

EMC Society Board of Directors Meeting

*The Hilton Hotel
Fort Lauderdale, Florida
November 9, 2007*

THE PRESIDENT'S OPENING REMARKS/CONSENT AGENDA

President Drozd called the meeting to order at 8:30 am., members present included B. Archambeault, H. Benitez, C. Brench, R. Davis, A. Drozd, R. Ford, B. Goldblum, F. Heather, D. Heirman, L. Hill, D. Hoolihan, T. Hubing, E. Joffe, F. Maradei, M. Montrose, J. O'Neil, R. Scully, D. Staggs, D. Sweeney, R. Wallen, K. Williams, and T. Yoshino. Members absent included W. Kesselman, J. Norgard, and G. Pettit. Guests included B. Crain, J. LaSalle, and V. Ungvichian. President Drozd reviewed activity since the last meeting. The topics included a review of recent global outreach activities. He welcomed the newly elected Board members and announced the appointment of Mark Montrose as IEEE Division VI Director. He then presented the agenda and noted the items shown under the Consent Agenda, which were then approved.

PRESIDENT-ELECT REPORT

Elya Joffe talked about long range planning activity, global outreach efforts and the 2008/2009 Board meeting schedule. On long range planning, he reviewed the plans for the Saturday, November 10 meeting. At the March 2008 Board meeting, he would like to hold a half-day LRP strategic brainstorming session (with the full BoD, in groups per field), covering only the reduced list of "mega issues." The desired outcome is to determine a course of action for long term "mega issues." On global outreach, he would like to continue outreach efforts to China and Korea as well as Eastern Europe. There are a very high number of graduating engineers in China who are not affiliated with IEEE.

FINANCE COMMITTEE REPORT

Kimball Williams presented the finance committee report. Two line items have been added to the budget for clarity, including President-elect and Past-president. The Society continues to look at diversifying its sources of income. John LaSalle presented a report on the financial matrix he has created to monitor the Society's budget. This includes budget and actuals per line item. Minimal data manipulation is necessary to maintain the database. The Treasurer's log may have a more detailed cost breakdown. Mr. Williams referred to Treasurer Warren Kesselman's report, which was circulated to the Board prior to the meeting. Regarding 2007 operations, IEEE's 30 September third quarter financials indicate the Society's operations net, to date, is \$301,900. This net is misleading. The listed Meetings/Conferences cost center actual of \$322,100 is the 2006 Symposium surplus, which was accrued in 2006. However, that accrual will not be deleted from 2007 financials until the 2006 Symposium books are officially closed. If the 2006 Symposium accrual data is deducted from the September 2007 summary sheet, the Society's year to date operations net is really in the order of a \$21,000 deficit. IEEE conducted a third quarter 2007 year end forecast review in October. The Society's forecast contains a net year-end deficit of \$110,300. The major factor in that forecast is that the Meetings/Conferences cost center net may be significantly below budget. If the market is "good", the actual 2007 operations for the Society could be on the positive side. Regarding 2008 budget development, a cost center summary of EMC's "2nd Pass" 2008 budget was presented. It projects a \$16,500 net surplus.

ALL PHOTOS BY JANET O'NEIL



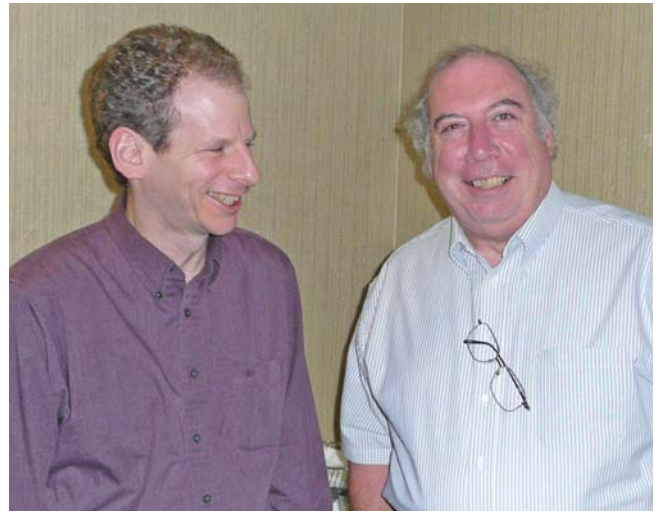
Don Heirman, Vice President for Standards Services, of Don HEIRMAN Consultants prepares for the start of the November Board meeting.



Francesca Maradei, Chapters Coordinator, of the University of Rome, "La Sapienza" and Todd Hubing of Clemson University are ready for the Board meeting.



The lunch break at the Board meeting provided a great opportunity for newly elected Board member Bob Davis (right) of Lockheed to visit with Floridians Kathy and Bruce Crain. Bruce Crain is a former Board member and is currently the Melbourne, Florida EMC Chapter Chair.



During a break in the Board meeting, Lee Hill of SILENT (left) caught up with Bruce Archambeault of IBM and enjoyed a humorous moment.

