



ICES

International Committee on Electromagnetic Safety

MEETING ANNOUNCEMENT

TC95 Summer Meetings

Date: 19 June 2014
To: Members of ICES, its Subcommittees and Interested Parties
From: R. C. Petersen
Subject: ICES/TC95 Meeting Announcement

ICES/TC95 and its Subcommittees will meet 9 September (Tuesday) thru 11 September (Thursday) 2014 at the Cliffs Resort, 2757 Shell Beach Road, Pismo Beach, CA 93449 (www.cliffsresort.com).

Enclosed are the following:

- 1) Registration form
- 2) Meeting schedule
- 3) Draft agenda – TC95/SC1
- 4) Draft Agenda – TC95/SC2
- 5) Draft Agenda – TC95/SC3/SC4
- 6) Draft Agenda – TC95/SC5
- 7) Draft Agenda – TC95
- 8) Hotel information
- 9) Travel Information
- 10) Venue: General Information

An updated draft of the revision of C95.1-2005 will be sent separately, as will additional information for the subcommittee and COMAR meetings.

R. C. Petersen
Tel: 908-234-0373
E-mail: r.c.petersen@ieee.org

NOTE--We are encouraging members of ICES and COMAR to reach out to younger colleagues, and invite them to participate in this September meeting. It was obvious at the January ICES meeting that our membership is rapidly maturing, and the future of our activity requires an infusion of new and younger members. We very much need to pass on our "corporate memory", and share our experiences with future leaders.

copy to:

Tricia Gerdon IEEE



ICES

International Committee on Electromagnetic Safety

ICES TC95 Meetings

Tentative Schedule

The Cliffs Resort, 2757 Shell Beach Road

Pismo Beach, CA 93449

ICES TC 95 and the TC95 subcommittees will meet 9 – 11 September, 2014, at the Cliffs Resort, Pismo Beach, CA (Draft agendas for TC95, TC95/SC1, TC95/SC2, TC95/SC3/4 and TC95/SC5 are enclosed; drafts of the standards under development and the COMAR announcement and agenda will be sent separately).

Tuesday, 9 September 2014

- 0800 – Noon: TC95/Subcommittee 1: Techniques, Procedures, Instrumentation and Computation
- 1300 – 1700 h: TC95/Subcommittee 2: Terminology, Units of Measurements and Hazard Communication
- 1730 – 1900 h: AdCom (AdCom members and invited guests)

Wednesday, 10 September 2014

- 0800 – 1630 h: TC95/Subcommittee 3: Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 0 - 3 kHz
and
TC95/Subcommittee 4: Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 3 kHz – 300 GHz (SC3 and SC4 will meet jointly)
- 1630 – 1800 h: TC95/Subcommittee 5: Safety Levels with Respect to Electro-Explosive Devices
- 1800 – 1930 h COMAR

Thursday, 11 September 2014

- 0900 – Noon: ICES TC95 Main Committee



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International Committee on Electromagnetic Safety

Draft Agenda

IEEE/ICES TC95 Subcommittee 1 Techniques, Procedures and Instrumentation

Tuesday, 9 September 2014

0800 – Noon

The Cliffs Resort
2757 Shell Beach Road,
Pismo Beach, CA

1. Welcome and Introductions

2. Modifications and approval of agenda

3. Approval of January 2014 SC-1 meeting minutes

4. Old Business:

- a) Forward Slides to Dave Cotton *Colville*
- b) Discuss low-frequency measurements
- c) Discuss the shape of the area to be used in spatial averaging above 3GHz *Colville*
- d) Discuss parabolic reflector antenna near-field power density definition *Colville/Tell*
- e) Revisions of consolidated C95.3-2002 and C95.3.1-2010 *Colville/Douglas*
- f) Revised structure of sections *Douglas*
- g) Introductory flowchart to the relevant sections *Douglas*
- h) Compare IEC 62232 with IEEE C95.3 *Cotton*

5. New Business:

- a) Open discussion.

