

**Approved Meeting Minutes**  
**ANSI-Accredited Standards Committee C63<sup>®</sup>**  
**Electromagnetic Compatibility**

**SUBCOMMITTEE 2 – E3 Terminology Definitions and EMC Best Practices**

**Wednesday, 01 May 2019, 1500 to 1700**  
**UL-LLC, Research Triangle Park, NC.**

1. **Call to Order.** Mr. Marcus Shellman, SC2 Chairman, called the meeting to order.
  - 1.1. **Opening Remarks:** The chairman welcomed everyone to the meeting and recognized the SC2 officers.
  - 1.2. **Meeting Logistics Announcements:** The chairman addressed meeting arrangements for the afternoon sessions.
  - 1.3. **Introductions:** The chairman conducted the roll call to record SC2 membership attendance and determine the establishment of a quorum. The meeting attendee list appears in Attachment 1.
  - 1.4. **Quorum:** Based on the number of SC2 member attendees, the Secretary determined that a quorum was achieved.
  
2. **Review and Adoption of the Agenda.** The chairman presented the agenda, highlighting key areas of significance for the meeting. Motion to approve the agenda as written was passed by voice vote. See Attachment 2. The approved agenda will be provided to Ed Hare along with the SC2 report to the main committee. (see Action Item 20190501 -1)
  - 2.1. **Approval of the Previous Minutes:** The chairman displayed draft minutes of the SC2 meeting held on 28 November 2018 at NIST, Boulder, CO. The minutes were approved as written.
  - 2.2. **Review of the Patent Slides:** The C63<sup>®</sup> Patent Policy slides were presented as they appear on the C63<sup>®</sup> public website and reviewed as required. There were no objections to the patent policy.
  - 2.3. **SC2 Scope and Duties:** The SC2 Scope and Duties were shown were presented. The motion for approval was passed by voice vote.
  
3. **Review of Subcommittee Membership.**

3.1. **Membership.** The chairman displayed the SC2 membership as it appeared on the agenda, stating that after review of the membership list on the C63<sup>®</sup> website that the following changes were required:

- Vladimir Bazhonov has retired and should be removed from the membership list.

The chairman will provide Jerry Ramie with the needed membership list change. (See Action Item 20190501-2)

3.2. **Members at Risk.** The Chairman displayed the Member Attendance Log, which highlights members at risk. He noted that there are no members at risk at this time.

3.3. **Consideration of new members.** The chairman addressed the consideration of new members for SC2 stating that he has not received any new applications for membership. No new members have been added to the SC2 roster at this time. The SC2 membership list appears in attachment 3.

5. **SC2 Status and Working Group Reports.**

5.1. **Working Group 1 Report.** Mr. Duncanson provided an update of WG1 activities since the last meeting and provided a revised update schedule for the five-year update period for ANSI C63.14-2014. He displayed a flow diagram briefly discussed the process for inclusion of new terms and definitions and elaborated on the rules for terms and definitions inclusion distinguishing the treatment of those sourced from International standards, ANSI C63<sup>®</sup> standards, DoD standards, and individual terms and definitions developed within ANSI C63<sup>®</sup>. He discussed the SC2 coordination process for C63<sup>®</sup> standards and displayed a table showing all of the ANSI C63<sup>®</sup> standards that have contributed to date to the update of C63.14-2014. For each of the standards identified, the table detailed the numbers of new terms, new definitions or modifications to those existing. He also displayed a table showing all of the C63<sup>®</sup> standards and indicating what version of the standard was used in the 2014 update of C63.14 and in the current 2019 draft. He noted that this provides a historical method of tracking all the standards and ensuring that the proper version (publish date) is reflected in the corresponding C63.14 publish date to determine that no standards slip through the cracks. It was noted by several attendees that the table, which used the status of C63 standards as they appear on the website, was not completely up to date and did not show the current version of C63.15 which was published in 2017 and should be reflected in the new C63.14 draft. Mr. Duncanson took an action to obtain the current

version of .15 and ensure the incorporation of all new or modified terms and definitions into the .14 draft. (See Action Item 20190501-3)

