

**Accredited Standards Committee C63® Electromagnetic Compatibility** 

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# NEWSLETTER

Issue # 26: Fall 2008

Warren Kesselman, Editor



#### DON HEIRMAN HONORED BY THE IEC

The International Electrotechnical Commission (IEC) has recognized Don's technical contribution and leadership in the IEC, especially the International Special Committee on Radio Interference (CISPR) that he chairs, with the prestigious Lord Kelvin award. This is a major international standards award granted to individuals who have contributed in an exceptional, dedicated way to the technical work of the IEC in the field of electrotechnology standardization and related activities, for a significant period of time. The Lord Kelvin Award is a landmark within the global electrotechnical community and takes its name from the famous British scientist and

engineer who played a major role in the founding of the IEC in 1906 and was IEC's first president. There have been less than two-dozen awardees from all the participants in IEC activity that have been granted this award.

Don has been active in the IEC and CISPR since 1984, and is the current CISPR Chair. He is also on the technical management committee of the US National Committee for IEC activity. In addition to his international activity, he has been a major contributor to IEEE Standards since the mid 1970s. He is a former president of the IEEE Standards Association, and is currently IEEE EMC Society VP for Standards.

(See this URL: <a href="http://www.iec.ch/online\_news/etech/arch\_2008/etech\_1108/world\_1.htm?mlref=etech">http://www.iec.ch/online\_news/etech/arch\_2008/etech\_1108/world\_1.htm?mlref=etech</a>)

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#### **MESSAGE FROM THE CHAIR:**

### Another year of excellent EMC standards progress comes to a close!!

Our last meeting of the year was held at Underwriters Laboratories in Northbrook, IL with Mike Windler serving as the host. The highlight of the meeting and frankly all meetings is the review of the status of the 16 EMC standards which we are responsible. That is an enormous load for our committee to maintain these standards. But with our outstanding team of technical experts and working group and subcommittee chairmen, good progress was reported to make 2008 another successful year. Here is a sample of our current activity (I abbreviated the titles)

Standard	Status		
ANSI C63.2 Field Strength	Resolving ballot		
Instrumentation	comments—estimate		
	publication in early 2009		
ANSI C63.4 Emission	Ballot successful; Draft		
measurements	being recirculated—estimate		
	publication in early 2009		
ANSI C63.5 Antenna	Working on next edition—		
calibration	estimated to be published in		
	2009		
ANSI C63.9 Immunity of	ANSI public review		
Office Equipment	completed successfully—to		
	be published shortly		
ANSI C63.10 Wireless	Ballot comments being		
Device measurements	addressed—recirculation		
	scheduled before the end of		
	year		

Working arrangements with		
IEC for using some material		
from their standards		
Committee to decide the		
need to reaffirm or withdraw		
Document to be sent for		
public review		
Assessing its being ready for		
publication		
May be overtaken by events		
by the IEC document on		
subject		
Recirculation of draft by the		
end of the year		
Next edition ballot		
estimated by end of first		
quarter of 2009		
Stable at this point		
Draft to be completed by		
end of year		
Draft to be completed by		
end of first quarter of 2009		

There are other standards that are also maintained by ASC C6There are other standards that are also maintained by ASC C63®. See the C63® web site on <a href="https://www.c63.org">www.c63.org</a>.

To show ASC C63® support for the EMC efforts of the Special International Committee on Radio Interference (CISPR) of the International Electrotechnical Commission (IEC), a motion passed to provide funding support for the 2010 meeting to be held with the IEC General Meeting in Seattle. This will be pledged to the US National Committee of the IEC.