COMMUNICATION SERVICES

In the absence of Ghery Pettit, Vice-President for Communication Services, Janet O'Neil presented his report. She noted the Society is seeking a volunteer for the position of Publicity Chair. If anyone knows of qualified candidates, please refer them to Mr. Pettit. As Newsletter Editor, Ms. O'Neil, reported on activity since the last Board meeting. The Summer 2007 issue was 84 pages and included regular articles, three articles by Dan Hoolihan in the special History/Anniversary section, including a reprint of the most referenced paper in the Transactions on EMC and two obituaries - one on Founder John O'Neil and one on Mike Hart. The issue also includes the annual article on EMC Finance by Warren Kesselman, a list of new Senior Members, and an article about IEEE Fellows by Heyno Garbe. Financially, the issue cost \$19,887 to produce, print, and mail to the members. 5,268 issues were printed. \$18,565 was billed in ad revenue with a net of \$9,654 going to the EMCS to offset the cost of the issue. There were 10.67 pages of ads from a total of 14 advertisers. The Fall 2007 issue focuses on the annual EMC symposium. There are numerous articles, including an extensive section on the 50th Anniversary activities at the EMC Symposium and the traditional photo collage pages showing scenes from the symposium. Ken Wyatt recruited a team of volunteer photographers to help him capture the numerous activities at the symposium. Regarding the IEEE Magazines and Periodicals Department, Bob Smrek, long time manager of the department, recently retired. His replacement is Peter Tuohy. Ms. O'Neil asked Mr. Tuohy about shipping the Newsletter to non-US addresses, following up on an inquiry on this from Elya Joffe. The Board approved Ms. O'Neil's proposal to increase the budget for Newsletter postage by \$250 USD per issue to expedite delivery to non-US addresses. Lastly, the EMC 2008 symposium committee is talking about including their advance program as a separate document shipped with the Winter 2008 issue of the EMC Newsletter. Plans have not been finalized to date on this. Also, Perry Wilson, Editor, Transactions on EMC, has suggested sending an e-mail blast to EMC members of the table of contents when each issue is published so members will know what

new papers have been uploaded to Xplore. Ms. O'Neil will coordinate this effort with Dr. Wilson. Next, the report from the Editor of the IEEE Transactions on EMC, Perry Wilson, was reviewed. Dr. Wilson noted that as of Nov. 2, 2007, 238 manuscripts have been submitted in 2007. Month-by-month statistics are shown in Table 1 going back to 2003 (thanks to Prof. Canavero for the 2003-2006 data). The submission rate is trending up.

Table 1. New Paper Submissions

	2003	2004	2005	2006	2007
January	11	10	19	18	27
February	13	20	11	79 (*)	11
March	13	12	16	14	21
April	13	14	16	17	20
May	19	20	14	20	31
June	11	23	21	21	23
July	29	15	23	15	31
August	15	16	11	28	23
September	19	17	17	20	16
October	16	17	11	22	35
November	9	9	16	0	
December	10	14	12	0	
Total	178	187	187	301 (**)	285****

(*) Including 75 manuscripts for the special issue on EMC Singapore

(**) The total is 226 if the 75 special-issue papers are not considered

(***) As of June 15, 2007

(****) Projected at current rate

Regarding Transactions production, the August issue was on time in production. The November issue should also be on time. In laying out the Table of Contents (TOC) for the May, August, and November 2007 issues, he has attempted to align the TOC subsection titles and key words with the EMC Society Technical Committee titles and key words. By doing so, he hopes to take advantage of the recognizable technical structure of the Society. Regarding Special Issues/Sections, for 2008, a Special Issue on Aerospace EMC is planned with R. Perez and Jim Lukash as Guest Editors. Dr. Perez has invited 20 authors who have committed to write papers on various aspects of Aerospace EMC. They have begun receiving papers (six so far) starting Oct. 30. He hopes to have all papers



At the conclusion of the November Board meeting, incoming President Elya Joffe (left) of KTM Project Engineering gladly accepted the gavel from outgoing President, Andy Drozd of ANDRO Computational Solutions.

reviewed by early 2008, and to schedule the Special Issue for either May or August of 2008. For 2009, Prof. Vladimir Rakov (University of Florida) is submitting a proposal for a Special Issue on Lightning. A special issue on the same topic was published in Nov.1998 (134 pages) with F. Canavero, M. D'Amore, C. Mazzetti, and C. Nucci as Guest Editors. Prof. Rakov is confident that progress warrants another special issue. For 2010, Prof. Erping Li (University of Singapore) would like to propose a special issue on PCB packaging EMC. EMC in electronics design is a strong area of contribution from Asia, and China in particular. This would be a good opportunity to highlight research in this area. Regarding Associate Editors, at the beginning of 2007, there were 15 Associate Editors (AEs): 2 from Regions 1-7, 10 from Region 8, and 3 from Region 10. Prof. Kami has stepped down as an AE as of early 2007. Prof. De Leo plans to step down mid-year, and Dr. Meyer and Prof. Singer plan to step down toward the end of the year. This reduces continuing AEs to 11. He has invited and received commitments from eight new Associate Editors as of Oct 30 as noted in his report. They represent a good mix of expertise on various topics and are from globally diverse areas. Regarding the EMC-S website, Mr. Pettit notes in his report that he continues to work with Shannon Archambeault to resolve broken links and update content on the web site. There is also work on-going to resolve questions as to who has access to the servers to update standards committee pages that are not on the server hosting the main web site. In closing the Communications report, Ray Perez, IEEE Press chair, advised that the Elya Joffe/Kai Sang Lock (Israel/Singapore) book, *The Grounds for Grounding - Grounding from Circuits to Systems*, is almost finished. Seven chapters of the book have been received and independently reviewed with feedback sent to the authors. There are no other books in production at this time. Dr. Perez also expects a yes/no decision from a prospective author in December on a book addressing EMC for Wireless Communications (with an emphasis on EMC testing). Dr. Perez continues to look for potential authors. The effort is being directed to niche areas that have not received previous attention.



