

## **APPROVED MINUTES**

### **OF THE IEEE EMC SOCIETY BOARD OF DIRECTORS MEETING**

**The Sheraton Hotel  
Phoenix, Arizona  
November 12-14, 2016**

#### **MEMBERS PRESENT (26)**

B. Archambeault  
T. Braxton  
C. Brench  
C. Bunting  
R. Carlton  
C. Chan  
R. Davis  
H. Garbe  
E. Hare  
D. Heirman  
J. Hill  
H. Inoue  
I. Kasperovich  
R. Koga  
J. LaSalle (via telecom)  
D. Lewis  
M. Montrose  
J. Norgard  
M. Oliver  
J. O'Neil  
V. Rajamani  
V. Rodriguez (via telecom)  
F. Sabath  
C. Sartori  
R. Scully  
D. Sweeney

#### **ABSENT (1)**

L. Cohen

#### **GUESTS (6)**

A. Duffy  
J. Fan  
J. Medler  
M. Violette  
T. Wu  
X. Ye

## **1.0 THE PRESIDENT'S OPENING REMARKS**

President Frank Sabath called the meeting to order at 9:00 am. A round of introductions was made. He welcomed the newly elected Board members for the term 2017-2019: Alistair Duffy, Frank Leferink, Mike Violette, Tzong-Lin Wu, Xiaoning Ye and John Norgard. He reviewed Board meeting protocol, the IEEE code of ethics, the EMC Society Field of Interest and Strategic Plan Goals (see President's Introductory Remarks). He reminded Board members of the material on the Board Forum site and asked that everyone remember to review this prior to the Board meetings (<http://ieee.emc-center.org/emcbod/login.aspx>).

## **2.0 CONSENT AGENDA MOTIONS**

The meeting agenda was presented for review. (See Draft Agenda.) The consent agenda motions included the following items:

- Approve November 2016 Meeting Agenda
- Approve Secretary's Report – July 2016 Meeting Minutes
- Approve Certificate of Appreciation for the GEMCCON

**The motion to approve the consent agenda motion was seconded and approved.**

## **3.0 PRESIDENT'S REPORT**

Frank Sabath reviewed the activity of the Excom meeting held the previous evening. The meeting addressed administrative points including the agenda review, motions to be presented, etc. All items discussed are included on the meeting agenda. (See President's Report.)

He noted there were no motions made since the last Board meeting.

The President's Report includes information on Strategic Activities, suggestions for new awards and conference offerings, as well as technology and public policy statements.

Frank Sabath reviewed the IEEE Technical Committee on Environmental Engineering Initiative activity. He will track this activity for the Board. More information will be in the future. The EMC Society is a partner in this new group.

## **4.0 MEMBER SERVICES**

Vignesh Rajamani, Vice-President for Member Services, presented his report. (See VP Member Services Report.)

Total IEEE Membership up 0.7% since this time last year; total Society Memberships is down 0.2% since this time last year. EMC Society Membership is slightly down 3.2% (126) to 3,759 (with Affiliates) since this time last year. EMC Society Student Membership is also down 17.4% (8) to 38 since this time last year. Nine Senior Member grade elevations occurred since the May 2016 Board meeting. The EMC Society membership application has been translated into Chinese.

The Senior Member Elevation Event at EMC 2016 in Ottawa was not well attended. We plan to promote senior membership to our members and encourage chapter chairs to run senior member events during their chapter events for the next year. We will reevaluate again in 2018.

Regarding Eta Kappa Nu, HKN publishes “The Bridge Magazine” for all HKN members. Heyno Garbe, VP of Communications, will be taking the lead on this effort, form a committee, appoint a guest editor and define/propose the scope.

There was an on-line Membership Survey in September 2016 with more focused questions on areas where we did not score well last year. Lesleigh Campanale from IEEE HQ helped with the questions. Vignesh reviewed the preliminary results of the survey. An official report will be submitted to the Board in the next few weeks. The response rate was approximately 77%. The EMC Society is performing well in most areas (satisfaction). There is room for improvement in certain areas such as outreach and education.