6. Time and Place of Next Meeting – TBD.

7. Adjourn

NOTE—Presenters/participants who intend to display MS PowerPoint/Word files, please send a copy to Ron Petersen (r.c.petersen@ieee.org) for the minutes



ICES

International Committee on Electromagnetic Safety

Draft Agenda

IEEE/ICES TC95 Subcommittee 2

Committee on Terminology, Units of Measurement and Hazard Communications

Tuesday, 9 September 2014

1300 – 1700 h

The Cliffs Resort

2757 Shell Beach Road,

Pismo Beach, CA

1. CTO
2. Introduction of those in attendance
3. Modifications and approval of agenda
4. Review and Approval of Unapproved Minutes of Plantation meeting (January 14, 2014)
5. Old Business:
 - a) Update on submittal of final draft (D11) of C95.7 to IEEE SASB RevCom for approval *Tell*
 - b) Report of RF Safety Barrier Working Group *Johnson*
 - c) Importance of medical device interference issues *Bushberg*
 - d) Potential revision of C95.2 for static and ELF fields *Haes*
 - e) Considerations related to revision of C95.7 to include 0-3 kHz. *Reilly*
 - f) National Fire Protection Association (NFPA) standards potentially relevant to RF safety matters. *TBD*
6. New Business:
 - a) Distinguishing between individuals subject to lower tier and upper tier of RF exposure limits; What represents the minimum necessary for allocation to restricted environments? *Tell*
 - b) Practical RF compliance issues from the wireless industry *TBD*
7. Time and Place of Next Meeting – TBD
8. Adjourn

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ICES

International Committee on Electromagnetic Safety

Draft Agenda

**IEEE/ICES TC95 Subcommittee 3
Safety Levels with Respect to Human Exposure to Electromagnetic Fields, 0 - 3 kHz
and**

**IEEE/ICES TC95 Subcommittee 4
Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields,
3 kHz to 300 GHz
0800 – 1630 h**

**Wednesday, 10 September 2014
The Cliffs Resort
2757 Shell Beach Road
Pismo Beach, CA, USA**

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|--|--------------------------|
| 1. Call to Order | <i>Ziskin</i> |
| 2. Introduction of those Present | <i>All</i> |
| 3. Approval of Agenda | <i>Ziskin</i> |
| 4. Approval of the Minutes (January 15th 2014 Meeting) | <i>Ziskin</i> |
| 5. Secretary's Report | <i>Petersen</i> |
| 6. Chairmen's Reports | <i>SC3/SC4 Co-chairs</i> |
| 7. Progress on revision of PC95.1-2005 | <i>Ziskin</i> |
| a) Update on the revision of C95.1-2005 and C95.6-2002 | <i>Ziskin</i> |
| b) Literature surveillance and review | <i>Elder</i> |
| c) Update on NATO standard C95.1-2345 | <i>Klauenberg</i> |
| 8. FCC low frequency regulations | <i>Kavet</i> |
| 9. Developing a WHO Standard on Non-Ionizing Radiation | <i>Bodemann</i> |
| 10. Technical Presentations | <i>Ziskin</i> |
| a) Discussion Paper - Considerations of Conservatism | <i>Tell</i> |
| b) RF Burns | <i>Tell</i> |
| 11. New Business | <i>Ziskin</i> |
| 12. Time and Place of Next Meeting – TBD | |
| 13. Adjourn | |

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International Committee on Electromagnetic Safety

Draft Agenda

**IEEE/ICES TC95 Subcommittee 5
Safety Levels with Respect to Electroexplosive Devices**

1630 – 1800 h

Wednesday, 10 September 2014

**The Cliffs Resort
2757 Shell Beach Road
Pismo Beach, CA, USA**

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| 1. Call to Order | <i>Chair</i> |
| 2. Introduction of those Present | <i>All</i> |
| 3. Approval of Agenda | <i>Chair</i> |
| 4. Chairmen's Reports | <i>Chair</i> |
| 5. Discussion on Committee Members | <i>Chair</i> |
| 6. Discussion on C95.4 Review | <i>Chair</i> |
| 7. Date and Place of Next Meeting | <i>Chair</i> |
| 8. Adjourn | |

NOTE—Presenters/participants who intend to display MS PowerPoint/Word files, please send a copy to Ron Petersen (r.c.petersen@ieee.org) for the minutes.