Other actions of interest were the report of FCC activities of interest by the FCC member of ASC C63® who is Bill Hurst. These items are always on the agenda. Further, the chair identified that there were two filings to the Commission on behalf of the committee. The first filing addressed the process being used in providing the necessary research for any amendment to ANSI C63.19. The process was shared with ATIS which is a member of C63® which has similar interests in a sound way to assess hearing aid compatibility with the use of mobile phones. Further research data is expected to be reported to the FCC by the end of the year and will review the use of phones with multiple transmitting capability including WiFi. The second filing was provided to the Commission to indicate that three of our standards continue to be and to first be referred to in the Rules, i.e. C63.4, C63.10 and C63.19. It was indicated that C63.4 and C63.10 should be referenced when published in 2009 and C63.19-2007 should be used. Both these filings are on the FCC web page.

We also want to report that our work is getting high visibility. In particular, the November 2008 issue of Conformity has as the cover article the work we are doing in antenna calibration and in particular ANSI C63.5. Check it out with this URL

http://www.nxtbook.com/nxtbooks/conformity/1108/index.php?startpage=12

Another article on C6Another article on C63® activity is schedule later in the year in Engineering Evaluation. We want to thank Dennis Camell (NIST), Zhong Chen (ETS-Lindgren) and Mike Windler (UL) for an excellent article in Conformity.

Finally, there was an election of the chairman of ASC C63®. Don Heirman was given another three year term as chairman by a unanimous vote of the committee. Don has indicated that there remains much to be done and he is looking forward to the challenge to make it happen.

Respectfully submitted

Don Heirman, Chairman

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#### 2009 ANSI ASC C63® MEETING SERIES

The first meeting series is scheduled to be held on April 20th-23rd 2009 at IEEE, Piscataway, NJ. Tentative schedule is:

Meeting	Monday	Tuesday	Wednesday	Thursday
	20April	21 April	22 April	23 April
				•
WG	0900-		0800-	
meeting(s)	1700*		Noon**	
SC2			0800-0945	
Definitions				
SC3 International			1000-Noon	
SC1			1300-1700	
Technical			1300 1700	
SC8 Medical		0800-		
		Noon		
SC5		1300-		
Immunity		1445		
SC6 Lab		1500-		
Accreditation		1700		
C63® Parent				0830-
Committee				1500
C63®		1715-	1715-	
Steering		1900***	1900***	
Committee *				
US EMC	1515-			
Standards	1700***			
Corp Board				
of Directors				

- \* Tentatively C63.19 Working Group Meeting; others may be planned—contact your WG chairman for details.
- \*\* Tentatively C63.10 Working Group meeting--Invited members only
- \*\*\* Members only of the Steering Committee and US EMC Standards Corp Board, respectively.

(Please double check on C63®'s website <a href="www.c63.org">www.c63.org</a>, "C63® main committee", "Upcoming meeting schedule & logistics".)

The October 2009 meeting series is scheduled to be held during the week of the 19<sup>th</sup> at NIST in Boulder, CO.

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## Subcommittee 1 – Techniques and Development

Mike Windler Chair

#### **PROJECT STATUS SUMMARY**

#### Project 1-13.2 C63.25 Site Acceptability

A new PINS was issued to move all site requirements into a separate standard, C63.25. This new standard will include moving the current NSA requirements from C63.4, adding the site VSWR requirements by reference and new requirements for time domain reflectometry. The development of requirements under 30 MHz will also be under consideration for future editions of this standard. Volunteers interested in this topic should contact Mr. Windler.

#### **Project 1-15.5** C63.23 Measurement Uncertainty

A first draft of this standard is completed. Some research is currently underway to validate some of the expected values and a section on type A assessments of contributors is also being developed. The target completion of this standard is Q1 of 2009.

#### Project 1-15.6 C63.5 Antenna Calibration

Revisions completed include

- Clarification of Section 5 and Annex G on the uses of Free Space Antenna Factors and the uses of Near Free Space Antenna Factors
- Improvements to the horn calibration methods (remove the ground ) response
- Clarify minimum frequency resolution for calibrations
- Editorial Revisions

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#### **Subcommittee 2 – E3 Terms and Definitions**

#### Dave Southworth, Chair

(Marcus Sheelman reporting)

The recirculation ballot for draft ANSI C63.14, "Dictionary of Electromagnetic Compatibility including E3," was approved. The document will be circulated for "Public Review" with publication expected by the end of the calendar year. The next maintenance phase of the document will start in 2009.