Following the Board meeting, members took a trolley to the Fort Lauderdale Convention Center, venue for the 2010 IEEE International Symposium on EMC. Trolleys are a popular mode of transportation in the beach cities.

STANDARDS SERVICES

Don Heirman, Vice-President for Standards, presented his report. Standards activity covers three major areas: The Standards Education and Training Committee (SETCom), the Standards Advisory and Coordination Committee (SACCom), and the Standards Development Committee (SDCom). The SETCom chair is Qiubo Ye and the vice-chair is Professor Johan Catrysse. The SACCom Chair is Dave Guzman. The SDCom continues to be chaired by Stephen Berger with Ed Hare as the secretary. The Standards Development Committee only met on November 8, with approximately 12 members in attendance. They reviewed the status of various standard projects, including: EM site survey (Std. 473) - New chair Vilitas - 80 percent or so completed, but no progress since Hawaii and before meetings; RF absorber evaluation (Std. 1128) - Current until 2011 - Looking at extending frequency range; VDT emissions (Std. 1140) - Current until 2011. No issues at this time; Gasket character. (Std. 1302) - in limbo. Will try to get draft from WG Chair; Probe calibration (Std. 1309 amd) - New WG chair (Zhong Chen of ETS-Lindgren) organizing WG; RF filter performance (P1560) - Current unto 2010. No issues at this time; Computational EM (P1597.1) - Ballot pool formed. Will be uploaded for ballot within days; Computational EM (P1597.2) - Draft 99% mature. SDCom approved sending to MEC (mandatory editing committee) of the Standards Board and then to ballot; Intentional EMI to computers (1642) - Ballot delayed. SDCom wants to see draft; Line replaceable module (P1688) - Draft 80% completed. First draft to be completed in Spring 2008; TV emission measurements (Std. 187) - Reaffirmed, with comments. SDCom will resolve revision. Regarding P1900 (Interference/coexistence-SDR), this is now Standards Coordinating Committee 41 (Dynamic Spectrum Access Networks). Steve Berger is the chair and the focus is on improved use of spectrum as new techniques and methods of dynamic spectrum access require managing interference, coordination of wireless technologies and inclusion of network management and information sharing. Mr. Berger will be the liaison between SDCom and SCC-41. Regarding P1775 (Powerline Communications Equipment EMC Testing), this is a



Board members arrive at the annual dinner, including (from left) Fred Heather of the Navy Pax River, Dan Hooliban of Hooliban EMC Consulting, Todd Hubing of Clemson University and Kimball Williams of Denso International America.

joint development among EMC-S, PES, and ComSoc, with a sponsoring committee of 12 members. The working group sent a draft to sponsors to approve for ballot, but the sponsoring committee by a close margin rejected the standard and sent it back to the working group. The negative votes were not all from the EMC Society sponsoring committee members (four of them). The working group expects to resolve and rebut comments received from the sponsoring committee by the first quarter of 2008. For 2008, Mr. Heirman noted the Standards committees would continue to meet the day before the Board meeting, with a full day for the SACCom and SETCom meetings in February 2008. These two committees are planning interim telecons to keep up progress. The traditional two part SDCom meeting and SETCom/SACCom meetings will be held at the Detroit symposium in August.

CONFERENCE SERVICES

Barry Wallen, Vice-President for Conferences, presented his report. EMC 2007 Honolulu, HI 50th Anniversary Symposium Chair Janet O'Neil reported on the following activity since the last report in July. Treasurer Benoit Nadeau reported preliminary numbers of: Income (near to final): \$937,299.34, Expenses (non-final): \$845,690.74, Surplus (up to now): \$91,608.70 (this number will be lower). The surplus is lower than typically achieved at the annual symposiums, however, there were considerably more expenses this year with A/V not being donated, printing hard copies of the workshop program, and the 50th anniversary celebration activities. In addition, this year exhibitor income was lower due to the special location of Hawaii. Local companies did not exhibit nor were some "regular" companies willing to exhibit in Hawaii. EMC 2007 full registration numbers were higher than last year with 443 full member registrations and 190 full non-member registrations. There were a record 192 companion registrations over 18 years of age and 48 registrations for those under 18. Exhibitor registrations were down as there were fewer booths purchased. There were 150 technical exhibitor registrations and 366 regular exhibitor registrations (no access to



Board member Dick Ford brought his lovely wife Terry to the annual dinner in Florida.