ICES

International Committee on Electromagnetic Safety

Draft Agenda

TC95 Committee

(Safety Levels with Respect to Human Exposure to Electric, Magnetic
and Electromagnetic Fields, 0 Hz to 300 GHz)

0900 – Noon

Thursday, 11 September 2014
The Cliffs Resort
2757 Shell Beach Road
Pismo Beach, California, USA

- | | |
|--|-------------------------|
| 1. Call to Order | <i>Chou</i> |
| 2. Introduction of those Present | <i>All</i> |
| 3. Approval of Agenda | <i>Chou</i> |
| 4. Approval of January 16, 2014 TC95 minutes | <i>Chou</i> |
| 5. ICES Chairman's Report | <i>Bodemann</i> |
| 6. TC95 Chairman's Report | <i>Chou</i> |
| 7. Executive Secretary's Report | <i>Petersen</i> |
| 8. Treasurer's Report | <i>Petersen</i> |
| 9. Membership Chairman's Report | <i>Murphy</i> |
| 10. Topic presentations | |
| a) In memory of Bill Guy | <i>Chou</i> |
| b) WHO initiative to developing a WHO standard on non-ionizing radiation | <i>Bodemann</i> |
| c) RF safety issues in various countries | <i>TBD</i> |
| 11. Subcommittee Reports | |
| a) SC1 (Measurements and computations) | <i>Colville/Douglas</i> |
| b) SC2 (Safety programs) | <i>Tell</i> |
| c) SC3 (Safety levels – 0 Hz to 3 kHz) | <i>Kavet</i> |
| d) SC4 (Safety levels – 3 kHz to 300 GHz) | <i>Ziskin</i> |
| e) SC5 (Effects of EM fields on blasting operations) | <i>Harmon</i> |
| 12. ICES Website Update | <i>Chou</i> |
| 13. New Business | <i>Chou</i> |
| 14. Future Meetings | <i>Chou</i> |
| 15. Adjourn | |

NOTE—Presenters/participants who intend to display MS PowerPoint/Word files, please send a copy to Ron Petersen (r.c.petersen@ieee.org) for the minutes.

Room Reservations for September 9-11, 2014 Meeting
ICES/TC95 & COMAR
Shell Beach, CA

The Cliffs Resort (where the Meeting Room is located)
2757 Shell Beach Road
Pismo Beach, CA 93449
Reservation: 800-826-7827
www.cliffsresort.com

Twelve rooms are guaranteed by ICES and available, from **Monday afternoon, September 8**, through **Thursday morning, September 11**, single or double occupancy, at the rate of \$159 per night. **Reservations must be made by Friday, August 8, 2014**, for this rate. Children under the age of 12 stay free. Rates are net, non-commissionable, exclusive of the current 11.065% tax (subject to change without notice based upon state and local ordinance) and a \$15.00 facilities fee per room per night. Check in time from 4:00 pm, with check out by 12:00 pm Typically, there is a \$50 late check-out fee until 2:00 pm; after 2:00 pm, the full room rate will be assessed. To make a room reservation, call the hotel directly at **800-826-7827 (California) or 800-826-5838 (toll free)**. In order to receive the group rate, callers must **identify themselves as being with the ICES Group**. There is a 72 hour cancellation policy.

The Spyglass Inn (less than a 5 min walk to the Cliffs Resort Meeting Room)
2705 Spyglass Dr.
Pismo Beach CA 93449
Reservation: 800-824-2612
www.pacificahotels.com/spyglassinn

Rooms are reserved from **Monday afternoon, September 8**, through **Friday morning, September 12**, single or double occupancy, at the rate of \$110 per night for a traditional single King bed room (20 available), and \$140 per night for an ocean view single king bed room (10 available), exclusive of the state and local tax of 11.07 %. A request for a room on the preceding Sunday will be at the same rate as Monday-Thursday. A request, when initially making the reservation, to stay overnight Friday to Saturday will be at 15% off of the hotel's regular rates at that time. **Reservations must be made by Friday, August 8, 2014, for these rates**. To make a room reservation, call the hotel directly at **800-824-2612 (toll free)**. In order to receive the group rate, callers must **identify themselves as being with the ICES Group**. Due to high demand, those attendees who cancel reservations after 8/09/14 will be charged for the first night room and tax. Check in time from 4:00 pm, with check out by 11:00 am.

