

APPROVED MINUTES

OF THE IEEE EMC SOCIETY BOARD OF DIRECTORS MEETING

**The Gaylord Hotel
National Harbor, MD
August 6 and 10, 2017**

MEMBERS PRESENT (28)

B. Archambeault
T. Braxton
C. Bunting
R. Carlton
C. Chan
L. Cohen
R. Davis
A. Duffy
J. Fan
H. Garbe
E. Hare
H. Inoue
I. Kasperovich
J. LaSalle
F. Leferink
D. Lewis
J. McLellan
M. Montrose
J. Norgard
J. O'Neil
V. Rajamani
V. Rodriguez
F. Sabath
C. Sartori
R. Scully
M. Violette
T. Wu
X. Ye

ABSENT (0)

GUESTS (14)

G. Alcala
R. Adams
M. Deering
A. Drozd
E. Drozd
F. Heather
D. Heirman

R. Hofmann
D. Hoolihan
L. Hill
E. Joffe
S. Kaule
S. Seguin
K. Williams

1.0 THE PRESIDENT'S OPENING REMARKS

President Frank Sabath called the meeting to order at 9:00 am on Sunday, August 6. A round of introductions was made. He welcomed the many guests present. 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.) Frank Sabath noted that Kristen Russell, the IEEE speaker on the TAB Committee on Diversity and Inclusion, was not able to attend the Board meeting. This topic will be removed from the agenda. The consent agenda motions included the following motions:

- Approve August 6, 2017 Meeting Agenda
- Approve Secretary's Report – March 2017 Stuttgart Meeting Minutes

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

3.0 PAST PRESIDENT'S REPORT

Immediate past President Bob Scully presented his report. He led a discussion on past presidents of the EMC Society running for election to the Board of Directors. (See Motion to BoD – Past Presidents.) Following extended discussion, voting on his proposed motion was deferred until the Thursday evening Board meeting.

The candidates for the Board of Directors election for the term 2018-2020 were presented. These include (in alphabetical order): Henry Benitez, Robert Davis, James L. Drewniak, Kris Hatashita, Susanne Kaule, Dennis Lewis, Davy Pissoort, Ferran Silva, David William Phillip Thomas, Nick Wainwright and Tzong-Lin Wu. Bob noted IEEE identified Susanne Kaule as an associate member; she updated her membership status and is now a full member. All candidates met IEEE requirements. He reviewed the nominee criteria with the Board. Biographies of the candidates have been posted to the EMC Society website.

Bob Scully moved to approve the slate of candidates as presented. Since the motion was brought to the Board from a committee, a second was not required. The motion was approved as presented.

Bob Scully will clarify if student members are able to vote in the election and how long a member of the EMC Society must be a member in order to be eligible to vote. The election closes on September 29 with results available by October 6.

4.0 PRESIDENT-ELECT REPORT

Bruce Archambeault talked about the first Board meeting of the year in 2018. The dates of March 27-28 or April 10-12 are two options reserved for the first Board meeting of 2018. The April dates were selected as being best for the majority of the Board members. These meetings will be held at IEEE headquarters in Piscataway, NJ.

Bruce invited Graham Kilshaw of ITEM Media to say a few words about the new, global online EMC Symposium. (See EMC+SIPI Online Symposium report.) Current symposium registration numbers were presented:

- Paid registrants, all access: 80
- Free registrants, limited access: 703

- Other registrants (newsletter, whitepapers, videos, etc.): 755
- Total show registrants (Paid + Free): 783
- Total registrants (Paid + Free + Other): 1538

Unique visitors to the symposium website have increased since last year's symposium in Ottawa. Facebook "likes" and Twitter followers have increased in response to the online global symposium promotion. Registrations will be available for purchase through December 30, 2017. The financial details of the program were discussed. In this first year, the loss is approximately \$80,000. The loss was expected since the program is new. Next year, the loss should not be as great.

Graham noted it is possible in the future to have speakers present online and NOT attend the EMC symposium. The program is flexible and can change to meet the needs of our members. His report concluded with an outlook and recommendations to increase the success of the program next year.