technical program). Total bodies then was 1,842 – compared to 2,108 at EMC 2006. On the technical program, there were a record seven parallel sessions for Tuesday through Thursday and five parallel sessions for Sunday and Monday. The committee received 345 papers (over twice as many as any other symposium); of which 245 were accepted, 45 withdrawn and 55 rejected. There were eight special sessions with one on EMC history. Four workshops and 14 tutorials were accepted; some 25 were proposed. There were four each poster sessions. The poster sessions were in a separate room and unfortunately did not get much traffic. The plenary session with speakers Leah Jamieson (IEEE President) and Tapan Sarkar drew record attendance. There was standing room only in the room, which seated 300 people. The new Global University proved to be very popular. There were 56 registered students from all over the world; of this total, 54 turned in the survey required to get their CEU certificate. Overall, the comments on the technical program were very positive – the only negative being that there was too much to choose from. This may have impacted exhibitor traffic accordingly. EMC 2008 should follow up with the IEEE IT department to see if the symposium website can be accessed by people living in China. The committee contracted with three hotels for EMC 2007. The symposium booked a record 4,224 number of room nights, but this total has not been confirmed with IEEE. At EMC 2006, 2,902 room nights were booked in the symposium block. There was record attendance at every social event. Over 800 people attended the Tuesday welcome reception, 1075 people attended the Wednesday night banquet, and just under 600 attended the Friday anniversary party and island tour. Regarding publicity, there was a new barter exhibitor – the China Electrotechnical Society – who gave the symposium good publicity at their EMC Beijing conference. They are interested in developing closer ties with the EMC Society. Ms. O'Neil acknowledged and thanked the 2007 Symposium steering committee for a job well done. EMC 2008 Detroit, MI, Chair Kimball Williams reported the 2008 Symposium Committee continues to meet via teleconference once each month. The decision was made to push for publication of an Advance Pro-



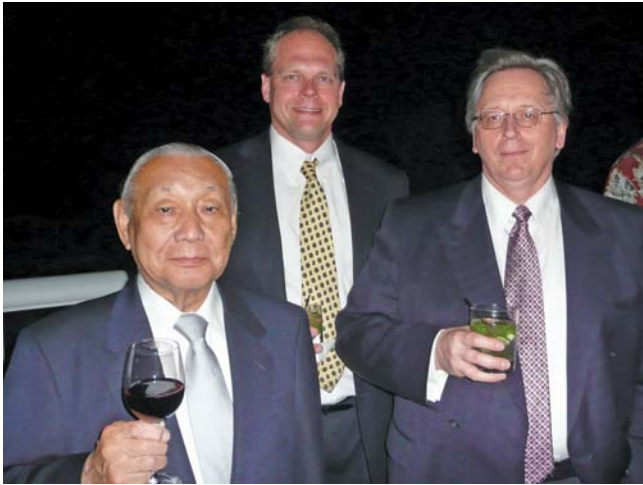
Bruce Archambeault enjoyed the pre-dinner conversation with fellow Board members Colin Brench of Southwest Research Institute and Dave Staggs, Vice President for Member Services (from left).

gram for the EMC 2008 Symposium by January 1, 2008 to meet the deadline for the Winter issue of the EMC Newsletter. Since the paper submission cut-off date is not until January 15, some areas may be a bit 'gray' as far as papers, workshops, and tutorials are concerned. The registration fees are in line with the same fees charged at the Portland 2006 Symposium though these still require final BOD approval. Regarding EMC 2009 Austin, TX, Chair David Staggs reported the IEEE Insurance and Information Schedule forms have been completed and submitted to IEEE CMS. The contract between the IEEE and the Austin Convention Center has been signed. A \$1,000 deposit has been provided to the Convention Center. This \$1,000 is a loan from the EMCS to the Central Texas Chapter. EMC 2010 Fort Lauderdale, FL, Chair Fred Heather reported a loan request draft has been forwarded to Tom Braxton. To open a bank account, the committee is providing the information for the conference registration with IEEE, it will take a couple of weeks to process, and they have requested a concentration banking account. John LaSalle is the treasurer for the 2010 symposium. The committee met in Hawaii and coordinated status of the committee members; the major action was the review of the CMS Statement of Work and the 2010 Operating Plan. The CMS Statement of Work is currently being used by the 2009 committee to obtain their contracted support. The committee held a meeting in Fort Lauderdale on November 8 to work on the budget and the operating guide. The committee has arranged, in conjunction with the BOD, a technical meeting with the Student Chapter at Florida Atlantic University and the regional IEEE Sections on Thursday evening. On Friday, the committee will host a tour of the convention facilities after the BOD meeting but before the annual dinner. EMC 2011 Long Beach, CA, Chair Ray Adams reported that IEEE CMS has reviewed and approved the Convention Center (CC) contract. Since CMS is not the management company of record, the Society will be responsible for the CC payment schedule. This will amount to three payments of \$22,000 per year starting in 2008. The committee is in the final steps of negotiation with the Hyatt Hotel, and potential overflow hotel options are being reviewed. Exhibitor Liaison Janet O'Neil reported that



Barry Wallen, Vice President for Conferences, of ANDRO Computational Solutions and his wife Marti appreciated the warm weather in Florida and the chance to have dinner outdoors – in November!