On EMC Society Awards, Dr. Perry Wilson will send an email blast mid-December soliciting award nominations for presentation at the 2017 IEEE EMC Symposium in Washington DC. Separately, he will directly encourage leading members to consider making nominations for the major awards.

**Vignesh Rajamani moved to eliminate the honorable mentions on the Richard Schulz Transactions on EMC Best Paper Award, the Best Symposium Student Paper Award, and the Student Design Award. Bruce Archambeault moved to amend the motion to remove the “Best Symposium Student Paper Award”. The motion to amend the motion was seconded and approved. The amended motion was seconded and approved.**

The honorable mentions will receive a letter acknowledging their honorable mention consideration.

On the Distinguished Lecturer program, the Lecturers proposed for 2017-2018 include:

- 1) Prof. Andy Marvin (UK), York University, York, UK
- 2) Prof. En-Xiao Liu (Singapore), Institute of High Performance Computing, Singaporean
- 3) Dr. Zhiping Yang (US), Google Consumer Hardware Group, Mountain View, CA
- 4) Kris Hatashita (Canada), Canadian Department of National Defense, Canada

**Vignesh Rajamani moved to approve appointment of Andy Marvin, En-Xiao Liu, Zhiping Yang, and Kris Hatashita as EMC Society Distinguished Lecturers for 2017-2018. The motion was seconded and approved.**

Regarding the EMC Chapters globally, we currently have 83 chapters. The newest chapter is located in Istanbul, Turkey. The chair is Levent Sevgi. Vignesh acknowledged Ross Carlton and Caroline Chan for their help with the revisions to the Angel Program.

Following is a list of the active Sister Society agreements (SSA):

- India - SEMCEI
- UK – IET
- ESD Society
- Australia – EMCSA
- Signed agreement between APS and MTT

The Japan – IEICE Sister Society Agreement was signed in Ottawa. The IEEE Product Safety and Engineering Society have approached us about an SSA. We have started the dialogue.

Caroline Chan reported on the Young Professionals (YP) activities held during the Ottawa Symposium week. There were 130 YPs registered at the Symposium, but only approximately 25% participated in the YP activities. Moving forward, she is providing training for her successor next year (Al Frye, [allanfrye5@gmail.com](mailto:allanfrye5@gmail.com)). She is also mentoring Student Liaison Joseph Vas ([jvas@ieee.org](mailto:jvas@ieee.org)).

The report concluded with updates on PACE, the Fellows Evaluation Committee, Sections Coordinator activity, the new Student Initiative and the History Committee.

## **5.0 IMMEDIATE PAST PRESIDENT REPORT**

Bob Scully reminded those present that Board officer elections will be held on Sunday, November 13. He reviewed the protocol for the Board officer elections. (See Past President Report.) **Bob Scully moved to waive the three-year term limits for the office of Secretary and Treasurer. The motion was seconded and approved. There were no abstentions.**

Bob suggested there be a two-year apprenticeship for the offices of Secretary and Treasurer.

Bob asked if there were any nominations from the floor. There were none. **Bob Scully moved to close the nominations and approve the slate of candidates as presented. This included:**

**Secretary: Janet O’Neil**

**Treasurer: John LaSalle**

**VP Membership: Vignesh Rajamani**

**VP Technical Services: Chuck Bunting**

**VP Conferences: Alistair Duffy, Mark Montrose**

**VP Communications: Heyno Garbe**

**VP Standards: Ed Hare, Jens Medler, John Norgard**

**President-elect: Bruce Archambeault, Mark Montrose**

**The motion was seconded and approved.**

Bruce Archambeault gave a presentation on the BoD Forum for the new Board members.

Following lunch each candidate spoke about why he/she was running for a Board officer position. Each candidate was allowed five minutes to speak, followed by a five minute Q&A session with the Board.