September 2014 TC95 Meetings—Travel Information

For those interested in attending the September, 2014, meeting of ICES/TC-95 and COMAR in Shell Beach/Pismo Beach, California (Located approximately halfway between Los Angeles and San Francisco), be aware that the local airport in San Luis Obispo County is a small airport, with a limited number of flights in and out.

Additional travel information:

San Luis Obispo County Regional Airport: Served (only) by United Airlines and U.S. Airways, with small propeller planes flying in from **Los Angeles (LAX)** and **San Francisco International Airports**. The flights are short (under 1 hr) but noisy. (Larger carry-ons can be quickly checked for free when actually boarding the plane and picked up alongside the plane on arrival.) The San Luis Obispo airport is also served by U.S. Airways jets from **Phoenix**. The taxi ride from the San Luis Obispo Airport to Shell Beach is about a 20 minute drive. Car rentals are available at the airport. "**FunRide**" rental cars may be available by advance reservation.

From the South:

The small **Santa Maria Public Airport**, south of Shell Beach via Hwy. 101, is a 35 minute drive. It has limited flights. Car rentals are available.

The **Santa Barbara Municipal Airport** is further south of Shell Beach via Hwy. 101. It is an easy 90 minute drive, with more flights available. Car rentals are available.

Los Angeles International Airport(LAX) is south of of Shell Beach on Highway 405. This highway connects when driving north to Hwy. 101 through Ventura and then Santa Barbara. The drive is under 4 hrs without traffic, but if landing at LAX after mid-afternoon until after rush hour, expect a great deal of traffic, often stop and go, and a longer drive time.

There is a scheduled **bus** (the "Santa Barbara Airbus") which travels north from LAX to Santa Barbara and Santa Maria, but you will still need to drive to Shell Beach from either.

Amtrak does have a **train** that travels along the coast from Los Angeles to Grover Beach and San Luis Obispo stations, both of which are within a 20 min taxi drive to Shell Beach.

LA/Ontario International Airport, northeast of Los Angeles International Airport, is served by several different airlines. The drive time to Shell Beach is 3 ¼ – 4 hrs. This will require a car rental.

From the North:

San Jose International Airport is north of Shell Beach. It is about a 3 – 3 ½ hr drive south via Hwy. 101, and should be considered.

San Francisco International Airport is north of Shell Beach. It is a 3.5 hour drive south via Hwy. 101. It should be considered as an alternative to landing at Los Angeles (LAX), because of the potential road traffic congestion in Los Angeles.

NOTE: Once at the meeting location, there is no need for a car for good dining. The three adjoining hotels each have excellent full service restaurants (The Spyglass Restaurant at the Spyglass Inn, the Marisol at the Cliffs Resort, and the Lido at the Dolphin Bay Hotel (between the other two hotels). In addition, across the street from the Spyglass Inn, there is a gourmet delicatessen (DePalo's) with warm and cold take-out food, and also a new Japanese Restaurant (Kanpai Sushi). Spyglass Park nearby has tables for eating outdoors.

September 2014 TC95 Meetings—
Background information:

**To all Current ICES and COMAR Members, Recent Guests, and
Prospective Attendees at the next meetings of ICES TC95, its
Subcommittees and COMAR**

At the January 2014 ICES/TC95 and COMAR meetings held in Plantation Florida, a decision was made to not follow our traditional path and hold the next meeting in conjunction with BIOEM 2014. The reason is based on the relatively low number of attendees at the meetings held in conjunction with BIOEM 2013 in Thessaloniki, Greece, and the likelihood that only a small number of ICES members and guests would be attending the upcoming BIOEM June 2014 meeting in South Africa. The decision was instead made to schedule a non-competitive meeting of TC95 and COMAR in September of 2014 in California. The meeting dates are 9 September (Tuesday) thru 11 September (Thursday); the meeting venue is Shell Beach California (on the central coast of California halfway between Los Angeles and San Francisco).