He addressed the status of new military terms and definitions and showed a list of the military standards, handbooks and Service specific requirements under review for the update. He noted specifically that draft MIL-STD-464D, “Electromagnetic Environmental Effects Requirements for Systems,” is currently undergoing formal DoD coordination and is expected to be published before the end of the year. Draft MIL-HDBK-240B, “Electromagnetic Environmental Effects to Ordnance Guide,” is also included, expected to be published before the end of the year. In addition to these, MIL-STD-704F, “Aircraft Electric Power Characteristics,” and MIL-STD-1275, “Characteristics of 28 Volt DC Input Power to Utilization Equipment in Military Vehicles,” have been included, recommended by Mr. Hodes at the last SC2 meeting. Mr. Hodes had also recommended that UNECE Regulation 10, “Uniform Provisions Concerning the Approval of Vehicles with regard to Electromagnetic Compatibility,” be considered for definitions. Mr. Duncanson noted that the regulation had been obtained and relevant terms and definitions identified, but inquired of the subcommittee whether these definitions, which would support draft ANSI C63.30 should be included in draft .14 given that draft C63.30 is not currently under consideration for balloting. Subcommittee consensus was that the identified terms and definitions should not be included in the draft, in keeping with SC2 rules.

Mr. Duncanson addressed open actions from the previous meeting. These involved requests from other subcommittees for assistance in drafting definitions needed to support preparation of their standards. They included the terms: “office equipment,” associated with draft C63.9; “vehicle,” associated with draft C63.30; and the terms “In-Situ,” and “On-Site,” associated with draft C63.24, with an emphasis on clarification of the distinction between the two test site conditions. Efforts to resolve these definitions are ongoing. Mr. Heirman noted the need to modify action item # 20180502-7 for the term, “office equipment,” to be simply, “office,” within the context of all venues that the term can describe. Additional discussion addressed definitions for “portable” and “mobile” equipment, also associated with the preparation of draft C63.24.

He displayed the schedule for completion of the C63.14 update stating that the projected date for publishing of the document will be the end of January 2020.

- 5.2. **Working Group 2 Report.** Mr. Dilay provided a status update for the draft ANSI C63.28-20XX, Best Practices Guide development. He displayed the

SC2 WG2 roster as it appears on the C63<sup>®</sup> website. He introduced the latest draft of C63.28, version 1.34 and noted that a new title has been accepted for the present, "American National Standard Guide to Best Practice Methodologies, Processes, and Procedures for Electromagnetic Compatibility (EMC)." He reemphasized the need for feedback from the subcommittee chairs to return the completed questionnaires on information about their standards. He discussed the critical role the questionnaires will play of providing relevant content, such as lessons learned or conformity to other standards, etc., to augment the standard's description, purpose and intended use. He displayed draft 1.34 and stepped through each section providing the status and discussing areas where assistance would be helpful to augment the development of some sections.

He addressed the need for a variety of commercial product EMI problem examples, noting that the WG has plenty of military system examples. The desire is to demonstrate the breadth of potential EMI problems that can occur among the variety of electrical and electronic devices in the marketplace, particularly where new and emerging technologies are concerned. He noted that Jeff Silberberg has provided a good number of medical device EMI examples and Richard Worley has provided a NASA document with good information on spacecraft related EMI problems. EMI problems having to do with consumer mobile devices, smart grid technology and other state of the art manufacturing examples are needed to round out the variety of problems addressed in the guide.

He also addressed some of the areas that remain unresolved in terms of outstanding actions and writing assignments. Among these are the action for write-ups addressing product EMC design considerations; at the circuit level, box level, system level and platform or facility level. Additionally, he cited the need for write-ups for the sections on test instrumentation and EMC laboratory accreditation.

Mr. Heirman raised the subject of the standards comparisons underway by SC3 and inquired about how results of those comparisons will appear in draft .28. He noted that it is still early in the SC3 comparison process and that formatting of the comparison study reports can be modified in the way best suited to serve the needs of .28. He stated that feedback from WG2 would help to better align the SC2 and SC3 efforts. After discussion, WG 2 took an action to review the five comparison reports received to date and make format change recommendations to SC3, if warranted. (See Action Item 20190501-4)

- 5.3. **SC2 Coordination with C63<sup>®</sup> Subcommittees.** Mr. Shellman addressed the chart in the agenda showing the eight C63<sup>®</sup> subcommittees and the standardization projects for which they are responsible, noting the responsibility of all subcommittee chairs to coordinate with SC2 on preparation of their terms and definitions prior to seeking a ballot decision.

