strauss <strauss_ieee@verizon.net>,
Secretary: vacant !!!! Help! ☺

Web site: <http://www.ewh.ieee.org/soc/emcs/tc3>

Note: TC3 web site will be updated and will be moved to a new URL:
<http://www.emcs.org/committees/tc03/>

Appendix 1. Attendance Sheet

IEEE	TC-3 Electromagnetic Environment	EMC SOCIETY
ATTENDEES		
★ IEEEC-479 Rv1d	19 AUGUST 2009	
Name	Organization	Email address
Dave Southworth	SPAWAR, San Diego	d.southworth@ieee.org
* José Chilo	University of Gävle - Sweden	jco@hig.se
Petre-Marian Nicolae	University of Craiova ROMANIA	pnicolae@elth.ucv.ro
Ileana-Diana Nicolae	University of Craiova ROMANIA	nicolae_ileana@software.ucv.ro
Greg Tait	NSWC Dahlgren	gregory.tait@navy.mil
Vignesh Rajamani	Oklahoma State Univ	vignesh.rajamani@okstate.edu
Chuck Bunting	Oklahoma State Univ	rebent@okstate.edu
Rene Davalos	Carroll U.S	rdavalos@lancar.com
VIL PARATILOS	DETROT DOWNS	rparatilo@ieee.org
* Randy J. Jost	Utah State University	randy.jost@sd1.usu.edu
Takeo Yoshino	Univ of Electro-Comm	yoshino@misig.nat
Brian Farmer	EMC Management	bfarmer@emcmanagement.com
PETER MARTI	EMC MANAGEMENT	pmarti@emcmanagement.com
Elysa B. Joffe	KTM PROJECT, EMC	ebjoffe@ieee.org
DAVE HILTON	SSC PROTECT	DAVE.R.HILTON@NAVY.MIL
CHRIS DILAY	SPAWAR, SAN DIEGO	CHRIS.DILAY@NAVY.MIL

Appendix 2. Five (5) Year Plan

TC3 5 Year Plan					
Activity	2009	2010	2011	2012	2013
Session(s) Sponsored (#)	1	1	1	1	1
Workshop(s) Sponsored (#)	1	0	1	0	1
Tutorial(s) Sponsor (#)	0	1*	0	1	0
Student Activity Sponsored? (Y/N)	0	0	0	0	0
Student Contest Sponsored? (Y/N)	0	0	0	0	0
Poster Recruit Session	0	1	0	0	1
Leadership Succession	E	S	-	E	S
TC3 Charter Review	U	U	U	U	U
Newsletter	Y	Y	Y	Y	Y

*2010 Tutorial on Basics of EM Environment & Measurements and possibly IEEE 473 EM Measurement Practices

Symbol Key

C = chair session

N = newsletter article

Updated: 20 Aug 2008

T = sponsor tutorial

Revised: 19 Aug 2009

U = Update if needed

W = sponsor workshop

Y / N = Yes / No

S = officer succession

E = election of Secretary