ABOUT THE LOCATION

The location is the northern gateway to the City of Pismo Beach, just south of the City of San Luis Obispo on Highway 101. The meeting site overlooks the Pacific Ocean near Spyglass Park, with access to beaches and tide pools below (when the tide is out); the beach towns of Pismo Beach, Avila Beach and Grover Beach within 4 exits in either direction on Highway 101. There are a large number of small towns nearby, many vineyards, small and large wineries, beaches and dunes, shopping and antique stores, a large number of restaurants of all kinds, and plenty of shopping for guests within 15 minutes of the two hotels hosting the meeting. Thirty rooms with single King beds at modest cost have been reserved for the meeting at the Spyglass Inn, and a block of 10 rooms with the option of two beds in a room have been reserved in the Cliffs Resort. The meetings will be at the Cliffs Resort— within a 5-minute walk. The information about rooms will be sent separately, with reservations at the contracted group rates being required before 8 August. There are an extensive number of other motels/hotels available within a 15-minute drive if necessary; we encourage reservations at the Spyglass Inn

(www.spyglassinn.com) and the Cliffs Resort (www.cliffsresort.com), however, as they have made a significant effort to reduce our costs.

WHY SOME SPECIAL ATTENTION TO THIS MEETING?

We are asking all of the current members of ICES and COMAR to reach out to younger colleagues, and invite them to participate in this September meeting. It was obvious at the January meeting of ICES that our membership is rapidly maturing, and the future of our activity requires an infusion of new and younger members. We very much need to pass on our “corporate memory”, and share our experiences with future leaders.

In addition, there was considerable discussion at the January meeting of the need to focus on the problems related to signs and barriers associated with protection against entering areas where the exposures could exceed the appropriate safety levels. The current system is lacking in detail, practicality, and consistency, and needs to be addressed by an audience of stakeholders who might not ordinarily attend our meetings. All of our members and guests need to reach out to these stakeholders, speak to them sooner rather than later, invite them to participate, and offer to forward to them future meeting information.

For Subcommittees 3 and 4, we will move forward on the standards revision and to update literature review for Appendix B on Research summary. We need lots of participation from all our members.

AREA WEATHER IN SEPTEMBER IN SHELL BEACH

While the kids are back in school, and the number of tourists to the area is reduced, it is still a popular time, with September our warmest month (the average temperature is around 68 degrees F.) We have sunshine around 300 days per year. There is plenty of opportunity for enjoyable short and long walks.

If immediate information is needed, feel free to contact the Local Chair, Martin L. Meltz PhD, at martinLmeltz@sbcglobal.net
For input and current information about the meeting of ICES, contact C-K. Chou at ck.chou@ieee.org.

For input and current information about the meeting of COMAR, contact Rick Tell at rtell@radhaz.com

If you will require an official letter of invitation to submit to your organization to allow your participation, please contact C-K. Chou at ck.chou@ieee.org.

We look forward to seeing you and your colleagues and contacts in Shell Beach in September.

Website Links of Interest to Potential Attendees

<http://www.visitsanluisobispo.com/our-area>

Pismo Beach Visitors Guide: <http://www.classicalifornia.com>

http://visitslo.com/cm/About_SLO/Virtual_Visitors_Guide.html

For “Conference Guests”

- Downtown Pismo Beach and Pier-A “Funky” Beach Town
- Pismo Beach Premium Outlets boasts over 40 premium retail outlets with available coupons
- The Shopping Village of Arroyo Grande
- On the way to nearby Avila Beach - naturally heated mineral springs where you can swim in the pool, take a hot mineral bath, or get a massage. Sycamore and Avila Hot Springs are two of the best mineral springs still operating in California
- Beach walks – ocean front promenades or on the sand
- Oceano Dunes State Park
- 5 wine tasting rooms within Pismo Beach; any number of nearby wineries and tasting rooms
- Hearst Castle, San Simeon – California’s only castle (1 hr, 15 min drive North)
- The Danish Village of Solvang (1 hour drive south)
- The City of San Luis Obispo-Many restaurants (indoor and outdoor seating), shopping, a small art museum, home of Cal Poly State University, a great place to walk. Every Thursday evening, a major outdoor Farmers Market on several closed blocks of Higuera Street, with fresh produce by area farmers, and lots of outdoor food carts for dinner by many restaurants.