THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

Baltimore Section

December Executive Committee Meeting Report 14 December 2015

This report summarizes the proceedings of the IEEE Baltimore Section Executive Committee (ExCom) meeting held on Monday, 14 December 2015 at the National Electronics Museum (NEM, http://www.nationalelectronicsmuseum.org), Linthicum, MD.

1. CALL TO ORDER (@6:35 pm)

2. INTRODUCTIONS

3. APPROVAL OF PRIOR EXCOM MINUTES

o Tabled for later in the meeting

4. Executive Reports

- o Chair
 - Vinod received an email from the University of Maryland College Park requesting \$250. The section has supported the February Fourier meeting series for at least 10 years. Usually the Signal Processing Society was involved, but the responsibility has moved to the section over the past few years. Boris said that the section supports this every year. Rob made a motion to continue our support for the talk of \$250. Dave seconded. Discussion It was confirmed that this request is for the meeting series. The section can also send another person or two to the meetings. It takes place in February. A vote was taken. All voted in favor of the motion, none opposed. The motion passed.
- Vice Chair

- Naval Academy student branch
 — Chris and Allison introduced themselves
 and brought a proposed budget. They are restarting the chapter.
 - Planned events Connecting and starting conversations during faculty research seminar one Friday each month. In 2015 they provided coffee and baked goods to encourage participating and interacting with professors. This was modeled off program at Virginia Tech, and they plan to continue through next year.
 - Trips They are planning a trip to Dahlgren to see other applications of electrical engineering and projects. Additional daytrips will be scheduled.
 - They provide information to freshmen who are going to pick their majors.
 - They have scheduled lectures with faculty and engineers from area companies.
 - A Distinguished Lecturer visit will be planned in 2015.
 - They will develop relationships with the Baltimore Section and other student chapters in the area.
 - They have some restrictions for who they can request funds from due to government nature of the school, but IEEE can work with them. They requested \$1100 from the section for 2016. Usually this is the responsibility of the section and the section receives money for all student chapters. They may be able to volunteer for some of the section events such as robot challenge, too.
 - There is an extracurricular fund at the university. The students opened an IEEE account with the fund. They can also obtain PACE funding with 50% match up front for the year.
 - The first meeting will probably be the second Friday of January. Typically the section provides \$500 for student chapters without a budget, but a detailed budget with specific requests will justify a larger budget. The section can pay it out as the year progresses. Request and reimburse doesn't work as well with the government rules. Matt and Rob can provide transfers ahead of time as necessary and use it as a model for other chapters.
 - Jeff made a motion to approve \$1100 for the Student Branch at the

Naval Academy and incrementally fund it. Dave seconded the motion. Matt and Rob will reach out to the students and advisor to work out all of the details. A vote was taken. All were in favor, and none opposed. The motion passed.

- Communications can be done through the advisor, Chris Anderson.
 They need advance notice of volunteer events and technical presentations to get permission to leave.
- Technology and Engineering Management Society TEMS 34 members in this area and they are willing to help support. They are looking for someone to lead a new chapter. TEMS was a counsel until this year when they became a society. One of their members should attend an ExCom meeting. Jeff will send out email to members and see if anyone wants to organize it.
- GlobeCom updates will be provided later in the meeting.
- 2016 meeting dates need to be requested. Rob will take the action. The only recommendations are to avoid religious holidays wherever possible and to schedule the conference room from 5 pm on to accommodate the robot challenge meeting before meeting. Rob will send out the dates.
- The Regional Student Activities Conference will take place in Cleveland in April. John Golzy from Region 2 requested a donation for the SAC. Baltimore Section has historically provided \$500. Matt made a motion to provide a \$500 donation to the student activities conference for 2016. Collin seconded the motion. Discussion The conference is April 8-10 2016. UMBC attended last year. SAC provides some subsidies to students to attend. Voting All voted in favor of the motion, and none opposed. The motion passed.