5.0 PRESIDENT'S REPORT

Frank Sabath presented his report. (See President's Report.) Due to having a deficit budget for three years, he noted that the IEEE TAB FinCom has put the EMC Society on the Society/Technical Council Watch List. A financial update report is now due at every meeting of the TAB FinCom. The TAB FinCom wants to see actions taken by the EMC Society to solve the budget problem. Frank's report outlined areas where the EMC Society will reduce its expenses and improve revenue.

Frank Sabath advised membership in the EMC Society is down 4.1%; the goal was to increase membership by 4%. He asked the questions: What is the value/benefit of an EMC-S membership? Do we manage our services and products wisely? Do we have a business model and marketing plan for our services and products? Larry Cohen suggested connecting with COMSOC about their online courses for payment.

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

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. A FinCom meeting was held to address the budget. There was also a telecom in June to discuss the budget. The budget expenses were reduced to address the target budget revenue and expenses. Moving forward, motions shall be submitted 30 days in advance of the Board meetings to enable FinCom to perform a financial assessment and provide the Board with financial implications to the EMC Society. All items discussed during the Excom and FinCom meetings are included on the meeting agenda.

He also provided a review of the June IEEE TAB meeting highlights, including the new periodicals package program algorithm, the IEEE Hardware Societies Group, and the IEEE Environmental Engineering Initiative.

6.0 TREASURER'S REPORT

John LaSalle presented his report. (See Treasurer's Report.) He talked about the 2017 initiative plan.

The Board travel policy was reviewed. On the 2017 Operations Overview, the target budget is a deficit of \$192,700 [-\$192,700]. This includes the initiative spending of some \$60,000. As of June 30, the Society is currently operating at \$91,500. The target budget is \$482,000 Comm/Other less \$60,000 in initiatives for a \$422,700 deficit.

The report included the financial status of immediate past and future conferences. The financial surplus/loss for the annual symposiums from 2008-2016 is included in the report. The amount of EMC Society reserves from 2005-2017 was reviewed. Currently, reserves amount to approximately \$2,000,000.

The report concluded with a review of unanticipated items that negatively affected the budget (higher expenses than anticipated as well as lower revenue than expected).

7.0 STANDARDS SERVICES

Ed Hare, Vice-President for Standards, presented his report. (See Standards Report.) He noted leadership of the Standards Development and Education Committee (SDECom) includes Alistair Duffy as Chair, Craig Fanning as Vice-chair, and Ross Carlton as Secretary. The report included a list of current Standards Committee members.

The SDECom meetings will be held on August 7 at 9 am and on August 10 at 3 pm. All Board members are invited to attend. Ed will have a report on these meetings at the Thursday evening Board meeting.

SDECom will hold a training on August 7 at 12 pm. Attendees will learn the process of assembling a working group, drafting a standard, as well as how to handle templates, balloting, resolution and publication work.

He noted significant milestones including IEEE Standard 187 Measurement of Emissions from BC Receivers; the balloting group is being formed. Also on P473, Site Survey, a meeting is scheduled for August 9 in the afternoon to get this effort moving forward (it has stalled for years).

Eleven working groups will hold meetings during the symposium week as shown in the report. This is significant activity! Details on this meeting activity will be provided at the Thursday evening Board meeting.

For more information on EMC Society Standards, see:

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

http://www.emcs.org/standards/sdecom/Standards_Matrix.html

8.0 TECHNICAL SERVICES

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

For the 2017 Symposium in Washington DC, 244 papers were submitted. Of these, 89 were accepted as submitted, 123 were accepted with changes, and 32 were rejected. The top breakdown by Technical Committee (TC) was 32 papers for TC-2 (EMC Measurements) and 66 papers for TC-10 (embedded SI/PI conference). The report shows the accepted number of papers per TC. The committee received 36 workshop and tutorial proposals. There are 32 poster papers.

Regarding technical co-sponsorship requests since the last Board meeting, EMC China, TAC unanimously approved the 5th International Symposium on Electromagnetic Compatibility in January 2017. Regarding GEMCCON 2017 in Sao Paulo, TC chairs were solicited for workshops, tutorials, special sessions and short courses.

Regarding the Education Committee (EdCom), Sarah Seguin is the Chair. Bob Scully is the Secretary. A Vice-chair should be announced soon. The committee's goal is to have a "unified" curriculum fully coordinated and

supported by EdCom that will include “Fundamentals” and “Global University” (GU). For this year’s symposium, the Fundamentals Chair is Lee Hill; the Global University Chair is Dale Becker.