## **6.0 MARKETING REPORT**

Mike Violette presented a marketing report. (See EMCS Marketing.) The objective is to support the EMC Society’s strategic goals. He reviewed marketing plan elements (such as industry alliances, among others) and products of value (such as emerging technologies like IoT and employer positivity, among others). A key element of the program is branding. His report included several new ads created to promote the EMC Society and new booth designs. They will continue to expand the on line presence of the EMC Society.

The meeting adjourned for the day at 5:30 pm.

***Continuation of meeting on November 13. President Frank Sabath called the meeting to order at 9:00 am.***

## **7.0 ELECTIONS**

Bob Scully reviewed the ground rules of the elections. **Bob Scully moved to approve the positions for which candidates were running unopposed by acclamation, including the offices of Secretary, Treasurer, Vice**

**President of Membership, Vice President of Technical Services, and Vice President of Communications. The motion was seconded and approved.**

The vote for the office of President-elect was taken by secret ballot. As a result of the voting, Bruce Archambeault was elected to the position of President-elect.

The vote for Vice President of Conferences was taken by secret ballot. As a result of the voting, Alistair Duffy was elected to this position.

The vote for Vice President Standards was taken by secret ballot. As a result of the voting, Ed Hare was elected to this position.

Frank Sabath noted that with Alistair becoming a Vice President, this leaves a vacant Director-at-Large position. Since there is a vacancy on the Board for the Director-at-Large position, Frank appointed Carlos Sartori to fill this position and represent Region 9 on the Board. Frank also appointed Kris Hatashita to the Boot Camp committee reporting to Vice President Vignesh Rajamani.

## **8.0 COMMUNICATION SERVICES**

Heyno Garbe presented the Communications report. (See Communication Services Report.)

He provided an update on the IEEE Journal on Multiscale and Multiphysics Computational Techniques. This is a joint journal of the MTT, AP and EMC Societies. Representatives from each Society participated in a telecom on Oct 26, 2016. They discussed the budget for 2016 and 2017 and the contributions from all partner Societies. Christian Schuster and Heyno Garbe joined the telecom. Based on the number of submissions and the workload of comparable starting journals, all Societies are in agreement that a half-time personal assistant appears to be sufficient. A special section on Multiscale and Multiphysics Computation for Metamaterials is planned for publication in late July 2017. Papers are due by February 28. The guest editors include Prof. Giacomo Oliveri of the University of Trento and Prof. Filiberto Bilotti of "Roma Tre" University. There will also be an IEEE NEMO2016 Special Section with Guest Editors Prof. Er-Ping Li, Zhejiang University, China; Prof. Zhizhang (David) Chen, Dalhousie University, Canada; and Prof. Chi Hou Chan, City University of Hong Kong, China. Papers are due December 15, 2016 and publication is late March 2017.

On the 3rd Virtual Journal, Heyno reviewed the response from IEEE. Based on IEEE experience, virtual journals are not successful. A suggestion was made to establish a "permanent special issue" as 5<sup>th</sup> issue/per year of our EMC Magazine. We only need an additional technical editor for this alternate publication channel. Heyno reviewed the competition to this 3<sup>rd</sup> journal.

Heyno closed his report with a discussion on the new IEEE Transactions on Signal & Power Integrity (T-SIPI). This is a natural result of the increasing number of papers submitted on this topic to the annual IEEE EMC symposium. The report includes a link to the draft letter of intent for this new T-SIPI journal.

On the EMC Society website, Tom Braxton gave a brief report. He is the website contact for updates, changes, and requests. Shannon Archambeault maintains and administers the site and provides technical support. The IEEE EMC Society website is a useful tool for information and for promotion of the EMC Society and its activities. Updates to the site have been more frequent this past year as more effort has gone into its maintenance and the timeliness of its text. Tom advised more changes are planned to make the site a more effective resource.

Joanna Hill reported the EMCS Social Media effort has opened Facebook and LinkedIn pages. The growth of the EMCS Social Media readership effort continues.