the annual exhibitor breakfast was held on Thursday, July 12 at the Hawaii Convention Center, from 7:00 am – 8:00 am and was well attended. This year was the first time the committee had provided the attendee list in advance to the exhibitors; surprisingly, not many reviewed this before the symposium. While traffic in the exhibit hall was down this year, no complaints were received from exhibitors that regretted attending the show. Regarding regional conferences in Regions 1-7, Janet O'Neil reported she organized a tabletop show in Dayton, Ohio on September 24, 2007 for the IEEE Dayton AP/MTT joint chapter in conjunction with AMTA. She recruited the EMC members in the area to participate in the program, hoping to revitalize the long dormant EMC chapter in the area. The show was well attended by over 70 people, several of whom requested that it become an annual event. The following tabletop shows are scheduled for 2008: Clemson University on March 12, April 1 in Milwaukee, May 8 in Detroit, May 13 in Chicago, and possibly June in Maryland. Regarding Region 8, Frank Sabath reported on the EMC conferences in Europe. These are all listed and promoted in the "Calendar" section of each EMC Newsletter. Some of these conferences need to be formally documented as being co-sponsored by the EMC Society. Regarding Region 9, Janet O'Neil reported that there are no plans for an event for the balance of 2007, and no plans are in place for one in 2008. Next, Symposium Finance Chair Bob Hofmann advised he has determined that the budget format adopted by the 2008 EMC Symposium committee is the format that should be used for all foreseeable future EMC symposia. The 2008 format includes slots for documenting/explaining budget changes as they occur. This cannot be done using the IEEE HQ format. The symposium committee will use the same budget account line item identification numbers as used in the IEEE HQ format, but will use them in the EMC Society budget format. That will allow us to build a history of rationale for budget changes so that we can be more accurate in developing future budgets. Building a history of budget changes was one of the external auditor's suggestions during the last Society Review. He will prepare a small auxiliary spreadsheet and send it to the various



Board members Takeo Yoshino and Bruce Crain toasted Andy Drozd (from left) for a job well done as EMC Society President during 2006-2007.

symposia treasurers. The auxiliary spreadsheet can be added to the regular symposia spreadsheet and will include line items that IEEE HQ specifically wants/needs at the end of a conference. This auxiliary spreadsheet will be very simple and should not be a burden on symposia treasurers to fill out or add to their existing spreadsheet. Site Selection Committee Chair Darryl Ray noted that Mike Oliver made a presentation to the BoD on July 7 to host the 2012 EMC International Symposium in Pittsburgh, Pennsylvania. There are no other proposals to host the 2012 Symposium at this time. The Denver and Santa Clara Valley chapters have expressed an interest in hosting the 2013 Symposium. The Symposium Site Selection application form will be undergoing a revision. TAC Liaison Bruce Archambeault then advised that the MTT paper review software package was reviewed and approved for use for the 2008 Symposium. Global EMC Symposia Chair Mr. Kilshaw reported that since July 2007, the Society has received a new technical co-sponsor application from EUROEM, July 21 to 25 2008, Lausanne, Switzerland, Chair: Farhad Rachidi. In addition, initial interest has been shown by the IBT Congress, ICEAA, EMC China 2008 (CES), and APACE 2007. The following conferences have been approved for Technical Co-Sponsorship by TAC: EMC Europe 2008, Hamburg, Germany, September 8 - 12, 2008, the 2007 IEEE Symposium on Product Compliance, Longmont, Colorado from October 22 - 23, 2007, 2EMC (Embedded Electromagnetic Compatibility), Rouen France, October 18-19, 2007 and the First Asia Pacific EMC Symposium (the 19th EMC Zurich Symposium), May 19 - 28, 2008, Singapore.

TECHNICAL SERVICES

In the absence of John Norgard, Vice President for Technical Services, Barry Wallen presented his report. Technical Activities Committee (TAC) Chair Bob Scully reported that he would be working closely with the EMC 2008 committee on the upcoming paper reviews. As noted above, Mr. Scully and Dr. Archambeault will be using the MTT Society software for the paper review process. Initial usage looks very promising and the tech-



At the conclusion of the Board's annual dinner, Kimball Williams (left), Immediate Past President, acknowledged outgoing President Andy Drozd with a gift of sincere gratitude from the Board of Directors.

nical support for the software to date has been very good. Fred Heather did not have anything new to report as Representative Advisory Committee (RAC) chair since the last meeting in July. He wrote an article on the RAC/SACCom luncheon, which summarized the committee activity for publication in the Fall 2007 EMC Newsletter. Bob Nelson reported on the Education and Student Activities Committee (ESAC). The current officers include Chair: Bob Nelson (r.m.nelson@ieee.org), Vice-Chair: Randy Jost (r.jost@ieee.org) and Secretary: Larry Cohen (lawrence.cohen@nrl.navy.mil). The subcommittee chairs include: NARTE: Jim Whalen (jjw@eng.buffalo.edu), Experiments Manual: Ed Wheeler (e.wheeler@ieee.org), Hardware/Software Demonstrations: Andy Drozd (a.l.drozd@ieee.org), Fundamentals Tutorial: Daryl Beetner (daryl@umr.edu), University Grant Committee: Tom Jerse (jerse@citadel.edu), Student Paper Contest: Jim Whalen (jjw@eng.buffalo.edu) and Aziz Inan (ainan@up.edu), Student Design Contest: Ahmad Fallah (AhmadFallah@ieee.org) and Harold Rudnick (harold.rudnick@ieee.org). Continuing its long-standing tradition, the ESAC Fundamentals Tutorials committee intends to provide a day-long set of tutorials during the 2008 IEEE EMC Symposium. Initial discussions are also underway to investigate the possibility of a "Standards Education Workshop" which would be jointly sponsored by ESAC and the IEEE EMC Standards Committee. A Call for Proposals for the University Grant has been extended which describes the funding available to help universities establish new EMC courses. Proposals were due November 1. The committee will review the proposals during November and winning proposals will be selected by December 31. The committee will award one \$5,000 grant. The announcement has been issued that this year's Student Design Contest has begun. Design kits are available, and completed kits are due April 20, 2008. Planning is already underway for a new EMC design kit that will be issued shortly. A revised Call for Student Papers is being developed for the 2008 IEEE EMC Symposium to clarify a few items from last year. As new Co-Chairs of this committee, Jim Whalen and Aziz Inan will work with Conference organizers to receive, judge, and identify the best Student Papers. Randy Jost and Ed Wheeler will submit



