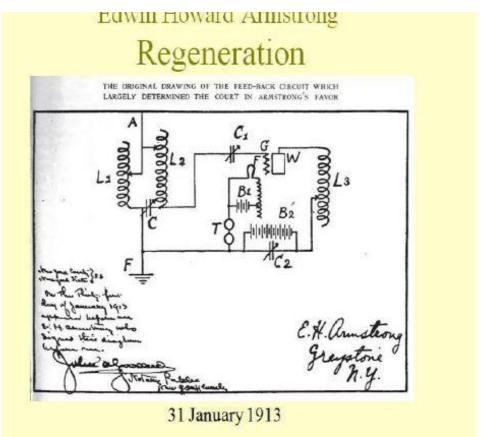
RegiOne



RegiOne, the quarterly newsletter of the IEEE Region 1

December 2014 & January 2015, vol. 1, No. 4

Regione wishes you a Healthy, Happy and Peaceful 2015



The patent for Major Edwin H. Armstrong's regenerative

circuit was granted on 6 October, 1913 (for more photos see .inside)



The

year came and in a few hours it will go down the memory lane. Things must have been happening all around Region 1 of which I have no knowledge. However, if the New Section, of which I have been the chair of the Life Members' Affinity Group and also the Historian, is any guide I imagine that the other sections also have been as active as some of the NY York chapters. I am especially happy to be instrumental in putting together an event commemorating the 100th anniversary of the granting of a patent by the USPO to Major Edwin Armstrong who was the inventor of the FM broadcasting technology. Armstrong set up his FM Yankee network that linked radio stations at Mt. Washington (NH), Paxton (MA), Boston (MA), Meriden (Conn.), and Alpine (NJ). Thus, the Armstrong event was important not only for the NY Section, but for the entire IEEE and really the whole world. Major Armstrong was a New Yorker, a graduate and (later) a member of the faculty of the Columbia University Engineering School. In realizing the event we were fortunate to enlist the support of Columbia's EE department, its radio amateurs club and the Fu Foundation School of Engineering and Applied Science, Armstrong Memorial Research Foundation, PACE, SSCS/EDS and SMC chapters in NY, and the IEEE History center. The Gil Cooke, former Historian at Boston Section and the chair of its milestone program was our

principal speaker. In that sense we covered a large swath of Region 1. The success of the event demonstrated that we can indeed pull our resources to organize events that are important for various Sections in Region 1 and the communities around us. If there is a will, there is a way. Region 1 is seeped with history of technology. Before the Silicon Valley in California took its contemporary form the

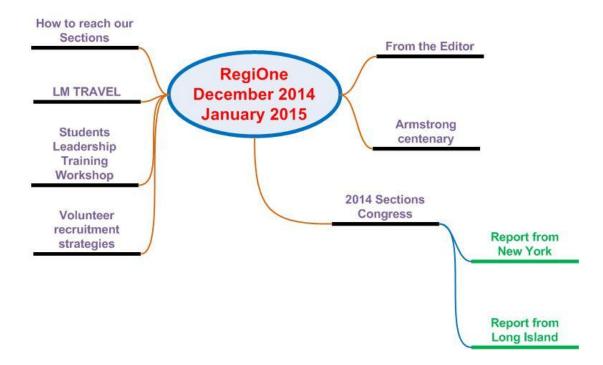
laboratories and teaching institutions in Region 1 were the incubators of great technological innovations. The names such as Thomas Edison, Alexander Graham Bell, William Shockley, Claude Shannon Norbert Wiener and John von Neumann ring any

bell in your mind? Ask yourself where did they work? We should honor those great moments of inventions and the giants on whose shoulders we stand today! At the IEEE we are a global community and we can do many things together including honoring past giants and present innovators. The IEEE LinkedIn is fine for professional networking. However, I would like to see more of a forum in which our peers who are near and far, even on the other side of the world can communicate, exchange ideas and, to use the IEEE's motto, advance technology for the humanity. The Internet allows us to do all this. But are we taking the best advantage of the innovations that engineers have given to the world?

