

C63™

www.C63.org

**Accredited Standards Committee C63™
Electromagnetic Compatibility**

Accredited by the American National Standards Institute, Inc.
Secretariat: Institute of Electrical and Electronics Engineers, Inc.

SPECIAL NEWSLETTER NEW WEB SITE !

Issue # 21: August 2006

Warren Kesselman, Editor

We're Back with New Web Site!!

Don Heirman, Chairman
ASC C63™

We are pleased to announce that our web site has taken a new streamlined look and that the material on the site has been brought up to date and friendlier to navigate without the clutter of unneeded ads or fanciness. We started this project over a year ago as we came to the realization that the "voice" of ASC C63™ has to be via its web site. What we had up to that time had information that was a bit difficult to find as it was our first venture into having a web site. Bob Hofmann of Hofmann EMC

Engineering pitched in to get us started in improving that site.

But soon it became obvious that we needed to move it up a notch with a BAMB! as Emeril Lagasse does for food on the Food Network. To do this, we asked an experienced web master-- John Lichtig of Lichtig EMC Consulting-- who is a web master for several web sites including the one for his own volunteer fire company in Bridgewater, NJ, to take on the permanent job of web master. John is also an individual member of C63™ and chairman of its Subcommittee 3 on International Standardization issues as they relate to C63™. What you will see on www.c63.org now is the result of his efforts the past several months. The site now is simpler with a modern look and

most importantly easier to navigate and to bring up web pages for downloading if desired. With this new revitalization, we also took time to check each “mouse over” and “hot button” to be sure that what is there is updated. Each C63™ subcommittee chair as well as the secretary and chairman have viewed their portions of the site to check for the latest information being there. Congratulations to John and an earned “thank you” for Bob Hofmann who continues to help John in keeping the web site up to date.

This newsletter is to announce more widespread the good news of our redesigned web site. We encourage you to surf the site for information. John Lichtig in another article in this special Newsletter has written more of the mechanics of the web site and how to get a hold of him via the web site feedback button to report any malfunctioning or data that needs to be corrected as we know we are probably 95 percent on target but the other 5 percent is a “work in progress”. There will by the way be a C63™ “members only” password protected site where for example unapproved meeting minutes will be placed until they are approved, more information on the membership such as their email addresses, drafts of documents that are still in their formative stages and are still work in progress not ready for prime time, etc.

Finally, please note that after each use of “C63” there is a “TM”, i.e. C63™. We have submitted our application last November for registering “C63” as our committee trademark. In addition to what you see in This Newsletter, you will see that for example the new ANSI C63.19 the first use of the trademark.

You will see that on all our formal documents from this point onwards.

So please have some “fun” and check out our web site which again is www.c63.org. In fact bookmark it on your internet explorer as there will be many times to check it out in the future with announcements of availability of new C63™ standards to announcements of the next meetings of our committees (which by the way will be the week of 23 October 2006 at the ARRL headquarters in Newington, CT). See some of you there!! To contact the chair, use d.heirman@ieec.org.

C63™

WELCOME TO THE NEW C63™ WEBSITE

John F. Lichtig, Webmaster

Welcome to the new C63™ website located at www.C63.org. This website is based on the structure that Bob Hofmann developed for the original website; thanks Bob.

Go ahead, Google “C63™” or “C63” and see what is the first hit of over 1.7 million hits!! Follow that first hit and it will take you to the home of the new ANSI ASC C63™ website ...



Some general website basics. When you click on a website logo (typically found in top left) it should take you to the website's Home page. Right clicking on a hyperlink to a document allows you to download the file.