## 9.0 STANDARDS SERVICES

Don Heirman, Vice-President for Standards, presented his report. (See Standards Summary Report.) He noted leadership of the Standards Development and Education Committee (SDECom) includes Alistair Duffy as Chair, Craig Fanning as Vice-chairman, and Ghery Pettit as Secretary. See:

<http://www.emcs.org/standards/sdecomindex.html>

SDECom is overseeing the development of 27 EMC standards as follows:

- 22 standards are the active responsibility of SDECom
- 1 standard is jointly sponsored with NPEC (nuclear)
- 1 standard is sponsored by PES (power substations) with close cooperation and consultation with SDECom
- 3 new standards just beginning (later described)
- List of standards: [http://www.emcs.org/standards/sdecom/Standards\\_Matrix.html](http://www.emcs.org/standards/sdecom/Standards_Matrix.html)
- Membership: <http://www.emcs.org/standards/sdecom/sdecom-members.html>

The report includes a review of “stable” standards (no ongoing work to revise) and Standards being developed with approved Project Authorization Requests (PARs). Three new PARs were approved by SDECom for submittal to the New Standard Committee (NesCom) of the IEEE Standards Board:

1. IEEE Guide for Near field Characterization of Unintentional Stochastic Radiators
2. Recommended Practice for Radio-Frequency (RF) Absorber Evaluation in the Range of 30 MHz to 40 GHz (Revision to existing standard)
3. Passive Intermodulation Test Methods for Wireless Systems in Low Noise Environments

Don reviewed the following standards which have problems:

- P187 - Emissions from broadcast receivers (need more volunteers to work on the standard)
- Std. 377 - Spurious emissions from land mobile transmitters (lack of interest to retain)
- P473 - Site surveys (being restarted now with cooperation with ANSI ASC C63® and their standards C63.24)
- Std. 1140 - Video display terminals (starting to work with EMCS TC7 to extend to near field measurements)

Regarding the Standards Advisory and Coordination Committee (SACCom), leadership includes John Norgard as Chairman, Andy Marvin as Vice-chairman and Don Heirman as Secretary. The SACCom membership list is available at <http://www.emcs.org/standards/saccomm/sac-members.html>.

Reports presented included:

- CISPR/A (Instrument, methods of measurement, statistics)
- AAMI (Assoc. for the Advancement of Medical Instrumentation)
- CISPR/I (Multimedia emissions)
- C63 (Emission measurements)
- ISO TC20 (Space systems and operation)
- IEC TC65/SCA/WG4 (process control)
- CISPR/B (Industrial, Scientific, Medical EMC)
- EOS/ESD Association, Inc.
- Other reports were received and will be added to website button. See <http://www.emcs.org/standards/saccomm/sac-memberreports.html>

Additional SACCom activity includes tracking non-IEEE standards development organization meetings and further engaging the members in joint efforts with the EMCS standards activity.

The Board gave Don a round of applause following his report to show their appreciation of Don's work over the past 40 years on the Board of Directors in a variety of positions and specifically for his many years as Vice President of Standards. This was Don's last Board presentation as Vice President of Standards.

## 10.0 TECHNICAL SERVICES

Colin Brench reported on Technical Services activities. He attended the ESD Symposium in late September with Bruce Archambeault.

He noted the Technical Advisory Committee (TAC) officers include Chuck Bunting (Chair), Xiaoning Ye (Vice-Chair), Antonio Orlandi (Secretary) and Jun Fan (Past Chair).

Regarding the Education Committee, Sarah Seguin is the new Chair. However, the other officer roles are not confirmed. This committee is in desperate need of encouragement, support and new members.

This being Colin's last Board meeting, he thanked the Board for supporting him over the years and for "kick-starting" his career.

## 11.0 iNARTE STATUS REPORT

Bruce Archambeault presented an update on iNARTE. (See iNARTE Status Report). In July 2016 during the Ottawa EMC Symposium week, the iNARTE activities included a workshop, exam, reception and luncheon, signing the new iNARTE -EMCS MoU, and attending the TAC, TC1 and Education Committee meetings.