2014 Principal Officers of IEEE Region 1

Chair, BoG and Director Region 1:Vincent Socci, SM Vice Chair and Director-elect R1:Ron Tabroff, SM Secretary: Charles Rubenstein, LSM Treasurer: Bala Prasanna, SM Past Director R1: Peter A. Eckstein, LSM

Topic identifier

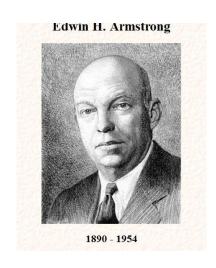


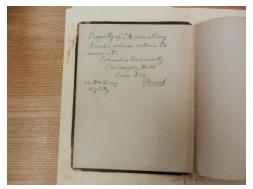
CENTENARY OF ARMSTRONG RECEIVING HIS FIRST PATENT

On 6 January. 1914 the US Patent Office granted the patent No. 1113149 for his regenerative circuit to Major Edwin H Armstrong (1890-1954) who graduated in electrical engineering from Columbia University, New York and later joined its faculty. That was his first patent. In later years, he also received nine more patents. He is unambiguously credited with the invention of FM broadcasting. Armstrong was honored by many awards and inducted to National Inventors Hall of Fame. In 1983, the US post office issued a stamp in his honor. His genius in inventions was interrupted by law suits for his patents. In 1954 financially ruined and mentally depressed Armstrong committed suicide. After his tragic death the Armstrong family donated his papers and books to Columbia University and that was the beginning of the Armstrong Memorial Research Foundation at his alma mater that also received gifts from the Smithsonian Foundation. Armstrong's books, manuscripts, his lab log books and correspondence with his lawyers are generally maintained in Princeton University's climatecontrolled rooms.

On 27 October, thanks to Prof Charles K Zukowski, vice chair of EE at Columbia, we had a venue to celebrate the centenary of the granting of Armstrong's first patent. Prof Zukowski is also the president of the Armstrong Foundation. At his initiative Ms Jennifer Comins in charge of the Armstrong papers shipped some of them from Princeton so that we could look at them first hand. Below are a few typical papers. Note his clear handwriting and meticulous logs of the results of his experiments.

One of the two presenters Alan R. Klase,
Technical coordinator of the New Jersey Antique
Radio Club's Radio Technology Museum at
Infoage spoke on the early years of Armstrong as
an engineer. The second presenter Gilmore
Cooke, SM chair of Boston's History and
Milestones Committee spoke about the Yankee
Network, a creation of Armstrong. Mr. Cooke
also played a live recording of Armstrong
conversing with his buddies at various stations
of the Yankee Network. Some photograph of the
event follow.- Amitava Dutta-Roy, *Editor*

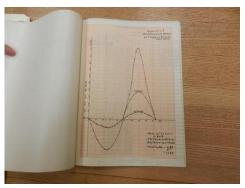








Property of E H Armstrong



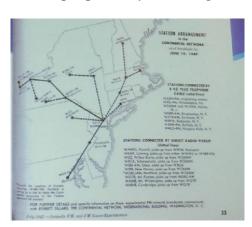
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The second secon

Neat entries in the log book



Graphs plotted by Armstrong



Yankee Network

Copying machine did not exist then



Antenna at Alpine, NJ

Yankee Network of FM Stations



Prof Charles Zukowski opened the session



For more on the IEEE-Columbia University celebration of the Armstrong event please visit http://sites.ieee.org/ny-monitor and see the November issue from the archive.