In order to be able to find information quickly, the website is divided into the following web pages (*Red font denotes Home Page*):

- *News*
- *C63™*
- *Subcommittees*
- *Standards Development*
- *Links*
- *Members Area*
- *Workshops*

Some of the web pages are self explanatory and you can explore them yourself. Information found in the **C63™ webpage** includes (*Blue font denotes web pages within the website, excluding the Home Page*):

- *C63™ Operating Procedures*
- *C63™ Officers List*

- *C63™ Members List*
- *Upcoming Meeting Schedule & Logistics*
- *Upcoming C63™ Meeting Agenda*
- *Approved C63™ Meeting Minutes*
- *Approved C63™ Meeting Minutes Attachments*
- *Project Matrix*
- *Newsletters by Date*
- *Membership Application Form (PDF)*
- *2006 Fee Schedule*

Left clicking on the hyperlinks will open an html (hyper text markup language) version of the document in your web browser. Hyperlinks followed by “PDF” or “doc” in parenthesis may be downloaded by right clicking and selecting “Save Target As...” option.

Members lists in the public areas of the website do not include the member's coordinates.

The **Subcommittees webpage** consist of a hyperlinked listing of all the seven subcommittees in ANSI ASC C63™. You will find the following information within each Subcommittee webpage:

- *Membership List*
- *Standards*
- *Approved Meeting Minutes*
- *Meeting Schedule*
- *Working Groups*
- *Meeting Agenda*

In the **Standards Development webpage** you will find the following information:

- *Current Standards List*
- *List of Issued Standards Explanations/Interpretations*
- *Explanation/Interpretation Request Form (right click to download)*
- *Standards in Development*
- *Active PINS and responsible SC*
- *PINS Forms (see members-only area)*

Password protected directories have been set up in the **Members Area webpage** to provide the chairs a location to post documents like:

- Membership list with all coordinates
- Draft minutes
- Working/draft documents

Please visit the website and navigate throughout its content. **Note that if this Newsletter is printed out in black and white, the colors referred to above are shown also italicized.** If you find any problems or have comment/suggestions, please do not hesitate communicate that to:

John F. Lichtig at
C63tm@LichtigEMC.com.

Note from Bob Pritchard, **Secretary**

One of the many jobs of the Secretary is to prepare a Status Report of all the ASC C63™ Standards Projects. This is done on, or slightly after, the first of each month and provided to the Committee web master for incorporation into the Project Matrix on the site. Look for an updated Report on, or about the fifteenth of each month – Click on “Project Matrix” on the C63™ page.

To contact the secretary, use r.pritchard@ieee.org

Subcommittee 1 – Techniques **and Development**

Mike Windler, Chair

Recent Activities of Special Interest Work has progressed very well on several key projects. We have a working group developing a new standard for transmitters. This new project will facilitate the consolidation and development of procedures for testing a wide variety of unlicensed wireless devices. The current procedures are scattered throughout a number of unrelated documents causing confusion regarding the testing of devices and inconsistent test results. The current test procedures in C63.4 are limited to a small subset of wireless devices. The project will also provide a forum for test labs, manufacturers of wireless devices and the government to discuss the testing of a many new wireless devices. The working group is led by Mr. Art Wall. Our efforts to clean up and re-organize C63.4 is nearing completion. Among other improvements, this project will move all site requirements into the annexes, update standard references and clarify some key clause that have been questioned. Site requirements above 1 GHz will also be put into the annexes of C63.4. Experiments have correlated both time domain methods, which are fast and diagnostic, with the VSWR method preferred in CISPR. Therefore both methods are being added thus giving manufacturers and test labs more

flexibility in evaluating their test sites than ever before. Finally, the development of a cook book style guide to EMC measurement uncertainty is nearing completion and should be balloted this fall. This new guide will help test labs and manufacturers meet the new ISO 17025 requirements regarding the ability to provide measurement uncertainties.

To find out more on the work of SC1, click on "Subcommittees" on the C63™ home page and then on "Subcommittee One". There you will find links to SC1 membership, next meeting schedule at ARRL headquarters in October, and the full title of C63.4 under the "Standards" link. Ordering information is found on the IEEE SA web site at <http://shop.ieee.org/ieeestore/> . Then click on "Electromagnetics" and you are there in the EMC portion of the IEEE SA web store where our C63™ standards are sold. In addition if you are interested in joining the subcommittee, contact the chair on michael.j.windler@us.ul.com .