On the EMC Experiments Manual, Larry Cohen and Sarah Seguin are working on the hardware experiments update; CJ Reddy, Matthias Tröscher, and Randy Jost are updating the electromagnetic modeling content. Other input is invited from the Board.

There is no Student Hardware Design Competition this year since Bogdan Adamczyk stepped aside in managing this activity. EdCom is actively seeking and examining options for leading the student hardware design competition in 2018. On the Student Paper Competition, Tzong Lin Wu volunteered to be the Student Paper review chair.

9.0 COMMUNICATION SERVICES

Heyno Garbe presented the Communications report. (See Communication Services Report.) Regarding the new IEEE Journal on Electromagnetic Compatibility Practice and Applications (J-EMCPA), the IEEE TAB Periodicals Committee (PerCom) has approved the Phase 1 proposal on June 23, 2017. Phase 2 will be submitted for the TAB November 2017 meeting. Financial issues need to be clarified and the Editorial Board must be defined. A detailed report on this new publication may be found in the J-EMCPA Update report.

Regarding the new IEEE Transactions on Signal & Power Integrity (T-SIPI), Bruce Archambeault has taken over the lead to set-up this new Transactions publication. The decision was made to focus on the J-EMCPA for now and start the process afterwards for T-SIPI.

On the Transactions on EMC, Editor-in-Chief Antonio Orlandi noted that the total number of papers submitted in 2016 was 544. A total of 314 papers have been submitted in 2017 as of July 1. The report shows the recent positive trend in the Impact Factor. On the Associate Editors, Dr. Perry Wilson, Dr. Bob Scully and Dr. John Dawson retired from their positions this year. New Associate Editors include Dr. Z. Yang (Google, USA), Dr. D. Di Febo (CST, IT), Dr. Keyan Sheshyekani (Ecole Polytechnique de Montreal, CAN) and Dr. F. de Paulis (University of L'Aquila, IT) for Letters.

For the EMC Magazine, Editor-in-Chief Janet O’Neil noted she has not received information from IEEE HQ about providing one issue translated into Chinese. The full issue of the EMC Magazine will be available for download as a PDF starting with the 2nd Qtr 2017 issue. All members will receive an email from IEEE notifying them that the issue is available for download from Xplore by the full issue or by the individual article. Members will now have a choice.

Regarding the IEEE Journal on Multiscale and Multiphysics Computational Techniques (JMMCT), Ross Stone was elected by the steering committee as the new chair. The EMCS members include Christian Schuster and Heyno Garbe.

Joanna McLellan gave a brief report on the Society’s Social Media activities with Facebook and LinkedIn. Ray Perez gave a brief report on the “Small Books Initiative”.

Tom Braxton gave a report on the proposed new look of the EMC website. (See EMCS Website Renewal Program Report.) A remodeled and consistently branded website is a necessary tool in achieving the Society’s strategic goals. A complete redesign is being done by ATG Productions, working with the site administrator to populate the redesigned pages. A prototype of the revamped site was shared with the Board. The plan is to go live with the new site during the third quarter of 2017. Ongoing maintenance remains the challenge. An attractive site is only

valuable if the information is current. A website maintenance team is being formed to aggressively track posted information on the new site to ensure that current material is displayed. Board members were encouraged to provide feedback on the new site.

10.0 iNARTE REPORT

Elya Joffe presented the iNARTE report. (See iNARTE BoD Presentation August 2017 Revised.) He discussed the background of iNARTE, current activity and future plans. iNARTE offers third party professional certifications, which establish the standard of excellence in engineering. These certifications are for individual qualified engineers and technicians in the fields of telecommunications, electromagnetic compatibility, product safety, electrostatic discharge control and wireless systems installation. New certification programs are under way.

iNARTE developed, and continues to develop, the EMC certification program. Esteemed subject matter experts develop the exam. The EMC Society serves as the body of knowledge and provides iNARTE with its recommendations as to scope, topics, industry needs and trends. The EMC Society may also assist in analyzing the outcomes of the surveys carried out by iNARTE, particularly with respect to implications on program development.