The list was reviewed by the subcommittee for accuracy at the request of Mr. Hoolihan who considers it a good reference to maintain. Mr. Duncanson took an action to implement several identified needed corrections. (See Action Item 20190501-5)

6. **Other Old Business.** None.
7. **New Business.** None.
8. **C63® SC2 Website Status.** Mr. Dilay stated that the SC2 member website would be brought up to date following this meeting.
9. **Action Item Review.**

9.1. **Newly assigned actions appear below:**

Action Item #	Subject	Responsible Person(s)	Status	Delivery Date	Comments
20190501-1	Provide Ed Hare with the approved SC2 agenda from today's meeting along with the SC2 report for the C63® Main Committee.	Mr. Shellman		ASAP	
20190501-2	Provide Jerry Ramie with SC2 membership list change to remove Vladimir Bazhonov.	Mr. Shellman		11/19/2019	
20190501-3	Obtain ANSI C63.15-2017, incorporate terms and definitions into draft C63.14-20XX.	Mr. Duncanson		11/19/2019	
20190501-4	Review SC3 standards comparison reports received to date, for format and content alignment with draft C63.28-20XX. Propose change recommendations for submission to the SC3 Chair.	SC2 WG2		11/19/2019	
20190501-5	Implement identified corrections to the SC2 agenda item 5.3; list of C63® Subcommittees and their active standards.	Mr. Duncanson		11/19/2019	

9.2. **Action Items from the previous meeting appear below:**

#	<b><u>ACTION ITEM</u></b>	<b><u>Disposition</u></b>
20180502-1	Mr. Shellman to provide Jerry Ramie with changes to SC2 membership roster for posting to the C63® website.	<b>CLOSED</b>
20180502-3	Mr. Shellman to provide Jerry Ramie with word changes to the SC2 Scope as agreed upon at the meeting.	<b>CLOSED</b>
20180502-7	SC2 WG1 to review draft ANSI C63.9, coordinate with SC5 on development of a definition for the term, "office equipment."	<b>OPEN</b>

#	<u>ACTION ITEM</u>	<u>Disposition</u>
20180502-8	SC2 WG1 to coordinate with SC4 on development of a definition for the term, “vehicle,” as the term will be applied in draft ANSI C63.30, within the context of wireless power transfer.	CLOSED
20180502-9	SC2 WG1 to make final determination on how to address attributions in draft ANSI C63.14-2019 for definitions sourced from MIL-STD-463A.	CLOSED
20180502-10	SC2 WG1 to prepare forward material for draft ANSI C63.14-2019 that historically documents the supersession of MIL-STD-463A by ANSI C63.14-2004 and explains the disposition of 463A attributions.	CLOSED
20181128-1	Mr. Shellman to provide Ed Hare with the approved agenda from today’s meeting along with the SC2 report to the C63® Main Committee.	CLOSED
20181128-2	Mr. Hodes to provide copies of UNECE Regulation 10 and CISPR 25 to SC2 WG1 for review, with respect to draft C63.14.	CLOSED
20181128-3	Mr. Heirman to provide draft C63.9 to SC2 WG1 for review, with respect to requested definition development.	CLOSED
20181128-4	Mr. Hodes to provide draft C63.30 to SC2 WG1 for review, with respect to requested definition development.	CLOSED
20181128-5	Mr. Duncanson to add the terms and definitions from draft C63.25.1 to draft C63.14-20XX and possibly those from C63.10 and C63.26, based on balloting dates.	CLOSED
20181128-6	Mr. Dilay to reestablish contact with the IEEE database POC to follow-up on IEEE database status and revisit the feasibility of an ANSI C63.14 database.	OPEN
20181128-7	SC2 WG2 to rework the Overview/Scope section of the C63.28 draft to address modifying “cost” consideration language and adding language for the “safety” aspects of EMC best practices.	CLOSED
20181128-8	Mr. Dilay to add Mr. Frank Coleman to the SC2, WG2 roster.	CLOSED

9.3. **C63® Newsletter Input.** Mr. Shellman stated that preparation of the newsletter input is pending, but would be provided to Mr. Zimmerman.

10. **Time and place of next meeting.** The next SC2 meeting is scheduled for 20 November 2019 at Keysight Technologies, Santa Rosa, CA.
11. **Adjournment.** The SC2 meeting was successfully completed as scheduled. The chairman adjourned the meeting at 1700.