2014 SECTIONS CONGRESS AT AMSTERDAM

As the editor of your RegiOne I wondered what happened to our recommendations sent to the 2014 Sections Congress that was held in Amsterdam. What was discussed there that would make our IEEE more beneficial to its present members and would appear more attractive to engineers who may be thinking of joining an association of professionals. I am

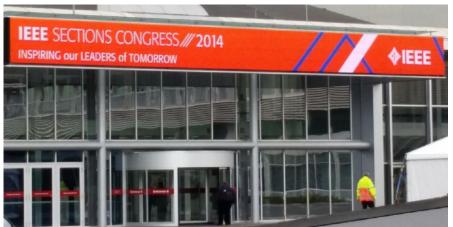
happy that this month we have two reports from two Section chairs —Long Island and New York. These two reports give some information for those of you who have been wondering the same way as I had been. It is better late than never!! I thank the two authors for coming forward.

SECTIONS CONGRESS 2014 - LONG ISLAND REPORT

JOHN SCHMIDT, SM AND 2014 CHAIR OF THE LONG ISLAND SECTION OF THE IEEE

The Long Island Section sent four representatives to Sections Congress 2014, I being one of them. This was a new experience for

me, having never been to a sections congress before. The Section had particular interest in the congress as three of our suggestions



had made it to the final suggestions list to be voted on at the congress

We arrived on a Friday morning, and checked into the Holiday Inn Amsterdam, the hotel R1 had designated as the preferred hotel. After a little bit of rest, we were off to the opening ceremonies, which featured welcome speeches that went through the history of sections congress, a review of the 2011 suggestions and the 2014 suggestions, and some awards and recognitions.

On the following day we started early with a 7am breakfast. Our companions went off on a tour of

Amsterdam while we got to work. The main exhibit hall was open from 7am to 5pm and resembled a large trade show with booths and

vendors though
each booth
represented an IEEE
specialty, such as
WIE, ComSoc, IEEE
Publications,
Membership
Services, and many
more. I spent a lot
of time on the floor
going from booth to

booth and speaking to the representatives about their specialty. I found the exercise to be a good general education of what services IEEE offers to the members. I also picked up enough IEEE pens to last a lifetime.

The general session opened at 8am, with classes and lectures — four tracks in all. There were 75-minute classes, 20-minute learning labs, and 5-minute IGNITE! A series of 5-minute presentations that introduced a host of topics. There was too much for any one person to attend or absorb, so the LI delegation used a divide and conquer approach.

I attended sessions that included improving IEEE engagement in industry, leadership development for volunteers, how to promote your local events, and recruiting and volunteer succession planning. All speakers were experts in their respective subject areas, and the classes were well presented.

That night our companions rejoined us for the honors ceremony, and then we retired back to the hotel for some much needed sleep.

Sunday was much like Saturday, with classes until 3pm, and the closing ceremony that ran from 3:15pm until 5pm.

On Sunday night, the R1 group went out to dinner as guests of our Region Director. I found this to be the perfect way to wrap up the weekend. Over dinner we talked about the classes we had taken, what we had learned, and collaborated on various topics. I took notes and

ideas from several members (thank you, Catherine Alton and Soon!) which I brought back to my Section. The congress left our incoming officers better educated and prepared to serve.

If I had to mention about one critical observation, it will be that the sections congresses are too far apart in time – there is a real need for continuous presentations, and introductions and education on the topics presented. The IEEE has a large number of programs and services, and there was just too much for any one person to absorb. •



The Region 1 delegation to the 2014 IEEE Sections Congress

2014 IEEE SECTIONS CONGRESS, AMSTERDAM, NEW YORK REPORT

A REPORT BY NEIL WEISENFELD, SM, CHAIR NY SECTION

The IEEE Sections Congress is a big annual event in which representatives from all its ten Regions take part. Prior to the congress all Regions and the Sections in their respective domains draw up a list of recommendations to be included in its agenda. This year the congress was held in Amsterdam, Netherlands during the weekend of 22–24 August. Neil Weisenfeld, the chair of the New York Section attended the congress and sent us a short report that follows. Thank you, Neil for your collaboration! I think that as members of the IEEE you will be interested in knowing about topics that were discussed and what impression they might have made on an attendee. Here is the Neil sent to the Monitor. —*Editor*

The Report:

As the chair of the NY Section I had the privilege to attend the 2014 Sections Congress that had drawn some 1,000 IEEE members from 95 countries.