The report concluded with a review of the financial commitment made to the iNARTE program and activity planned during the symposium week. For more information, see <http://inarte.org/certifications>.

11.0 MEMBER SERVICES

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

Discussion was held on soliciting for awards early for the Singapore symposium. The major awards will be distributed at the Singapore symposium.

Don Heirman reported on the Completed Careers Committee. He outlined the purpose of the committee and the assistance needed in collecting information for the tributes published in the EMC Magazine. It has been difficult obtaining obituaries and high res photos of our members who have passed away.

On Chapter activity, Caroline Chan reported that there are 84 chapters, of which a few are at risk of being dissolved. Angels and others are needed to help the chapters in distress. An Excel sheet was shared to show Angels, Chapter Chairs, and number of meetings held in 2015/2016 for each chapter. Angels can see the trends on where the chapter is heading (healthy or unhealthy). If a chapter has less than two technical meetings in three consecutive years, the Chapter will be dissolved. An article was written to encourage Chapter Chairs/representatives to come to the Washington DC Chapter Chair training. Topics consist of an overview of SAMIEEE and new materials. The Chicago and Germany Chapters will present on "How to lead a successful mini symposium" and "EMC student retreat", respectively. The Chapter of the Year and Most Improved Chapter awards will be presented at the annual Awards Luncheon on August 10, 2017.

On the Fellow Nomination and Support Committee, Bill Radasky advised there was no activity since the last Board meeting in March 2017. IEEE Fellow nominations are seasonal with November-December being the time when requests for support can usually be expected. It is unlikely that any requests for support will be received until late 2017 or early 2018.

Heyno Garbe reported on the activity of the Fellow Evaluation Committee. Six nominations are completed for the class of 2018. There are four for the category "Researcher", one for "Technical Leader" and one for "Application Engineer". As a result of the evaluation, one nomination was changed to "Educator" and one was changed to

"Technical Leader". All the seven evaluators responded and agreed on the ranking, which Heyno submitted to IEEE.

Vignesh Rajamani reported total IEEE Membership down 1.8% since this time last year; total Society Memberships is down 1.4 % since this time last year. EMC Society Membership is down 4.1% (150) to 3,500 (with Affiliates) since this time last year. EMC Society Student Membership is up 27% to 47 since this time last year. Fourteen Senior Member grade elevations occurred since the March 2017 Board meeting.

Membership Services continues to work on the Strategic Goal "D" objectives as a normal part of Member Services activities. HKN publishes "The Bridge Magazine" that is distributed to all HKN members. Vignesh has reserved a slot to feature EMCS in their magazine. This will be a good way to reach many high potential students. The VP of Communications, Dr. Garbe, will be taking the lead on this effort, form a committee, appoint a guest editor and define/propose the scope better. Since this magazine will primarily reach students, target articles will explain some exciting and emerging problems in order to draw students into EMC area.

Frank Leferink reported on Region 8 Membership Coordination. The IEEE EMC Society booth was used at the EMV Mesago Exhibition and Workshops in Stuttgart, March 2017. Although there has been an agreement with the EMC Compo organization, there was no booth at EMC Compo held July 4-8, 2017 in Saint Petersburg, Russia. Communication was difficult. The EMC Society was a technical co-sponsor at the IEEE I&CPS and IEEE EEEIC 2017 conference held June 6-8 2017 in Milan, Italy. Other co-sponsors included IEEE PES and IAS. There was no booth, as there was no exhibition. It might be useful to produce one or two roll-up banners, which are much easier to transport and require less effort to install. They also do not need 'expensive' booth space. Discussions were held with engineers from Indonesia; it is extremely costly for people in Indonesia to become a member of the IEEE EMC Society. There is an Indonesian EMC Society. Discussions about "Sister Society" agreements have started. On July 26-27, a workshop was held in Jakarta, Indonesia, with contributions from the staff of the University Twente, The Netherlands. The IEEE EMC Society was promoted to the over 100 attendees. Frank Leferink discussed with Janet O'Neil on using her 'mini-symposium' concept. However, the Indonesian organizers preferred not having an exhibition. This activity is a starter for the proposal for organizing the APEMC 2021 (or 2022) conference in Bali, Indonesia.

No reports were received from the Regions 9 and 10 Coordinators.