Florida “locals” EMC Society member Vichate Ungvichian (far left) of Florida Atlanta University and Bruce Crain (far right) joined Board members Henry Benitez of ElectroMagnetic Investigations, Mark Montrose of Montrose Compliance Services and Janet O’Neil of ETS-Lindgren (from middle left) at the Fort Lauderdale Board meeting.

a “Faculty Workshop” for the symposium next year. The title is “Incorporating Electromagnetic Compatibility, Signal Integrity, and High-Speed Design in Engineering Curricula.” The report includes an outline of the purpose of the workshop.

MEMBER SERVICES REPORT

Dave Staggs, Vice President for Member Services introduced Bruce Archambeault who reported on the Distinguished Lecturer (DL) program for chair Jim Drewniak. At the last meeting, Dr. Archambeault reported on a distance delivery idea for DLs using video downloads of DL presentations. The report included considerable information on the scope of this project and financial implications. The Board approved a video recorded DL talk program be initiated for a trial period of one year (2008), with no more than 10 DL talks video recorded at the Missouri University of Science and Technology (formerly UMR) for the EMC Society. The resumes of candidates for the new DL candidates for 2008/2009 were reviewed and discussed. The Board approved the appointment of Tzong-Lin Wu, Stephan Frei, Alistair Duffy, and Eric Bogatin as EMC Society DLs for 2008/2009. Bruce Archambeault, Awards Chair, next reported that the 2007 awards certificates have been mailed to anyone who was not present at the Awards Luncheon. The processing of the cash awards is complete for some and in process for the remainder. The web site has been updated to show the 2007 winners. Dr. Archambeault is working closely with the 2008 Detroit Awards Chair to make sure that the awards ceremony does not go over time in 2008. His report outlines the plans in place to accomplish this objective. Chapter Activities Chair Francesca Maradei noted there are currently 65 chapters. The newly formed Rock River Valley Chapter is going to have its inauguration meeting on November 15 on the campus of Northern Illinois University (NIU) in DeKalb, Illinois. Regarding chapters under construction, John Osburn has initiated the reformation of the Fort-Worth EMC Chapter, which was dissolved in 1965. The number

of EMCS members in the Ft. Worth Section is 21. Dave Staggs has been appointed the “Angel” of the chapter and is supporting the activity of forming the chapter. Todd Robinson and, more recently, Chet Summers have expressed interest in the formation of a new chapter in the Central Valley of California (San Joaquin Valley). This would include the small cities of Modesto, Turlock, Merced, Fresno, and Visalia. Since those cities are spread over different IEEE Sections, the possibility to form a joint section Chapter is under investigation. Contacts have been established with Randy Jost who has expressed interest to form the Salt Lake Chapter. There are currently six EMCS Members in the Utah Section, and they are considering the possibility to form a joint AP-MTT Chapter. Contacts have been established with the members of the Dayton IEEE Section and the (dissolved) EMC Chapter and encouraging replies were received, with the intentions for re-activating the Chapter. There are currently 10 EMCS Members in the Dayton Section, and they are considering the possibility to form a joint EMC-PSE Chapter. Work has recently begun to form a Chapter in Vancouver/British Columbia, Canada. That would be the fourth EMC Chapter in Canada, in addition to the Ottawa, Montreal, and Toronto Chapters. The formation of an IEEE EMC Chapter in Mexico was initiated and the petition submitted. However, the request was not processed because some of the members who signed the petition were not filed as EMC Society members for 2007. Therefore, the approval is pending on the subscriber’s membership renewal. In Asia, Dr. Werachet Khan-ngern has initiated the process for forming the chapter in Thailand as new members submitted their membership application forms in Singapore, during the EMC Zurich Singapore 2006 symposium. The formation of chapters in Bangalore and Hyderabad, both in India, was initiated during the INCEMIC 2006 Symposium in Bangalore. This work is ongoing. Contacts have been established in Munich during the EMC Zurich Symposium with Hongmei Fan who has expressed interest to form the Shanghai Chapter. There are currently five EMC Society Members in the Shanghai Section. Initial inquiries have been received about starting new chapters in Argentina and Algeria. Regarding the Chapter Handbook, the new version of the Handbook was distributed to the Chapter Chairs and BoD officers, and is now available on the EMCS website. Following the success of the previous Region 8 and Region 10 retreats held in 2006, Ms. Maradei organized the 2007 Chapter Chair Retreat in Honolulu on July 9, 2007, in conjunction with the 2007 IEEE EMC International Symposium. This time, it was a global retreat since the attendees came from all the IEEE Regions. The retreat was very successful and was attended by the representatives of 20 Chapters and a significant number of EMCS officers. The schedule of the retreat and results of the evaluation forms are included in the Member Services report. Planning is underway to hold a 2008 Chapter Chair Retreat in Detroit, in conjunction with the 2008 IEEE International Symposium. On the Fellow Nomination and Search Committee (FNESC), Chair Heyno Garbe wrote an article titled “Call for Fellow Nominations: Class of 2009” for the Summer 2007 EMC Newsletter. The article was written to encourage EMCS members to bring forward and submit Fellow nominations. Dr. Garbe has been nominated for the IEEE Fellow Evaluation Committee. If this nomination is successful, then Dr. Garbe will have to resign from the EMC Society FNESC; thus, this committee Chair position will