Treasurer –

- The current balance is around \$45,000, which is significantly down from last year. Recent payments were made for robot automation kits, Naval Academy chapter events, National Electronics Museum contribution, refunded robot challenge events, meeting refreshments, robot kits, and invoices.
- Matt tried to report for 2014 in NetSuite, but the books for 2014 are closed

and can't be updated. IEEE resolved this by creating one journal entry to cover it, so the books are technically up to date through January 1, 2015.

- 2014 reports can be done, but are very time consuming. It is now possible to upload a spreadsheet directly into the system, which should help in the future.
- Matt is still missing receipts from 2015. \$465.10 to Carole for chapter activities in January needs receipts or more information. Vinod will look at records. Carole sends scanned receipts which Vinod or Carole may still have.
- There was a \$4000+ deposit on February 17 from before Matt had the treasurer materials. It is probably for robots, but he will need more information. Neville or Jay will provide missing robot receipts.
- There is a missing receipt for March 11 food on credit card.
- A deposit for around \$1268 was made on March 27. It is also probably for robots. Jay will send all documentation for robots for earlier this year.
- There was a deposit \$707 from May 26 that needs additional information.
- Neville requested that the schools that make the payments are documented in the system in the future.
- Email receipt for the past chair pin purchase is missing.
- An IEEE credit card was used for \$3.58 October 12, 2015 at Fed Ex office and is still missing a receipt.
- If anyone ever had an IEEE credit card and is not an officer for 2016, they should destroy the card and stop using it. Receipts are required for these cards. Matt will look into closing cards can be closed out and issuing new ones.
- All of the PACE deposits have documentation.
- Secretary Jeff made a motion to approve all of the minutes. Rob seconded.
 Discussion There is a small change for the June minutes on page 3. The WIE leadership conference is a summit and not a flagship conference. Jeff changed the

motion to approve all minutes with these changes for June. Vote –All were in favor, and none opposed. The motion passed.

- O Tim Cash would like to restart the Annapolis subsection, but he will need some help. He will provide details, but can get \$500 almost automatically from the section. Tim made a motion to request \$500 to resuscitate the Annapolis subsection for enhancement and education of members in the subsection. Neville seconded the motion. Discussion The subsection deactivated 6 or more years ago. Carole mentioned that we need to see if we need to re-petition. Carole will investigate how to restart it and see if there are any other procedures to follow. A budget for 2016 will be required, and then the section will approve it in January. The section is spending money faster than it is coming in. Some of it is due to the lost year of income from 2014. The general belief is that the section had been increasing money until this year, but there is no proof. The finances were closer to \$100k a few years ago. Some of the increase was due to conference sponsorships and sections congress payments. Jeff suggested having a budget presented in January from all chapters and subsections. The motion to restart the Annapolis Subsection was tabled for January.
- O Rachel reviewed the L31s. Two events are required each year to remain active. The results as of December 13 are as follows:
 - AES, Annapolis, AP03/MTT, C16, Consultants, E25JT (joint with DC), IAS, PEL, R07, SP01, and WIE all had no events recorded.
 - EMB, EMC, and YP each had 1 event recorded.
 - ED/SSC and PES each had 3 events
 - COM19 and PHO each had 4 events
- Several of the societies with less than 2 events had meetings that were not reported
 or have meetings scheduled before the end of the year. Rachel sent an email to the
 IAS chair. All chairs should check the L31s and verify that they are submitted.

5. Committee Reports

- GlobeCom Carole discussed the GlobeCom conference that will take place
 December 4-8, 2016. They need a lot of volunteers.
 - o Some volunteers have been unhappy. There is not enough time for