On the EMC Society Survey, Vignesh noted the 2017 membership survey would be conducted in October 2017. A report will be presented to the Board during the November meeting.

Jerry Ramie, EMC Society Photographer, noted there are four confirmed photographers scheduled for the Symposium in National Harbor, MD: Jerry Ramie, Allen Crumm, Richard Georgerian and Beth Scully. The photographers will be assigned to events, speakers, exhibits and tours.

On the Distinguished Lecturer (DL) Program, Ram Achar reported there are three DLs for 2016-2017: Kate Remley (US), Farhad Rachidi (Europe), and Chunfei Ye (USA). The new DLs for 2017-2018 include Prof. Andy Marvin (UK), Prof. En-Xiao Liu (Singapore), Dr. Zhiping Yang (US), and Kris Hatashita (Canada). From January to June 2017, approximately \$23,210 has been spent on the DL program for travel. The report included a list of DL program videos available to chapters.

Kimball Williams reported on PACE - "Professional Activities Committee for Engineers" - and their goal: "...promote the professional interests of the IEEE members..." In light of this goal, EMC Society Chapter Coordinator, Caroline Chan, and the PACE Coordinator have completed experiments with PACE presentations at the Chapter level. These resulted in positive reactions of Chapter members to the inclusion of PACE topics as part

of an overall Chapter event. EMC Chapters were recruited to take part in an experimental two-part presentation at a membership meeting, with one PACE topic and one technical topic presented. Six EMC Chapters participated in the experiment: Santa Clara Valley, Southeastern Michigan, Twin Cities, Rock River Valley, Cedar Rapids and Chicago. All Chapters had a positive response to the PACE presentation. A suggestion was made to include PACE topics as a focus for Young Professional gatherings.

Vignesh noted the following Sister Society Agreements are active:

- India - SEMCEI
- UK – IET
- ESD Society
- Australia – EMCSEA
- APS, MTT and EMC officially signed sister society agreements
- Japan – IEICE – Signed the MoU during the Ottawa symposium
- PSES – Product Safety Engineering Society

A handful of these societies will have a booth at the symposium.

Dan Hoolihan provided a report on the History Committee. It includes discussion on the EMC Legacy I and II projects. These projects include distribution of USB smart drives containing EMC Society Symposium proceedings from 1964-2014. The material is also available on IEEE Xplore; the symposium proceedings from 1964 to 1987 are on IEEE Xplore for the first time! An additional 1,000 EMC Legacy II smart drives were ordered for distribution at the 2017 IEEE International Symposium on EMC+SIPI in Washington, DC. Requests for the smart drives continue to be received from readers of the IEEE EMC Magazine. Regarding the EMC display at the National Electronics Museum (NEM) in Baltimore, there is a Stoddart NM-20 receiver currently displayed with a suitable description alongside it. Dan visited the museum on June 22 to discuss the display and the status of the 2017 contract (MOU) between the EMC Society and the NEM.

Dan noted the History Committee of the EMC Society has been working with the History Committee of the IEEE and the IEEE Foundation to support the REACH Program. REACH stands for “Raising Engineering Awareness through the Conduit of History.” It covers all engineering, not just IEEE technologies. The EMC Society can help attract the next generation of engineers while raising the understanding and technological literacy of the broader young population. It will help demonstrate the underpinning of EMC technology; remember our original name was the “Professional Group on Radio Frequency Interference.” An EMC Society investment could help complete the radio videos and support the upcoming drone unit with its heavy reliance on wireless communications. Dan will approach the Board about this investment request at the Thursday night Board meeting.

12.0 CONFERENCE SERVICES

Alistair Duffy presented his report. (See VP Conferences Report.) He noted his committee includes:

- International Conference Committee Chair: Tom Braxton
- Symposia Finance Chair: open
- Site Selection Committee Chair: Darryl Ray
- Symposium Publicity Committee Chair: open
- Global EMC Symposia Co-Sponsorship Chair: Dennis Lewis
- Global Post Conference Liaison: Ross Carlton
- 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

Regarding the 2017 IEEE International Symposium on EMC+SIPI, the Gaylord Hotel and Convention Center will hold most major activities. The budget for food and beverage is high (about 50% of the budget expense). Currently there 800+ on-site registered attendees. This is the first year for a remote “digital” symposium with online content available to members and nonmembers globally. Currently there are 700+ remote attendees registered. The technical program includes an excellent mix of MIL, IoT, Wireless, and Fundamentals of EMC topics. There are over 20 students registered for the Global University.