be vacant. A decision will be made in November 2007. Bill Duff is the Chairman of the Evaluation Committee and the other members this year were Ernie Freeman, Hugh Denny, Dr. Gerry Capraro, and Art Wall. They will be evaluating candidates for 2008 during the months of March 15 through June 15. Next, Elya Joffe reported that the membership activities in Region 8 consisted of promotion of membership at the EMC Zurich 2007 conference in Munich, Germany and at the SoftCOM 2007 conference in Split, Croatia. At each conference, a membership booth was provided and material handed out. In total, six new members were recruited to the IEEE and EMC Society. No new activities are expected for the remainder of 2007. The next activities in Region 8 are EMC Wroclaw in June 2008 and EMC Europe in September 2008. There are no new activities in forming new Chapters in Region 8, however, next year a focus will be placed on establishing an EMC Society Chapter in Africa. Mr. Joffe noted that beginning in 2008, the Region 8 Coordinator position would be vacant. Maria Alejandra Mora Riveros then reported that there are currently 159 EMCS members in Region 9 (both student and professional), with 26 of these belonging to the newly formed Columbia EMC Chapter. Efforts are underway to expand membership in Columbia, Brazil and Argentina. The Argentina Section is trying to create an EMCS Chapter. Professor Takeo Yoshino reported there is no change in status since his last report. Continued email communication attempts with Dr. Jaswinder Singh of SFS India have failed. Efforts to increase EMCS Chapter membership in Region 10 include offering first year free EMCS membership for applications received at symposia and workshops. Currently, in Region 10 there are nine EMCS Chapters: Japan, Sendai, Seoul, Beijing, Nanjing, Malaysia, Singapore, Australia (Victoria), Hong Kong, and Taipei/Taiwan. Ken Wyatt, the EMCS photographer, reported that he has finished collecting and editing EMC 2007 symposium images from the entire photo team members and delivered the images to Janet O'Neil for the EMC Newsletter and to others who made specific requests. He is planning to reprint and mount more updated photos for the IEEE booth in time for the Detroit symposium. Bob Hofmann and his Financial Assistance Program (FAP) Committee will now manage this activity, which is currently being rolled out to the EMCS web site and the "2008 IEEE International Symposium on EMC" web site and associated materials. Mr. Staggs closed his reporting noting that the PACE chair position is vacant. Anyone interested in serving as chair are encouraged to contact Mr. Staggs.

EMC SOCIETY 50TH ANNIVERSARY COMMITTEE

Dan Hoolihan presented his report. The Power Point Presentation on the History of the EMC Society was completed and was shown in its entirety for the first time at the 2007 IEEE International Symposium on EMC. The presentation was distributed to the BoD along with additional material. An additional 70 copies have been made and are ready for distribution to the Chapter Chairs. The Historical Booklet, produced with the help of the Creative Services Group of the IEEE and the IEEE History Center, was distributed to all attendees at the 2007 Symposium and it was mailed to the members of the EMCS who did not attend the 2007 Symposium. The Top Transactions

Papers for the first fifty years of the EMCS were selected and announced at the July 13th (Friday) 50th Anniversary Awards Luncheon. The papers will be republished in the EMC Newsletter; one paper in each issue in the future. With the excellent cooperation of Bob Scully, the 50th Anniversary Pin was flown on the Space Shuttle Endeavour, STS-118, August 8-21, 2007! A plaque was developed with the pin on it; the committee hopes to present it to the IEEE in the near future. Related to the IEEE History Center, 12 Oral Interviews on EMC Founders and early Presidents of the Society are completed, Oral interviews are now available on the website http://www.ieee.org/organizations/history_center/oral_histories.html or type "oral histories" into the search window of the IEEE web page. Hard copies of the EMC Transactions from 1957 to 1987 were sent to the IEEE for digitization. Some of those copies are now available through IEEE Xplore; namely, the years from 1966 through 1987 with the exception of 1967 and 1986. Remaining committee activity includes continuing to research the "Top Papers", developing an exhibit of the 50th Anniversary of the EMCS for the IEEE Headquarters in Piscataway, NJ (IEEE History Center), and transitioning the 50th Anniversary Committee to the History Committee of the EMC Society.