Subcommittee 2 – E3 Terms and Definitions

Dave Southworth, Chair

This subcommittee is developing the update to the ANSI C63.14 document that defines the terms used in the Electromagnetic Environment Effects engineering field. Without standardization in the meaning of terms, definitions become vague and confusing as different definitions are given to common terms by the whim of those who write test plans, reports and specifications. The ANSI C63.14 has become the standard for the Department of Defense and this document is cited in MIL-STD-461E and MIL-STD-464A which are the E3 performance standards for equipment and systems, respectively. Industry also references ANSI C63.14 as the standard for E3 terms.

To find out more on the work of SC2, click on "Subcommittees" on the C63™ home page and then on "Subcommittee Two". There you will find links to SC2 membership, next meeting schedule

at ARRL headquarters in October, and the full title of C63.14 under the "Standards" link. Ordering information is found on the IEEE SA web site at <http://shop.ieee.org/ieeestore/> . Then click on "Electromagnetics" and you are there in the EMC portion of the IEEE SA web store where our C63™ standards are sold. In addition if you are interested in joining the subcommittee, contact the chair on dave.southworth@navy.mil

Subcommittee 3 – International Standardization

John Lichtig, Chair

Subcommittee 3 has revised its scope of work (please visit www.c63.org). As a result of the revision, it has become apparent that there is a need to restructure and broaden SC3's scope so that there is a formal process to communicate (meet) with the US national committee (USNC) technical advisory groups (TAGs) of the CISPR and TC77 IEC committees via the technical advisors (TAs). The purpose of this communication channel is for "harmonizing" approaches to US positions and to jointly work in technical areas in order that the work of C63™ is not in conflict with that of the TAGs, or vice versa.

The reengineering and broadening of the SC3 scope will probably require that the TAs be further solicited to join SC3, and for SC3 to have a place on the TAGs as a resource organization. John Lichtig, the chairman of SC3, is in the process of revising the scope of SC3 to embrace similar technical activities being addressed by the TAGs and C63™.

To find out more on the work of SC3, click on "Subcommittees" on the C63™ home page and then on "Subcommittee Three". There you will find links to SC3 membership and next meeting schedule at ARRL headquarters in October. In addition, if you are interested in joining the subcommittee, contact the chair on JFL@LichtigEMC.com

Subcommittee 5 - Immunity Testing and Measurements

Ed Hare, Chair

Subcommittee 5 (SC5) is doing some interesting work on the immunity of devices to EMI phenomena. The subcommittee has three active projects: Working Group 1 is well on the way to developing a standard for the immunity of audio office equipment. This standard can be used to help ensure that audio equipment used in an office environment will not suffer interference from cell phones, wireless devices and other transmitters commonly also used in the same environment. Working Group 2 is developing ad-hoc test procedures that can be used to verify in-situ that various electronics systems will not suffer EMC problems from transmitters that may be in use nearby. Working Group 3 is assuming responsibility for C63.15, a recommended practice for immunity measurements of electrical and electronic equipment.

To find out more on the work of SC5, click on "Subcommittees" on the C63™ home page and then on "Subcommittee Five". There you will find links to SC5 membership, next meeting schedule at ARRL headquarters in October, and the full title of C63.9 under the "Standards" link. Ordering information is found on the IEEE SA web site at <http://shop.ieee.org/ieeestore/> . Then click on "Electromagnetics". and you are there in the EMC portion of the IEEE SA web store where our C63™ standards are sold. In addition if you are interested in joining the subcommittee, contact the chair on ehare@arrrl.org

Subcommittee 6 – Laboratory Accreditation

Dan Hoolihan, Chair

The Subcommittee chair has found a volunteer for the Vice-Chair position of Subcommittee 6. Kurt Fischer, currently working for NIST-NVLAP, is

the Vice-Chair candidate. His selection still needs to be approved by the Main Committee.

Kurt is a long-time member of the EMC Community and he is presently in charge of the EMC and Telecom portion of the NIST National Voluntary Laboratory Accreditation Program. He has years of experience in both managing EMC Laboratories and auditing/assessing EMC and Telecom laboratories.