The 2018 Joint IEEE International Symposium on Electromagnetic Compatibility and Asia-Pacific Symposium on Electromagnetic Compatibility will be held in Singapore over May 14-17. The General Chair is Er-Ping Li; Liu Enxiao (IHPC) and Bruce Archambeault are the co-chairs. The technical program chair is Jun Fan. The organizing committee consists of EMC Society members and local Singapore APEMC members.

Alistair moved to approve a loan of \$30,000 to support the organization of the 2018 IEEE Symposium on EMC+SIPI in Long Beach, California. The motion was seconded and approved.

The report includes a review of future symposiums EMC 2018 in Long Beach thru EMC 2021 in Glasgow (International with EMC Europe) and Raleigh, NC (National). A summary of yearly total registrations received at the 2002-2016 EMC Symposiums is included in the report.

For 2017, GEMCCON will be held in Sao Paulo, Brazil on November 8-10; Carlos Sartori is the Chair. The call for papers is published at <http://gemccon2017.emcss.org/>. There have been some issues with the venue; these will be resolved shortly. Six special sessions/workshops and five oral sessions (35 papers) are planned. The sponsorship and exhibition plans are still being developed, but will be completed by the end of September. In 2018, GEMCCON will be held in South Africa (Stellenbosch). The targeted date is November 7 - 9. The suggested venue is the Stellenbosch Institute for Advanced Studies (STIAS), in particular, the Wallenberg Centre <http://stias.ac.za/> that offers cost-effective pricing for audio-visual equipment and meals. The potential local conference organizing company has been identified.

On EMC Society technical co-sponsorship requests, there are no motions to vote upon at this meeting. Two requests are being processed, including: 1) The IEEE Workshop on Signal and Power Integrity (SPI), May 2018, Brest, France, financially sponsored by the CPMT society. SPI has previously been co-sponsored by the EMC Society and 2) ICCE Berlin 2017, organized by CES. The EMC Society has been a technical co-sponsor of this event in 2014 and 2015.

Regarding the post conference liaison, Ross Carlton advised conference reports are generally received on time or with a little prompting. The primary issue is compatibility with the requirements for the EMC Magazine. The standard TCS MOU wording should be revisited to clarify the requirement for a conference report and to reference any new guidelines/templates. The Xplore submissions are generally on time with the exception of the GLOBESPACE and INCEMIC conferences. Consideration is being given for either a revision of the conference manual or creation of a separate Xplore guidance document. Ross is identifying the publications chair of each conference early to open a conversation, provide guidance, or provide help.

The report included a review of regional conference activity as prepared by Janet O’Neil, Regional Conference Coordinator. This is an area where we can grow our regional presence. Discussions are underway about ‘packaging’ these events to deliver more events in Regions 8, 9 and 10. Martha Hallman will chair the Exhibitor Breakfast on Thursday morning. Reports from the current and future symposium chairs will be presented at the breakfast meeting.

13.0 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 advertising and branding as well as IoT and 5G. He noted he and Larry Cohen are the EMC Society liaisons to the IEEE IoT Initiative. There are many conferences and events in this space. Mike lectured on this topic at IEEE events in Seattle (EMC Chapter), South Korea (APEMC) and in National Harbor at the symposium. The IoT and EMC tutorial will be part of the global online symposium. He reviewed social media, industry partners and related publications. Regarding outreach, the committee has identified emerging markets to target, including China (Shenzhen), India and South America as well as several Sister Societies. A new EMC Chapter is forming in Shenzhen. His report included several new ads created to promote the EMC Society and new booth designs. They will continue to expand the online presence of the EMC Society and address the emerging hot topics of IoT and 5G.

14.0 FINANCIAL IMPACT OF APPROVED MOTIONS

Bob Scully summarized the financial implications of the approved motions:

\$30,000 - Loan to 2018 IEEE EMC+SIPI Symposium in Long Beach, California

15.0 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.

The meeting adjourned for the day at 5:05 pm.

Continuation of meeting on Thursday, August 10. President Frank Sabath called the meeting to order at 6:00 pm.