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#### <u>Subcommittee 5 - Immunity Testing and</u> <u>Measurements</u>

#### Ed Hare, Chair

SC5 met Tuesday (7 Oct.) afternoon. Vice-Chair Steve Whitesell led the meeting in the absence of Chair Ed Hare. There were no changes in membership and there are no action items for  $C63^{\circ}$ .

WG1 Chair Steve Berger reported C63.9 on Office Equipment Immunity has received ANSI approval and has been submitted to IEEE for editorial review and publication. Discussion following the meeting indicated the WG should be put disbanded until a revision is needed. This will be taken care of at the next meeting.

WG2 Chair Joe Morrissey reported the drafting of C63.24 on Ad Hoc Testing of Non-Medical Devices is awaiting the completion of C63.18 on Ad-Hoc Testing of Medical Devices by SC8. Once that document is complete, it should be a simple matter to use it as a template to create C63.24. A draft is expected early next year.

At the last C63 meeting, an ad hoc group recommended that C63.16 on ESD Testing be abandoned. C63 did not accept the proposal and remanded the document to SC5 instead. Ed Hare's Action Items to circulate the draft of the document to SC5 members and to see if Bill Rhoades would be willing to lead an effort to see if the document can be salvaged in some form, perhaps as a Guide, remain open.

There is also an open Action Item to identify a liaison to SC3 on International Standards.

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#### **Subcommittee 6 – Laboratory Accreditation**

Kurt B. Fischer, Chair

(Victor Kuczynski reporting)

Oct. 8 2008 Meeting summary:

•11 members and 6 guest were present

- •Need to follow up on copyright issue. This relates to formed ballot group in order to push forward on Immunity Checklist Guide (C63.11) for the associated PINS Is there a copyright issue?
- •Study group (WG 4) looks at the traceability and calibration requirements for "key" emc equipment such as LISNs, Antennas, Spectrum Analyzers, coaxial cables, preamps, filters, etc. (Bob Delisi, DeanGhizonne, Dan Hoolihan, Werner Schaeffer, Kurt Fischer, Victor K, Zhong Cheng, Colin Brench)
- •Working Group 2 headed by Dean Ghizzone including Dan Hoolighan, Bob DeLisi, Brad Moore, Victor Kuczynski looks to explore idea to drop dates from scope of accreditations list to minimize amount of entries
- •Website update Approved minutes and draft agenda of future meeting will be accessible from public area

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#### **Subcommittee 8 – EMC and Medical Devices**

#### Joseph Morrissey, Chair

The subcommittee 8 meeting was again very busy and ran into lunch on Tuesday (7 October). An initial discussion on a study from the Netherlands on RFID readers resulted in the group identifying a task force to draft a response regarding the intended scope and use of the ad hoc test protocol ANSI C63.18. The bulk of the meeting was devoted to WG3 and the issue of hearing aid compatibility. The ANSI C63.19 standard is currently undergoing revision, and is expected to be placed into ballot at some point in 2009. Issues to be addressed include new and emerging technologies such as Wi-Fi and 3G technologies that will operate on the newly allocated 700 MHz spectrum as well as a new generalized approach to evaluate wireless signals for interference potential. Of note, three new task groups under WG3 were identified to address this new generalized approach.

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#### **STANDARDS STATUS MATRIX**

The current status of all active ANSI ASC C63® Standards Projects may be found on C63®'s web page <a href="www.c63.org">www.c63.org</a>. Click on "C63 Main Committee" and then on "Standards Status Matrix".

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#### WISHING ALL A HAPPY AND PROSPEROUS NEW YEAR!

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ANSI ASC C63®, ELECTROMAGNETIC COMPATIBILITY, NEWSLETTER is published approximately forty-five days after Committee meetings and is available on the web site <a href="www.c63.org">www.c63.org</a>. That site also contains much information about ANSI ASC C63®and its subcommittees.

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