**Attachment 1**

**SC2 Meeting Attendance List (01 May 2019)  
UL, LLC, Research Triangle Park, NC.**

<b>NAME</b>	<b>TITLE</b>	<b>EMAIL</b>
Marcus Shellman	Chair, SC2	<a href="mailto:marcus.shellman.civ@mail.mil">marcus.shellman.civ@mail.mil</a>
Chris Dilay	Vice Chair, SC2	<a href="mailto:chris.dilay@navy.mil">chris.dilay@navy.mil</a>
Michael Duncanson	Secretary, SC2	<a href="mailto:michael.duncanson@aecom.com">michael.duncanson@aecom.com</a>
Dan Hoolihan	Chair, C63 <sup>®</sup>	<a href="mailto:danhoolihaneme@aol.com">danhoolihaneme@aol.com</a>
Jerry Ramie	Secretary, C63 <sup>®</sup>	<a href="mailto:jramie@arctechnical.com">jramie@arctechnical.com</a>
Don Heirman	Chair, SC3	<a href="mailto:d.heirman@ieee.org">d.heirman@ieee.org</a>
Ed Hare	Chair, SC5	<a href="mailto:WIRFI@arrl.org">WIRFI@arrl.org</a>
Randy Long	Chair, SC6	<a href="mailto:rlong@anab.org">rlong@anab.org</a>
Janet O'Neil	Member	<a href="mailto:j.n.oneil@ieee.org">j.n.oneil@ieee.org</a>
Doug Kramer	SC1 Proxy	<a href="mailto:douglas.kramer@ets-lindgren.com">douglas.kramer@ets-lindgren.com</a>
John Repella	Guest	<a href="mailto:johnr@wll.com">johnr@wll.com</a>
John Norgard	Guest	<a href="mailto:john.d.norgard@nasa.gov">john.d.norgard@nasa.gov</a>
Chris Harvey	Guest	<a href="mailto:admin@tcbCouncil.org">admin@tcbCouncil.org</a>
Deanna Zakhoud	Guest	<a href="mailto:deanna.zakhoud@motorolasolutions.com">deanna.zakhoud@motorolasolutions.com</a>
Ross Quan	Guest	<a href="mailto:Rquan@ansi.org">Rquan@ansi.org</a>

Attachment 2

# C63<sup>®</sup> Accredited Standards Committee C63<sup>®</sup>

## Electromagnetic Compatibility

### Subcommittee 2: E3 Terminology Definitions and Best Practices

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**Chair: Marcus Shellman   Vice Chair: Chris Dilay   Secretary: Michael Duncanson**

May 01, 2019; 3:00 PM - 5:00 PM - EST

UL, LLC

12 Laboratory Drive

Research Triangle Park, NC 27709-3995

### Meeting Agenda

1. **Call to Order: Chair**
  - 1.1 **Announcements: Chair's remarks -**
  - 1.2 **Meeting logistics announcements: Host**
  - 1.3 **Introductions: Secretary – roll call** (record attending members with their affiliations and guests separately below) **Report any roster errors to the ASC-C63<sup>®</sup> Secretary** (insert [SC2 membership roster](#) from the website as shown below)

### Subcommittee 2 Membership Roster

Name	Role in SC	Affiliation
Marcus Shellman	Chair Subcommittee 2	DoD-Joint Spectrum Center (JSC)
Chris Dilay	Vice Chair Subcommittee 2	Naval Information Warfare Center (NIWC), Pacific
Michael Duncanson	Secretary Subcommittee 2	DoD-Joint Spectrum Center (JSC)
Dan Hoolihan	C63 <sup>®</sup> Chair	Hoolihan EMC Consulting
Zhong Chen	Chair Subcommittee 1	ETS - Lindgren
Don Heirman	Chair Subcommittee 3	Don HEIRMAN Consultants
Bob DeLisi	Chair Subcommittee 4	Underwriters Laboratories
Ed Hare	Chair Subcommittee 5	ARRL
Randy Long	Chair Subcommittee 6	ANSI-ASQ National Accreditation Board
Vladimir Bazhanov	Chair Subcommittee 7	VB Laboratory Services, LLC
Stephen Berger	Chair Subcommittee 8	TEM Consulting
Harry Hodes	Member	Bay Area Compliance Laboratories Corp.
Janet O'Neil	Member	ETS - Lindgren