16.0 CONFERENCE SERVICES UPDATE

Alistair Duffy presented an update on the 2017 IEEE International Symposium on EMC, Signal Integrity and Power Integrity. (See 2017 EMC+SIPI Online Symposium Status Report.) Mike Violette, Chair of the 2017 IEEE International Symposium on EMC+SIPI reported on symposium attendance. Approximately 780 people participated in the online symposium. Some 1,500 people attended the “live” symposium at the Gaylord Hotel and Conference Center. The audience goal for the online event is to ultimately attract 3,000 unique individuals. So far, (Year 1), we are at 1,538 registered audience plus an unregistered web audience of approximately 45,000. The revenue goal for the online event is to ultimately reach costs + 20% surplus. In Year 1, we reached costs – 54%, for an \$83,000 loss.

Bruce Archambeault provided a report on the online symposium. (See Digital Symposium Summary.) As of August 8, there were 17 online tracks with 100 presentations (including some vendor presentations). Online registrations were 925, with 97 paid for all access. The total number of registrants was 1,782, including physical, online, and white papers. Some 65 countries were represented among the total registrants. The largest session (EMC Fundamentals) had 159 attendees.

17.0 TECHNICAL SERVICES UPDATE

Chuck Bunting reported on the Technical Advisory Committee (TAC). (See Post Symposium Wrap Up Technical Papers.)

There were 36 technical sessions during the symposium with 124 EMC papers and 58 SIPI papers. There was one poster session of 32 papers. Forty-nine abstract reviewed papers were submitted; with five rejected. Overall, there was a higher number of papers submitted for this year's symposium versus last year in Ottawa. A merger of SC 6 (Unmanned Aircraft Systems EMC) and SC 7 (Aeronautics and Space EMC) will be proposed at the TAC meeting on August 11. TC 7 (Low Frequency EMC) and SC 5 (Power Electronics EMC) have competing charters/members. This will be addressed at the TAC meeting as well on August 11. TAC leadership may change since Chuck Bunting is handling leadership of TAC and is the EMC Society VP for Technical Services.

Leadership of the Education Committee (EdCom) has changed. Bob Scully is the new EdCom chair, replacing Sarah Seguin.

18.0 STANDARDS SERVICES UPDATE

Ed Hare presented his report. (See VP Standards.) There have been no changes in leadership. SDECom now consists of 22 members. There are 13 standards under development: six are being revised, seven are new. Thanks to good monitoring by SDECom, there are plans going forward for all of our standards. His report included a review of these standards, including standards being updated, standards being developed, and standards with problems.

There was record attendance at the SDECom meeting held during the Symposium week with over 20 people in attendance at one of the two meetings. There was a record number of 12 working groups who met during Symposium week. The working groups are making better use of webinar and other tools to further their standards activity. There are a number of new standards under development meeting industry needs. The report also included information on communication with other societies and standards development organizations (non-IEEE).

19.0 MEMBER SERVICES UPDATE

Vignesh Rajamani presented his report. He noted the Young Professionals events were well attended during the symposium week. A new award has been proposed to recognize the efforts of outstanding Young Professionals. (See New YP Award.)

Vignesh moved to create a new award recognizing a Young Professional member of the IEEE EMC-S for significant service to the administration and the overall success of the EMC-S in first years of their professional career or to recognize and encourage the achievements and potentials of a Young Professionals member of the IEEE EMC-S working in the topical area covered by IEEE EMC-S, in an early period of their career, age up to 38.

No second to the motion was needed since it came from the committee. The motion passed.

Kimball Williams provided an update on PACE activity. (See Angel Trip.) He started working on this about 10 years ago. Their focus is on promoting education of soft skills. With an interest in moving PACE to our Chapters, Kimball attended various Chapter meetings to promote PACE topics, including the Santa Clara Valley and SE Michigan EMC chapters. Moving forward, TC1 and the Education Committee will be encouraged to participate in the development of more PACE topics for member and Chapter use. He would like the Board to encourage more consistent TC1 sponsorship of 'Soft Skills' workshops at the annual symposia. The PACE activity will cease from this point forward.

