

 Meeting Notes

**TC1 EMC Management Meeting**

 **Friday, December 08, 2023 10:30 a.m. CDT (UTC-6)**

**Attendees:** Tom Braxon (Chair), Daniel D Hoolihan, Tom Fagan, Kimball Williams, Balaji Gollapalli (Secretary)

* Discussion on TC1 officer election.
	+ Call for interested candidates to fill up the vacant Vice Chair position in the TC1.
* Update on EMC Engineer Certification Committee
	+ IEEE EMC Society’s adhoc certification activities continue to make progress.
		- So far outline of the certification requirements, test requirements & RFIs (Request for Information) are complete.
		- Currently review of the companies that responded to RFIs are in progress.
		- This adhoc committee meets at regular intervals
	+ The Industry Advisory Committee that was instituted by Exemplar Global that consists of advisors that included representatives from IEEE EMC Society convenes a few times. The major topic of discourse in those meetings was the need to keep the certification program current with the latest technological advancements in the EMC/I field.
	+ Currently the activities of both IEEE EMC Society’s adhoc committee & the Exemplar Global’s IAC are running in parallel. It is yet to be seen if these activities converge or diverge or remain parallelly running paths.
* 2024 Symposium workshop and paper submission deadlines:
	+ Special sessions: December 13, 2023
		- While Spokane conference had a special session that could be attributed to fall under TC1’s purview, there hasn’t been many concerted efforts in the past from TC1 to conduct a special session.
		- It is possible that the same trend may continue into the 2024 conference. However, a few action items were discussed as follows.
			* **Action:** Daniel D Hoolihan to talk to Ramona Saar if a session could be organized for the 2024 symposium
			* **Action:** Tom Braxton and Balaji to follow up with Tom Fagan to seek a contact person for the SAEAE4 for any potential session. This could be a collaboration effort between TC1 and TC2.
	+ Paper submissions: January 8, 2024
		- There is no significant expectation of paper submissions that might fall under TC1’s purview.
	+ Workshop, Tutorial, Experiments & Demos proposals, and abstract-reviewed papers: March 4, 2024
		- A proposal was submitted from Keith Armstrong & Davy Pissort for a workshop/session about EM resilience.
		- There’s a potential for a session/workshop about Intellectual property by Kristen Schott.
			* **Action:** Tom Braxton to work with Schott to develop the format of this workshop in coming days.
		- There is not much progress on a session focusing on the Federal Communications Commission (FCC)’s activities and responsibilities. The likelihood of this session happening during the 2024 coneference is currently low.
		- A potential idea was brought forward that has to do with discussing the ever-changing landscape of the FCC’s responsibilities and activities.
		- Proposal work for a potential session about measurement and characterizing the EM environment is currently under development. The deadline for submitting proposals is March 4th.
		- Tom Fagan and others proposed an idea for a potential workshop around light bulbs and RFI. Mike Gruber who published “Light Bulbs and RFI – A closer look” article ([Light\_Bulbs.pdf (arrl.org)](https://www.arrl.org/files/file/RFI/Light_Bulbs.pdf)) in the ARRL could be the subject matter expert to deliver this workshop.
		- **Action:** Tom Braxton to work on the proposal for a potential workshop about potential noise sources from power supplies & fixtures & inexpensive, poor-quality and second-rate products.
		- **Action:**  Tom Braxton to follow up with Karen Burnham about idea about the measurement & characterizing EM environment. A potential collaborative effort between TC1 & TC3 might make this effective.
	+ Revised traditional paper submissions: March 18, 2024
	+ Final paper, workshop & tutorial submission: May 15, 2024
* Career training  and education
	+ Prototype Boards
		- While this work continues in the background, no much update this week.
* Proposal to add a Special Committee to TC3 on Communication EMC
	+ This special committee work continues to make progress. Currently the committee charter is being developed.
	+ While the committee is now brought into existence, now the focus is on making this committee effective.
	+ Kimball Williams is the contact person for this committee.
* Follow-up on new training ideas (Global University - Online/Hybrid Format, etc.)
	+ Tom Braxton successfully shared the ideas about Global University from previous meeting. These were received with satisfactory level of interest & acknowledgement. Vignesh to get back on these.
* Update on 1848- MSSV, Medical, Railway Specific topics.
	+ Work on the 1848 MSSV are progressing well. After successful approval of the PAR. First Working group meeting was held on December 15, 2023. Subsequent meetings continue to be held in 2024 and 2025.
* Other Topics
	+ Previous New Training Ideas
		- Training - Ambient EMC Environment – already discused
		- EMC Standards – Educational Content -
		- YouTube as marketing/promotional platform
			* A proposal was made to leverage IEEE TV as a promotional platform to spread awareness & knowledge about the EMC society and Technical Committees.
			* Kimball Williams proposed an idea about TC1 taking a leading role in reaching out to other societies to seek speakers and presenters. Potential adjacent societies such as antennas & propagation etc., to learn more about the technological advancements in those areas.
				+ Other technical societies within the IEEE organization are reaching out to the experts within EMC society so much so that some are even offering free memberships. For example: Kimball Williams was offered a free membership in the circuit and Systems Society, Frequency allocation & Remote sensing society (<https://www.grss-ieee.org/technical-committees/frequency-allocations-in-remote-sensing/>)
			* **Action:** Tom Braxton to follow up on this idea about reaching out to other societies for speakers & presenters about the technological advancements in their areas of interest.
		- Conference records needed: Daniel D’Hoolihan is currently working to gather conference records of Armour conferences on reduction of radio interference 1954-64 Illinoi institute of Technology. Specifically 2nd conference of 1956 & 5th conference of 1959.
	+ Sidebar Technical Conversations:
		- Solar inverter noise: Lack of appropriate filters on some internationally developed inexpensive, low-rate and sub standard products create EMC and EMI problems. While these products seemingly passed the FCC’s requirements, they continue to be the leading cause of interference problems. Tom Braxton recently published a linkedin post about the EM noise from LED fixtures and power supplies infringing on the distress radio frequencies. Moreover the LED lights on the garage doors might cause problems with remote door openers degrading the range and reliability,.
* Review of action items