**Guests and Observers:** (non-voting)

**1.4 Quorum:** (50% of roster + 1) constitutes a quorum. (rounding down) (Example: 9 roster members / 2 = 4.5 + 1 = 5.5 (therefore 5 people are required for a quorum) **Was quorum achieved? (Yes/No)** If not, any actions taken are subject to confirmation by electronic ballot or at a future meeting. (Quorum is not required for Working Group meetings)

**2. Approval of the Agenda: Secretary**

**2.1 Approval of the previous Minutes - [Minutes of the previous meeting](#)**

**2.2 Review of the [patent slides](#) -**

**3. Review of [Subcommittee Membership](#) - Report any errors to the ASC-C63<sup>®</sup> Secretary**

**3.1 Review of Membership Guidelines –**

**Subcommittees:**

For an individual to remain a voting member of a Subcommittee, active participation in Subcommittee meetings and regular responses to Subcommittee email votes is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or remotely via web conference (when used)) or respond to at least one of every two consecutive Subcommittee email votes, their membership in that Subcommittee may be at risk.

Note: Abstentions shall be treated the same as a “yes” or “no” vote regarding the requirement to respond to email votes.

**Working Groups:**

For an individual to remain a member of a Working Group, active participation is required. Should a member fail to attend at least one of three consecutive scheduled meetings (in person or via web conference (when used)) their membership in that Working Group may be at risk. Individual Working Groups may establish additional participation criteria and/or modify this requirement. (insert Member Attendance Log as below)

**Member Attendance Log:**

Name	Role	05/11/2016	11/08/2016	05/09/2017	11/08/2017	05/02/2018	11/28/2018
<a href="#">Marcus Shellman</a>	SC2 Chair	x	x	x	x	x	x
<a href="#">Chris Dilay</a>	SC2 Vice Chair	x	x	x	x	x	x
<a href="#">Michael Duncanson</a>	SC2 Secretary	x	x	x	x	x	x
<a href="#">Dan Hoolihan</a>	C63 Chair		x		x	x	x
<a href="#">Zhong Chen</a>	SC1 Chair					x	x
<a href="#">Don Heirman</a>	SC3 Chair	x		x	x	x	x
<a href="#">Bob DeLisi</a>	SC4 Chair				x	x	x
<a href="#">Ed Hare</a>	SC5 Chair			x	x	x	x
<a href="#">Randy Long</a>	SC6 Chair	x	x		x		x
<a href="#">Vladimir Bazanov</a>	SC7 Chair	x					x
<a href="#">Stephen Berger</a>	SC8 Chair	x				x	x
<a href="#">Janet O'Neil</a>	Member	x	x		x	x	x

<a href="#">Harry Hodes</a>	Member	x				x	x
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**Any members at risk?** These members are at risk: (send letter to each member at risk)

**3.2 Consideration of new members?** [Application for C63® Subcommittee Membership](#)

**4. Approval of [Scope and Duties](#) (Spring meeting only)** (Report approval or any changes to the Main Committee)

**Scope: E3 Terminology, Definitions, and Best Practices**

Subcommittee 2 (SC2) is responsible for developing electromagnetic environmental effects (E3) terminology for C63® publications, and harmonizing the use of E3 terms with U.S. military and international standardization bodies. SC2 is also responsible for developing guidelines and best practices for application of C63®, other commercial, and U.S. military E3 standards.

**Duties:**

- (1) ANSI C63.14, "American National Standard, Dictionary of Electromagnetic Compatibility (EMC) including Electromagnetic Environmental Effects (E3)"
- (2) ANSI C63.28, "American National Standard, Guide for Best Practices for EMC."

**4.1 Election of Officers** (as required)

**5. Working Group reports - Chair -** [More information about each standard](#) is available on the Standards Status Matrix page of the [C63® web site](#). This information will be reviewed for accuracy at each Subcommittee meeting.

**5.1 C63.14 – Definitions - Duncanson** (insert link to [WG report](#).) Verify accuracy of document [status matrix](#) content and report any errors to the ASC-C63® Secretary.

**Is this information correct? (Yes/No)** (repeat this verification for all Standards covered by this Subcommittee)

**5.2 C63.28 – Best Practices for Electromagnetic Compatibility - Dilay** (insert link to [WG report](#)) Verify accuracy of document [status matrix](#) content and report any errors to the ASC-C63® Secretary.