20.0 OLD BUSINESS

The following topics were discussed under Old Business:

JOURNAL EMCPA - Heyno talked about the new joint journal on practical, application oriented papers, called the IEEE Journal on Electromagnetic Compatibility Practice and Applications (J-EMCPA). (See JEMCPA Publication.) The report reviews media options with pricing considerations for print and electronic copies. The plan is to publish the new journal in spring/summer of 2018. Revenue is expected to be achieved in 2019.

Heyno Garbe moved to approve Frank Sabath as the editor-in-chief of this new publication. Bruce Archambeault seconded the motion. The motion was amended to remove the financial impact justification noted on the motion. The amended motion was approved. Frank Sabath abstained from voting on the motion.

CONSTITUTION AND BYLAWS – Bob Scully continued the discussion held at the Board meeting on Sunday, August 6. (See CBL – EMCS Motions 10 Aug 2017.) He showed the wording of motions the committee is considering proposing, such as: Constitution bylaw – Amend Article V, Section 1, paragraph 2; Amend Article V, Section 2; Amend Bylaws, Section 5.1. After much discussion, it was agreed the motions needed revision. Bob will bring new motions to the Board at the next meeting.

21.0 NEW BUSINESS/ADDITIONAL TOPICS

The following topics were discussed under New Business:

REACH PROGRAM - Dan Hoolihan introduced Michael Deering of the IEEE who spoke on the REACH program - "Raising Engineering Awareness through the Conduit of History." (See REACH EMC Slides.) This program covers all engineering, not just IEEE technologies. It provides free, user-friendly resources for educators to help them meet their goals and standards. For structural reasons, the history of technology is not well represented in pre-university classrooms (despite efforts by standards setters). The history of engineering and technology is important to raise awareness of engineering as a career and enhance its "wow" factor. Not all students will be STEM workers, yet all will be STEM consumers and citizens of a STEM-based world who need technological literacy and appreciation of engineering. Therefore, it makes sense for IEEE to be involved in an active and dynamic effort to communicate the history of technology to a broader young public. The IEEE History Center is ideally suited to help teachers bring the history of technology to life in the social studies classroom. Dan moved to support the IEEE REACH Program at a budgeted value of \$10K/year for five years starting in 2019. Since the motion came from a committee, no second to the motion was needed. Bob Scully moved to table the motion to no later than the November Board meeting so the Finance Committee can evaluate and make a recommendation of EMC Society participation in the REACH program. The motion to table was seconded and approved.

SYMPOSIUM REGISTRATION FEES - Vignesh Rajamani discussed registration fees at the annual symposium. (See Registration Issue.) He suggested adding a question if people are EMCS members, i.e. not just IEEE members, to

the registration form. Vignesh would like to provide a symposium registration rate that will include a discount for EMCS members. All agreed to postpone this discussion until the November Board meeting.

STEAM PROGRAM - Andy Drozd presented on the STEAM immersion-learning program. The goal is to stimulate engagement in STEM cross-disciplines. The Project Fibonacci Foundation is the non-profit organization behind STEAM. The motivation for this project is based upon the ineffectiveness of STEM-only curricula for the past 20 years. US students lag behind other countries in proficient science, math and reading skills. The US needs to fill millions more STEM jobs, which is a significant challenge. In addition, women are under-represented in STEM. The world is becoming increasingly cross-disciplinary which encourages a STEAM approach. IEEE is becoming engaged in STEAM through IEEE Engineering Projects in Community Service (EPICS). Section-level support/endorsement is encouraged.

22.0 FINANCIAL IMPACT OF MOTIONS

Bob Scully summarized the financial implications of the approved motions:

\$1,045 for the new Young Professionals Award

23.0 ACTION ITEM REVIEW

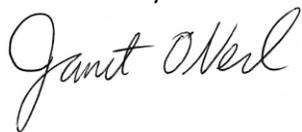
Secretary O'Neil reviewed the action items discussed during the meeting. An updated, consolidated list of action items will be sent to the Board following the meeting.

24.0 SUMMARY AND CLOSING REMARKS

President Frank Sabath thanked everyone for attending the meeting. The next series of Standards and Board meetings will take place over Nov 12-14, 2017 in Phoenix, Arizona.

The meeting adjourned at 9:30 pm.

Submitted by:



Janet O'Neil
Secretary, EMC Society Board of Directors