## 12.0 REPORT ON EMC BOOT CAMP

Frank Sabath reported on the EMC Boot Camp held in Hamburg, Germany. (See EMC Boot Camp Report.) This was held on 12-13 October 2016 at the Helmut-Schmidt-University/University of the Federal Armed Forces Hamburg. The title was "Basic EMC Knowledge for Beginners" with five speakers from industry and five professors from various Universities. The targeted attendance was students and young professionals. Over 100 people attended from all parts of Germany for the two-day event. There were 1.5 days of lectures plus a half day of lab experiments. The event was very successful and many positive comments were received.

## 13.0 CONFERENCE SERVICES

Alistair Duffy presented a report on the venue for the joint EMC 2021 and EMC Europe 2021 in northern Europe at the end of July/early August. (See VP Conferences Report.) **Alistair Duffy moved to approve a 2021 joint international symposium with EMC Europe in Glasgow, Scotland. The motion was seconded and approved. Vince Rodriguez voted against the motion.**

On the Site Selection Committee, Bruce Archambeault presented information on the regional (US) symposium that would be held in 2021. John Vanella and Conference Direct assisted with the search. Eight sites were rejected and three sites were explored further.

**Bruce moved to approve Raleigh, NC as the venue for EMC/SI/PI 2021 in North America over April 30-May 6. The motions was seconded and approved.**

The meeting adjourned for the day at 4:00 pm.

***Continuation of meeting on November 14. President Frank Sabath called the meeting to order at 9:00 am.***

#### **14.0 SECRETARY/TREASURER ASSISTANTS REPORT**

Don Heirman gave a presentation on Treasurer and Secretary Assistants being appointed. (See Assistant S&T Motion Report.) The Secretary and Treasurer positions are key roles for the Society. Each position requires detailed knowledge of and familiarity with multiple and varied information sources, personal contacts, negotiating skills, detailed records-keeping and reporting practices, and much more. This requires specific training and familiarization that can be acquired over time, but that are far more easily obtained through apprenticeship. Because of the foregoing, if either position was to become vacant for any reason, the Society could be crippled during the time necessary for a replacement to develop sufficient competence and proficiency in the role.

**Don Heirman moved for the Secretary and Treasurer to identify individuals to serve as assistants in the performance of the duties of the respective offices at the March 2017 Board meeting. The motion was seconded and approved.**

#### **15.0 CONFERENCE SERVICES CONTINUED**

Bruce Archambeault continued the presentation of his report. (See VP Conferences Report.) He noted his committee includes:

- International Conference Committee Chair: Tom Braxton
- Symposia Finance Chair: Bob Hofmann
- Site Selection Committee Chair: Darryl Ray
- Symposium Publicity Committee Chair: open
- Global EMC Symposia Co-Sponsorship Chair: Alistair Duffy
- Exhibitors' Liaison Chair: Martha Hallman
- Regional Conferences Chair: Janet O'Neil
- Symposium Continuity Committee:
  - John LaSalle
  - Janet O'Neil
  - Bob Davis
  - Rhonda Rodriguez
  - Bonnie Brench
  - Bruce Archambeault

His report included a review on the Ottawa 2016 EMC symposium. From all comments, the symposium was a big success, both technically as well as the venue and host city. Kris Hatashita would not hesitate to offer Ottawa as a host city again in the future. The surplus is estimated at 24%. A few outstanding receivables still exist, and the symposium account is expected to be closed soon.

For EMC 2017, the committee is fully formed and on a bi-monthly meeting schedule. Conference Direct has been selected as the meeting planner. Technical themes planned include SI/PI, Wireless, and the Internet of Things. The committee will provide a live broadcast of some sessions for a reduced registration fee. ITEM Media has been contracted for this service.

In 2018, the IEEE EMC Symposium will be jointly held with the APEMC conference in Singapore. The symposium general chair is Erping Li; the technical program chair is Jun Fan.

The report includes a review of future symposiums EMC 2018 in Long Beach thru EMC 2020 in Reno. For 2021, Bruce suggested a combined IEEE EMC Symposium with EMC Europe, as held in 2015 in Dresden.