- volunteers to attend any meetings. They are looking into ways to avoid this in the future, but it is a common problem with other conferences.
- NoVA and Baltimore were not really included in some of the planning meetings and did not get enough support from 2015 conference committee, but the volunteers continue to work on the 2016 conference. They will need a lot of support from the sections.
- They also need keynote speakers.
- Continuing Education The next Continuing Education program is February 6 from 10 am to 2 pm. UMBC will be presenting. The topic will be drones and quadcopters.
 - The March 26 Continuing Education program will be about the Internet of Things in cars. They will discuss the design and analysis of embedded automotive networks.
 - O Boris needs approval and a budget to start advertising and open vtools for registration. The budget is \$45 per course, and the plaque \$35 per plaque. The drones talk will require two plaques. Sodas and pizzas are people dependent, but typically range from \$50-150. Boris requested up to \$200 for the March event and \$230 for the February event. Collin made a motion for \$450 to support continuing education in Baltimore. Neville seconded the motion. There was no discussion. All voted in favor of the motion, and none opposed. The motion passed.
- Robotics The notes from the robotics are included as an attachment. There
 has been a low school turnout so far due to changes in teachers. They are
 working to make additional school contacts.
- Two NJ robot challenges are supported by WIE groups.
- Inventories are good. They are looking for judges.
- Neville turned the most recent bills turned over to Matt. They spent \$873 in the last month, which was primarily for printing manuals.
- The ITIA conference will be next March. Neville will be attending, but the second person is still trying to get other half of the fees covered. Neville will be staying one night and will request up to \$300 to cover it. The previous approval from the November meeting was \$425 plus \$80 for the teacher. Rob made a motion to request an additional \$300 to cover Neville's incidentals. Jeff seconded the motion. There was no discussion. All voted in favor of the motion,

and none opposed. The motion passed.

- The Communications Society had a successful meeting last Tuesday. They have a full schedule planned through May.
- E week will be February 21-27, 2016. The Baltimore engineering societies run something at the engineers club. There is a Howard County Girls Day event for freshmen and sophomores in engineering classes on 2/24. The event is looking for more volunteers.
- Elections The elections closed last night at midnight, and Dave Kisak received the results this afternoon. The chair was left vacant. Rob Rencewicz received 15% of 32 votes. Dave Kisak received 12.5%, and several other names written in. Rob won the vice chair election. Since the chair was open, Rob will become the chair. Sherwood Olson won the secretary election. Matt won the treasurer election with slightly over 50% of the votes. Rob will continue with position of chair, so the vice chair will be open. Ben Menachery received several vice chair votes, so he will be appointed to vice chair.
- o Vinod will send officer updates to Felicia.
- EMC Society Tim Cash is presenting on electromagnetic modeling with examples of products of each one and how they are applied on Thursday,
 December 17. The NEM staff can help with the projector for meetings in Pioneer Hall. The projector was purchased by IEEE, but resides at the museum. Rob will verify that there are no meeting room conflicts.
- Signal Processing When the Signal Processing society tried to book their next meeting, the NEM requested additional funding, but did not provide an exact number. This will be tabled for the next meeting. It was noted that meetings at the NEM need to end by 8:30 so the staff can leave.
- The meeting adjourned at 8:32 pm.

6. Attendees

- Rachel Krepps
- Collin Krepps

Tim Cash Vinod Mishra Matthew Stryjewski **Robert Rencewicz Benand Menachery Sherwood Olson Robert Berkovits** Sandra Hyland **Boris Gramatikov** Kate Duncan **Bill Semancik** Jeff Friedhoffer Jay Gamerman **Neville Jacobs** David Kisak Carole Carey Chris Panuski Allison Hunt Chris Anderson

Attachments Status, Student Activities, 12-14-15 1. Orders have been received from 6 schools for 66 2-leg teams and 13 4-leg teams. Excluding the MESA teams that were a separate issue, this compares with last year's figures at this time, of 10 schools ordering 49 2-leg kits and 13 4-leg kits. 8 schools from last year have not yet responded, and we have 2 more months before registration closes. Gilman and Catholic High School are showing an interest, and Friendly High School has come back to us again. Jay has shipped all orders received to their respective schools.