**Is this information correct? (Yes/No)** (repeat this verification for all Standards covered by this Subcommittee)

**5.3 Coordination with other ASC-C63® Subcommittees on terms/definitions**

**SC1:** C63.2, C63.4, C63.5, C63.7, C63.22, C63.23, C63.25, C63.27

**SC3:** C63.12

**SC4:** C63.10, C63.26, C63.29, C63.30, C63.31

**SC5:** C63.9, C63.15, C63.16, C63.20, C63.24

**SC6:** C63.8, C63.11

SC7: C63.17, C63.27

SC8: C63.18, C63.19

## 6. Other Old Business: Chair

**6.1 Written reports** - Written reports of this Subcommittee meeting shall be presented by the Subcommittee Chair at the Main Committee meeting. These reports shall be made using the [PowerPoint template](#). Prior to the Main Committee meeting, the [SC report](#) and [approved previous meeting minutes](#) shall be provided to the projectionist for showing on the screen at the Main meeting. The Presentation and any written report shall also be sent by the Subcommittee Chair to the ASC-C63<sup>®</sup> [Newsletter editor](#).

**6.2 Coordination with SC2 prior to standard balloting** – Process change for standards publication to include draft submission to SC2 for review of definitions prior to the balloting process.

**6.3 Coordination with SC3 for harmonization** - Before any Working Group draft can be submitted to the Subcommittee for approval, the document must be provided to the SC3 Chair for evaluation and coordination of any harmonization effort.

## 7. New Business: Chair

**8. [C63.org](#) website use and updates: Secretary** - We normally post documents to the [SC2 protected area](#). If any SC or WG needs help with this posting, a Technical Secretary is available to assist.

## 9. Review of the Action Items: Secretary

**9.1 Review of Action Items from this meeting: Secretary** - (read Action Items to Members, who must agree that they understand their meaning)

**9.2 Review of Action Items from previous meeting:** (insert consolidated Action Item table from the previous meeting Minutes as shown below)

**9.3 Review Newsletter input:** The SC Presentation and any written report shall also be sent by the Subcommittee Chair to the ASC-C63<sup>®</sup> [Newsletter editor](#).

## 10. Time and place of next meeting: Chair

## 11. Closing remarks and Adjournment: Chair

\*\*\*\*\* End of Meeting  
\*\*\*\*\*

### Attachment 3

#### SC2 Membership List

Chairman – Marcus Shellman  
ASC C63<sup>®</sup> / SC2 Membership Roster

<b>NAME</b>	<b>TITLE</b>	<b>EMAIL</b>
Mr. Marcus Shellman	Chair, SC2 (WG1/WG2)	<a href="mailto:marcus.shellman.civ@mail.mil">marcus.shellman.civ@mail.mil</a>
Mr. Chris Dilay	Vice Chair, SC2 (WG1/WG2)	<a href="mailto:chris.dilay@navy.mil">chris.dilay@navy.mil</a>
Mr. Michael Duncanson	Secretary, SC2 (WG1/WG2)	<a href="mailto:michael.duncanson@aecom.com">michael.duncanson@aecom.com</a>
Mr. Dan Hoolihan	Chair, C63 <sup>®</sup> (WG2)	<a href="mailto:danhoolihanemc@aol.com">danhoolihanemc@aol.com</a>
Mr. Zhong Chen	Chair, SC1	<a href="mailto:zhong.chen@ets-lindgren.com">zhong.chen@ets-lindgren.com</a>
Mr. Don Heirman	Chair, SC3 (WG2)	<a href="mailto:d.heirman@ieee.org">d.heirman@ieee.org</a>
Mr. Bob Delisi	Chair, SC4	<a href="mailto:bob.delisi@ul.com">bob.delisi@ul.com</a>
Mr. Ed Hare	Chair, SC5	<a href="mailto:W1RFI@arrl.org">W1RFI@arrl.org</a>
Mr. Randy Long	Chair, SC6	<a href="mailto:rlong@anab.org">rlong@anab.org</a>
Vacant	Chair, SC7	
Mr. Stephen Berger	Chair, SC8	<a href="mailto:stephen.berger@ieee.org">stephen.berger@ieee.org</a>
Mr. Harry Hodes	Member (WG1/2)	<a href="mailto:harry.hodes@baclcorp.com">harry.hodes@baclcorp.com</a>
Mr. Victor Kuczynski	Member	<a href="mailto:yican@on.aibn.com">yican@on.aibn.com</a>
Ms. Janet O'Neil	Member	<a href="mailto:j.n.oneil@ieee.org">j.n.oneil@ieee.org</a>