OLD/UNFINISHED BUSINESS

TAB Roster: President Drozd noted the following open representative positions:

- Board Activity
- Public Relations (under VP Communications)
- PACE Coordinator (under VP Member Services)
- SACCom
- EIA R1/R2/CISPR I
- IEEE Representative Liaison Positions (RAC)
- IEEE Society on Social Implications of Technology
- IEEE-USA Energy Policy Committee
- IEEE-USA Medical Technology Policy Committee
- IEEE Sensors Council
- IEEE Systems Council (\$5K one-time membership)

Todd Hubing again volunteered to be the representative to the Systems Council (Mark Montrose volunteered to help as liaison to this council since he is a member of the AdCom). Don Heirman offered to be the interim representative for the EIA R1/R2/CISPR I committee until a permanent liaison may be found.

NEW BUSINESS

The following topics were discussed under New Business:

AUDIO CONFERENCING SYSTEM

Fred Heather presented information on a sound system of microphones and PA systems that can be used for Board meetings. The Board approved spending \$10,000 in fiscal year 2007 for a Board conferencing system as outlined in Mr. Heather's report.

IT PLANNING COMMITTEE

President Drozd noted we have several IT needs including website maintenance for the BoD and the Standards Commit-

tees, Webinars, the FTP site, video storage (DL talks, etc.), reliance on the IEEE server, etc. He suggested appointing an IT planning committee chair (reporting to EMCS President) and asked for suggestions of possible chair candidates. If anyone has suggestions, please contact Mr. Drozd.

FOUNDERS/PAST PRESIDENT FINANCIAL SUPPORT AT ANNUAL SYMPOSIUM

The Board approved providing Honorary EMC Society Life Membership to all the Founders of the EMC Society. The Board also approved funding, in an amount not to exceed \$10,000, to support the travel expenses of the EMCS Founders to attend the EMC 2008 symposium.

OPEN ACCESS

Don Heirman led a discussion on open access to IEEE publications. Open access is the availability of these without charge. In the US the push for no charge access is for those publications or the work that that was used as the source for the publications that was funded by certain government agencies. There is current discussion about this topic within IEEE Publication Services and Products Board where this may have the most impact if it goes beyond government funded projects. This might even cover our conference proceedings, for example.

TECHNICAL CO-SPONSOR REQUEST

The Board approved the EMC Society being a technical co-sponsorship of the Kyoto Japan EMC Symposium to be held over July 20-24, 2009.

MEETINGS FOR 2008/2009

Elya Joffe confirmed the quarterly schedule of meetings for 2008. These will be listed in the "Calendar" section of the EMC Newsletter.

ACTION ITEM REVIEW

Secretary O'Neil reviewed the action items discussed during the meeting. An updated, consolidated list of action items will be sent to the Board following the meeting.

ADJOURNMENT

There being no further business, the meeting adjourned at 5:20 pm. **EMC**

Submitted by:
Janet O'Neil

Secretary, EMC Society Board of Directors

REVERBERATION CHAMBER THEORY/EXPERIMENT SHORT COURSE

March 31-April 4, 2008

OKLAHOMA STATE UNIVERSITY

Location: OSU-Stillwater, OK

Time: 8.00AM to 5.00PM

Fee: \$2500 if registered before February 29, 2008 \$2750 if registered after February 29, 2008

4.0 CEUs/40 PDHs

<http://rc-course.okstate.edu>

Host

The course is hosted by the School of Electrical and Computer Engineering of Oklahoma State University. Technical and equipment support is provided by the Naval Surface Warfare Center, Dahlgren Division (NSWCDD), Dahlgren, Virginia.

About the course

Several standards including MIL-STD 461E, RTCA DO 160D, IEC 61000-21, and SAE J551/J113 permit the use of reverberation chambers for EMC certification testing. This course is designed for engineers and technicians who will be involved in radiated emission or immunity testing of commercial or military systems using reverberation chambers. The course will also be valuable to personnel evaluating the use of reverberation chambers as a complement to or replacement for other types of radiated test facilities.

The theory portion covers the statistical nature of reverberation chamber testing, characterization of the EM test conditions, and the tradeoff between uncertainty in test results and test time. The experimental portion includes demonstrations, test setups and instrumentation, statistical sampling techniques (mechanical tuner operation and frequency sweeps), and chamber characterization and calibration measurements. While the experimental portion includes reverberation chamber demonstrations, it consists primarily of a series of hands-on experiments conducted in 4 to 5 person groups. The notes format includes the objective, a description of the experiment, instrumentation, test setup, procedures, and room for specific measurements, analyses, results, and conclusions. The experiments and demonstrations are conducted in the small (2.5 x 4 x 7 feet) OSU reverberation chamber and an ETS-Lindgren SMART 80 chamber. The small chamber, constructed in-

house by OSU students for less than \$1,000, indicates the flexibility of the reverberation chamber concept. The small chamber can be used for radiated immunity and emission testing above 1 GHz in accordance with several standards. The chamber demonstrates the statistical equivalence of the electromagnetic environment in all conductive cavities independent of size and construction materials. Participants will have a thorough understanding of the operation of a reverberation chamber for EMC testing. They will have developed a test plan for an immunity test with specified conditions and objectives. They will also have a permanent record of data collected and analyzed, and an extensive set of notes.

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