- 2. Of the 66 2-leg teams, 19 ordered Automation kits, so taking into account the kits already out there (they are re-usable indefinitely), we can expect at least 19 teams planning to automate their robots. Of these teams 8 have ordered feedback kits for closed loop in addition to open loop operation.
- 3. For 13 4-leg robot teams, 3 ordered Automation kits, so there'll be at least 3 teams planning to automate their robots, and 1 has ordered a feed-back kit for closed loop as well as open loop operation.
- 4. We have shipped 125 Robot kits to New Jersey, even more than we are planning to use here. Theresa Basquez, of Southern New Jersey IEEE WIE has ordered 73 Robot kits, 3 spare parts kits, 4 2-leg Automation kits, 1 with feedback, and 1 4-leg Automation kit plus feedback. Dru Reynolds, or Coastal New Jersey IEEE WIE has ordered 52 Robot kits, 6 2-leg automation kits and 1 4-leg automation kit. This is the first time they are attempting automation, and it will be interesting to see how they make out.
- 5. We have a current inventory of 35 robot kits plus 27 we expect to receive tomorrow from the 50 kits we added to our original 210 piece order (23 kits were shipped directly to New Jersey). While we have 5 4-leg automation boards in inventory, we have no 2-leg automation boards left (after making up 10 2-leg and 5 4-leg boards a few weeks ago). If we receive a last-minute request for 2-leg boards we can provide 4-leg boards instead, but it would be advisable to release 10 more 2-leg boards just in case.
- 6. Administration of this process is getting somewhat intense, and we could use a little help. We also need to get financial data relating to the Robot Challenge from years 2013, 2014 and 2015 to help us make sure that our finances are under control.
- 7. A bill from Kelvin for \$5,161.20 has been forwarded to our Treasurer for payment, and we'll be receiving invoices shortly from Kelvin for the additional 50 Robot kits, and some parts kits. My own expenses were \$873.70 and they were largely for the printing of Manuals.

Neville Jacobs



2016 Student Chapter Budget

01-JAN - 31-DEC 2016

Presented to the Baltimore IEEE Executive Committee

MIDN Christopher L. Panuski (Chair) MIDN Allison E. Hunt (Vice-Chair) Associate Professor Chris R. Anderson (Faculty Advisor)

14-DEC-2015

USNA IEEE Mission Statement

The mission of the United States Naval Academy (USNA) IEEE Student Branch is to

- Enrich the Electrical and Computer Engineering (ECE) student's professional knowledge and overall learning experience, thus fostering the development of involved, technically proficient officers.
- Improve student-faculty cohesion for ECE majors in order to promote academic mentorship and student research.
- Enhance the recruitment, prestige, and visibility of the ECE department at the USNA through active participation in the world's largest technical association.
- Recognize excellence in electrical and computer engineering through membership in the IEEE Eta Kappa Nu honor society.

Total Proposed Budget

The following is our proposed student branch budget for the 2016 calendar year (01-JAN-2016 to 31-DEC-2016):

Item	Breakdown	Total Cost	Funding Source
USNA IEEE Friday Event	4 carafes of coffee at \$17.50/ea. (Nimitz Library Coffee Bar)	\$70.00	IEEE
	8 sets of 6 pastries (48 total) at \$9.00/ea. (Great Harvest Bread, Annapolis)	\$72.00	IEEE
	Total Single Event Cost (with tax)	\$150.00	IEEE
	Total Cost (7 events)	\$1050.00	TEHE
Student Branch Banner	3' x 5' USNA IEEE Banner for official events	\$50.00	IEEE
Movement Orders	Transportation (\$250/day per van)	\$500.00	USNA
Guest Speakers	Fees and refreshments	Various	Various
	Total Internal Funding Available	\$500.00	Cave S
	Total Outside Funding Requested	\$1100,00	

Funding Challenges

As an affiliate of a government organization, we are subject to special rules regarding external funding that prevent our student leadership team from seeking funding from external businesses and corporations. Adherence to these regulations, without degrading our opportunity for collaborating with external groups and organizations, is as a fundamental concern of our leadership team. Due to these inherent restrictions, the number of viable funding mechanisms which will allow our student branch to thrive is severely limited.

USNA IEEE Student Branch Activities

IEEE Friday Event

The IEEE Friday event was originally inspired by Virginia Tech's "Fun Friday" social event, which has been the flagship event of the Virginia Tech student branch for over 20 years. It serves as our branch's primary mechanism to: enrich faculty-student cohesion and communication, promote student involvement in the department's various professional activities, and recruit and maintain STEM talent in ECE. As a combined professional development and social event, the monthly meeting supports several of our goals as a student branch. For the event, our student branch hopes to offer refreshments in the morning to attract students. These refreshments are placed in our student atrium, located in the ECE department's spaces, to encourage faculty-student interaction. Throughout the morning, students visit with one another, share information on their major to new midshipmen, and discuss potential projects and research involvement with faculty. IEEE membership development materials are strategically placed around these spaces to attract new student members. The event is also currently planned to coincide with the monthly department research seminar, which takes place at noon after the completion of the event's social component.