Action Items:

|  |  |  |
| --- | --- | --- |
| **Owner** | **Action Item** | **Status** |
| Daniel D hoolihan | To talk to Ramona Saar if a session could be organized for the 2024 symposium | Open-New |
| Tom Braxton & Balaji | To follow up with Tom Fagan to seek a contact person for the SAEAE4 for any potential session. This could be a collaboration effort between TC1 and TC2. | Open-New |
| Tom Braxton | To work with Schott to develop the format of this workshop in coming days. | Open-New |
| Tom Braxton | To work on the proposal for a potential workshop about potential noise sources from power supplies & fixtures & inexpensive, poor-quality, and second-rate products. | Open-New |
| Tom Braxton | To follow up with Karen Burnham about idea about the measurement & characterizing EM environment. A potential collaborative effort between TC1 & TC3 might make this effective. | Open-New |
| Tom Braxton | To follow up on this idea about reaching out to other societies for speakers & presenters about the technological advancements in their areas of interest. | Open-New |
| Kimball Williams  | Inviting special speakers such as Director of SETI etc., for the EMC Symposium next year | Open |
| Dan Hoolihan | Speak with Bob DeLisi about a session about C63 in the conference next year. | Open |
| Tom Braxton | Tom to speak with Karen about potential avenues for Incentivizing presenters for the GU in the same vein as the discussion surrounding incentivizing the members within the standards development committees for their time and efforts. | Open |
| Tom Braxton & Balaji Gollapalli | To propose following ideas pertaining to GU to VigneshInstitute separate payment structure just to GU. Separate GU from the Symposium . Offer GU at multiple times of the year . Dynamic pricing ideas: ONLY GU attendees may pay an extra price while symposium goers would get a discount on GU. | Open |
| Karen Burnham | To develop a preliminary abstract and title of an ambient EMC environment characterization workshop /tutorial/demo  | Open  |
| Tom Braxton | Tom to ask Davy Pissoort’ about EM resilience and how that’s being defined. As that will have an influence on how EMC affects communication  | Open  |
| Tom Braxton | Tom to speak with Mark Steffka to convey the feedback about the structure, content, and agenda of the Global University.  | Open  |
| Tom Braxton | Bring question to BoD on dual track | Open - Add a virtual component to Symposium; request BoD to poll members of EMCS. – Logistical  |
| Kimball Williams | Ask Keith Frazier from Ford about speaking on testing variability | Open – Workshop coming up – In progress – Still viable and in progress |
| Tom Braxton | Work with Janet to publish available EMC courses/tutorials in EMC website cleared by TC1. As part of TC1's Mid-career training item.  | Open -  |
| Tom Braxton | Ask Janet to update the website with the details about the newly elected VPs and other members | Open – new website in progress |
| Kimball Williams & Randy Jost | Develop the idea about soft skills/team building and send to Tom. This could potentially be valuable to a newly appointed manager who needs to make a cohesive team with the people assigned to him/her | Open – In progress |
| Karen Burnham | To check about the standards relevant to ham radio operators. | Open |
| Louann Mlekodaj | Proto-board development | In-Process |
| Tom Braxton & K. Williams  | Work on angel support. | Open – prelim spreadsheet done – progress to close? - Communication with new chapter contact – In progress |
| Mark Steffka/ Tom Braxton | To find out whether these sessions are recorded and made available to the EMC society members later | Open  |
| Randy Jost | To distribute the drafts of the prototype boards presentation materials within the next 2-3 weeks to receive everyone’s feedback and comments. | Open |

Closed Action Items:

|  |  |  |
| --- | --- | --- |
| **Owner** | **Action Item** | **Status** |
| Kimball Williams  | To develop and send initial proposal for the special committee to Randy and others for feedback and suggestions. This would eventually be submitted to EMC society board. | Open – In progress – set to go to BOD soon. - CLOSED |
| Dom | To share the new EU directive about no uncertainty with the TC1 members | Closed |
| ~~Doug Kramer~~Tom Braxton | Talk to Rachel Norrod regarding Podcast and EMC Society promotion | Closed |
| Tom Braxton | To talk to Vignesh about IEEE withdrawal from iNARTE MoU and ask for a public announcement about it. | Closed |
| Tom Braxton | TC1 to review existing letters and draft a letter for engineers to use to get approval for attendance | Closed |
| Tom Braxton | To talk to Sarah and John Lasselle to propose that TC1 being a clearing house/directory of the training material available in the public domain. Instead of creating a new training altogether.  | Closed  |
| Tom Braxton | To contact Karen Burnham about making a proposal on this topic.  | Closed |
| Keith | To explore opportunities to carry a demonstration kit to the 2023 symposium. | Closed – Done. |
| Tom Braxton | To send acknowledgements and status update to the companies that have responded to our RFI submission.  | Closed - Done |
| Keith & Davy | Keith and Davy to discuss and determine whether combining both IEEE 1848 meetings at the 2023 Symposium would be more beneficial.  | Closed – Done – only 1 3 Hour meeting |
| Dan Hoolihan | To contact Janet about an event/workshop, news, and updates on activities on C63.  | Website has all info needed at [www.c63.org](http://www.c63.org)  |
| Kimball Williams | Recruit amateur radio volunteers for EMCS 2023 in Grand Rapids | Closed |

* Adjourn