On the GEMCCON activity, the audit for the Adelaide, Australia (November 2015) event has been completed. The committee will transfer \$46,332 USD to the EMCS. On the 2016 Buenos Aires, Argentina event on 7-9 November, Alistair Duffy and Carlos Sartori from the EMC Society Board attended. There were 20 talks/papers and two workshops. For 2017, GEMCCON will be held in Sao Paulo, Brazil in November; Carlos Sartori is the Chair. For 2018, the event will be held in South Africa (Stellenbosch) in the month of March.

**Bruce Archambeault moved to approve a \$5,000 loan to GEMCCON 2017 in Brazil. The motion was seconded and approved.**

Alistair Duffy's report as the Global Symposia Coordinator was then reviewed. There is one pending request for technical co-sponsorship from SPI 2017 in Baveno (VB), Italy over May 7-10. TAC recommends approval. The financial arrangement would be 100% financial sponsorship by IEEE CPMT (no cost to EMC Society for Xplore).

**Alistair Duffy moved to approved technical co-sponsorship for SPI 2017. The motion was seconded and approved.**

The financial implication of the motion was confirmed as not to exceed \$3,000. Sergio Pignari and Flavio Canavero were suggested as delegates from the EMC Society to attend this SPI 2017 conference.

A policy was proposed for use of EMCS advance and final program content by other industry publications. The proposed policy states the content is not for republication until after the official final program has been posted and made publicly available on the EMCS symposium website. The complete policy is shown in the report.

**Alistair moved for the Board to accept this policy related to industry publication of EMCS symposium program content. The motion was seconded and approved.**

The report concluded with a review of regional conference activity as prepared by Janet O'Neil, Regional Conference Coordinator. The results of the survey taken at the EMC Symposium in Ottawa in July/August 2016 were shared. Overall the symposium attendees were very happy with the symposium. The exhibitors were relatively happy, but thought the exhibit hall traffic was not optimal.

## **16.0 TREASURER'S REPORT**

John LaSalle presented a report on EMC Society finances. (See 4<sup>th</sup> Qtr Treasurer's Report.) He reviewed EMC Society reimbursement policy for Board member travel. He provided an overview of 2016 Operations noting:

- The target budget is a deficit of \$84.6k [-\$84.6k]
- As of end of September, the Society is operating at \$121.3k; under budget
- The target budget = \$355.9 Comm/Other + \$94.7 Initiatives = \$450.6k Deficit

The report included a review of conference surpluses since 2008 and provided a status report of conference audits.

**Each year the Society’s Temporary Employees and Independent Contractors need to be approved by the Board of Directors for the 2017 performance year. John moved to approve the list of contractors and not to exceed amounts shown for 2017. The motion was seconded and approved. Bruce Archambeault, Janet O’Neil, Don Heirman, and Bob Scully abstained from voting.**

John noted our Contracts Manager is Dave Staggs. All contract requests go through Dave. He will coordinate the paperwork with the Independent Contractor, Managing VP and IEEE HQ.

**John moved to approve the 2017 EMC Society sponsorship of TEAM EMC cycling fitness team for \$950, an on-going EMC Society sponsored annual event. The motion was seconded and approved.**

John reminded all Board members that all expense reports must be turned in by mid-December in order to be paid by the end of the year.

### **17.0 FINANCIAL IMPACT OF APPROVED MOTIONS**

Bob Scully summarized the financial implications of the approved motions:

\$5,000 (not to exceed amount) for travel funds to support Assistant Secretary and Assistant Treasurer

\$5,000 for GEMCCON 2017 loan

\$950 sponsor fee for Team EMC bicycle team

\$3,000 (not to exceed amount) SPI 2017 conference delegation (two people)

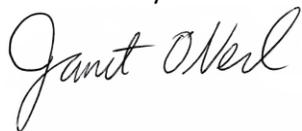
### **18.0 ACTION ITEM REVIEW**

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.

### **19.0 ADJOURNMENT**

The meeting adjourned at 12:00 pm.

Submitted by:



Janet O’Neil

Secretary, EMC Society Board of Directors