Movement Orders

To broaden the overall educational experiences provided to midshipmen, we plan to organize a variety of trips, or "movement orders" as defined by the Naval Academy, to both local and national engineering or research and development institutions. In December 2015, we coordinated a trip for 10 students to tour various test sites and labs at Naval Surface Warfare Center Dahlgren. Even more students showed interest in attending the movement order, but due to transportation constraints we were only able to accommodate ten. Afterwards, discussion amongst those who attended revealed that everyone found the trip interesting and informative. We would like to continue these trips at the rate of one or two per semester. We have organized potential future trips into local and multiple day opportunities as follows:

Local

- Naval Research Laboratory
- National Security Agency
- · APL at Johns Hopkins

Multiple Day

- Bath Iron Works, Maine
- MIT Lincoln Laboratory, Massachusetts

These movement orders will give students the opportunity to see applications of ECE beyond what is typically seen in a classroom. Additionally, the trips should be funded by USNA and would therefore require no additional outside financial support.

Guest Speakers

While guest speakers are always appreciated for their different perspective and ability to shed light on different facets of electrical engineering, students at USNA typically attend numerous mandatory briefings and presentations outside of the classroom and are thus hesitant to attend an additional PowerPoint presentation, especially an optional one. Consequently, guest speakers that are most likely to capture student attention at USNA are those who can incorporate demonstrations and other hands-on components to their presentations. For instance, there would likely be greater response to an event where an antenna was set up and students used spectrum analyzers to determine and study the antenna propagation pattern than for a lecture on signal propagation in an indoor environment. We recently hosted a guest speaker from Raytheon, who led, to the great interest of our members, an interactive discussion regarding the connection between civilian and military leadership. Next semester, we plan to invite Dr. Gregory Durgin, a Georgia Tech professor and IEEE Distinguished Lecturer for the Council on Radio Frequency Identification.

Participation in IEEE Events

In the future, pending student interest, we plan to participate in future external IEEE events. Senior capstone design teams, when supplemented with talented students from other class years, could potentially compete in future IEEE student competitions. Furthermore, our student branch has the ability to assist with various community involvement events.

Financial Controls

We have established an official USNA IEEE student branch account with the Midshipmen Welfare Fund (MWF), an office that handles accounts for extracurricular activities at the Naval Academy. From here forward, any deposit or expense will be channeled through this account and supplemented with the proper documentation. Any expenditure of chapter funds will require independent verification from three entities: our chapter's Treasurer, our Chair or Vice-chair, and our Faculty Advisor or Officer Representative. These controls have been enacted to ensure that all funds are spent in accordance with our chapter's goals and applicable DoD/US rules and regulations.

2016 Goals

In addition to the planned events, including a variety of social, technical, volunteer, and recruiting events both on and off campus, our IEEE Student Branch is primarily focused on establishing ourselves as a well-known, premier student organization at the United States Naval Academy.

In terms of membership, we intend to engage as many ECE majors as possible. However, to encourage a diverse, interdisciplinary culture and knowledge base, we would also like to extend our reach to interested students various other departments. Thus, establishing an active and informed member base will be a focal point of our initial operations. Considering quantifiable goals, we will strive to increase the number of IEEE student members and ECE majors at the Naval Academy.

In order to maintain a lively Student Branch, keeping our members up-to-date on group events will require effective communication. To further foster this essential connection, we plan to implement a community website for the group. Similarly, another primary goal for the upcoming year will be to further develop our meeting place in the ECE department. A dedicated meeting location for our IEEE student branch serves not only as a common meeting location, but also as a faculty-student lounge to nurture continued education, collaborative efforts, and innovative thinking.