Steady progress is being made on the latest version of the IEC Immunity Checklists; final editing is in progress and circulation for full committee approval should be imminent.

To find out more on the work of SC6, click on "Subcommittees" on the C63™ home page and then on "Subcommittee Six". There you will find links to SC6 membership and next meeting schedule at ARRL headquarters in October. In addition if you are interested in joining the subcommittee, contact the chair on d.hoolihan@ieee.org

Subcommittee 7 – Unlicensed Personal Communications Services Devices

Stephen Berger, Chair

ANSI C63™ Subcommittee 7 (SC7) develops standards related spectrum etiquette and spectrum sharing techniques. SC7 was responsible for developing ANSI C63.17, which provides the test methods for FCC Part 15D, Unlicensed Personal Communications Services (UPCS).

SC7 provides the technical expertise and resources necessary for writing, updating, or changing existing and proposed UPCS and other spectrum etiquette standards to provide new or amended measurement techniques and associated instrumentation, measurement methods, and operational limits or protocols.

After revising ANSI C63.17 in 1995 and supporting its adoption by the FCC SC7 has turned its attention to new applications for spectrum sharing techniques. Currently the activity of SC7 is closely aligned with the IEEE 1900 effort. IEEE 1900 is developing international standards related to next generation radio and spectrum management. SC7 provides a venue for developing US specific standards implementing spectrum etiquette protocols.

ANSI C63.17 sets forth uniform methods of measurement of the electromagnetic and operational compatibility of *Unlicensed Personal Communications Services* (UPCS) devices. The standard does not cover licensed *Personal Communications Services* (PCS) devices. The recommended methods are applicable to the radio transmitter and monitoring devices contained in the UPCS device. These methods apply to the measurement of individual UPCS devices. In addition to the measurements specified herein, UPCS devices may also be required to be tested in accordance with other standards. Examples are listed in Appendix A of the standard. The draft version of the standard was ANSI approved at the end of June 2006. Publishing will be after the editor finishes the publication package.

To find out more on the work of SC7, click on "Subcommittees" on the C63™ home page and then on "Subcommittee Seven". There you will find links to SC7 membership, next meeting schedule at ARRL headquarters in October, and the full title of C63.17 under the "Standards" link. Ordering information is found on the IEEE SA web site at <http://shop.ieee.org/ieeestore/> . Then click on "Electromagnetics" and you are there in the EMC portion of the IEEE SA web store where our C63™ standards are sold. In addition if you are interested in joining the subcommittee, contact the chair on stephen.berger@ieee.org.

Subcommittee 8 – EMC and Medical Devices

Dan Hoolihan, Chair

The 2006 version of the American National Standard ANSI C63.19 on "Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids" was officially published in early July. Congratulations to Steve Berger and his working group on this significant accomplishment; the result of a five-year effort.

An Amendment to the recently released C63.19 standard is being pursued to accommodate some new technology and advanced interpretations of the existing test methods.

A reaffirmation of C63.18 is nearly complete and the preliminary results are favorable to reaffirm the standard. C63.18 is an American National Standard entitled "Recommended Practice for an On-Site, Ad Hoc Test Method for Estimating Radiated Electromagnetic Immunity of Medical Devices to Specific Radio-Frequency Transmitters."

To find out more on the work of SC8, click on "Subcommittees" on the C63™ home page and then on "Subcommittee Eight". There you will find links to SC8 membership, next meeting schedule at ARRL headquarters in October, and the full title of C63.18 and C63.19 under the "Standards" link. Ordering information is found on the IEEE SA web site at <http://shop.ieee.org/ieeestore/> . Then click on "Electromagnetics" and you are there in the EMC portion of the IEEE SA web store where our C63™ standards are sold. In addition if you are interested in joining the subcommittee, contact the chair on d.hoolihan@ieee.org .

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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 www.c63.org. That site also contains much information about ANSI ASC C63™ and its subcommittees.

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