Here are some key points I took away from the:

- Dr Roberto Demarca, the 2014 president of the IEEE that our volunteer-based organization has been successful in maintaining its ideals during the last 130 years. Volunteerism and emphasis on service must continue as core values for future success
- At 431,000 members worldwide, the biggest challenge for us is sustaining our membership
- Region 1 to Region 6 membership is now 203,357
- Membership in the USA has dropped while student membership has increased both in the USA and in all other countries
- IEEE needs to engage volunteers; volunteers want to make an impact this is a recurring theme in surveys

 Volunteers will need to be engaged differently than in the past due to greater distraction and demands

Some of the most notable benefits of IEEE membership that were highlighted at sections congress were:

- Professional peer network
- Mentoring network
- IEEE TV (1000 videos)
- IEEE job site
- Resume lab with mock interviews (900 questions)
- IEEE eBooks: handbooks, advanced texts, and references
- IEEE podcasts
- Special Interest Group on Humanitarian Technology (SIGHT) which engage with nongovernmental organizations, civil society organizations the UN and other similar bodies to develop useful and sustainable technologies for humanitarian benefit
- SIGHT comprises of 51 groups from all geographic areas of the IEEE

Some notable SIGHT projects are:

- Sensor column to detect landslides in the Philippines
- Engineering students designing solar lamps in India
- Wireless head-mounted keyboard
- Interactive classroom tech for hospitalized children

The most notable presentation at the congress was given by Dr Jayant Baliga, the inventor of the insulated gate bipolar transistor (IGBT). Baliga

detailed the computations to quantify and demonstrate the societal benefits of his invention. The IGBTs have improved efficiency of motor drives, automobile electronic ignition systems, and ballasts for fluorescent lights. That has resulted in a reduction in energy usage of over 50,000 terawatt hours and 56 trillion pounds in carbon dioxide emissions.

Sections congress attendees voted on the 34 recommendations for process improvement (mostly via their personal tablets or smart phones).

The top five recommendations based on voting were:

- Include free access to IEEE Digital Library as a member benefit. Promote other IEEE services and products based on their usage and preferences (adopt Google Business Model)
- Develop an incentive and recognition program for companies that invest in full or partial support of their employees' IEEE membership dues
- Introduce loyalty rewards such as publication access, conference fees, and standards activities for continued membership
- Provide a tool to build, promote, record, host and broadcast technical events at the local level and make them available to IEEE members
- Enhance vTools for better usability by volunteers and provide a training program to the Sections.



STUDENT LEADERSHIP TRAINING WORKSHOP

Babak Beheshti, 2014 IEEE R1 Student Activities Chair

On Saturday

December 6, 2014, the Student Activities Committee of Region 1 hosted a Student Leadership Training Workshop (SLTW) at Robert Treat Hotel, Newark, NJ. Students and their advisors from several universities in New York, New Jersey, Connecticut, Rhode Island, and Massachusetts attended the event. Region 1 also paid for the two-night hotel stay for all attendees who had requested it.

The event started with opening remarks by Babak Beheshti, the 2014 IEEE R1 student activities chair, followed by an introductory talk by Mr. Vince Socci, the R1 Director. The morning session was devoted to IEEE's role in student leadership development, student branch management and the IEEE resources available to student volunteers and leaders.

The afternoon session was focused on career development of students and was moderated by John Hyde, Amy Bravo, Adrienne McNally and

Jeremy Ducos, all from the office of career services at New York Institute of Technology (NYIT).

Feedback from attendees indicated a high level of satisfaction for the event and appreciation of array of inspiring potent talks and presentations from officers of R 1, namely, Soon Wan, chair of membership development; Charles Rubenstein, secretary; Parshva Bavishi, student branch development specialist; Babak Beheshti, chair of student activities; Bala Prasanna, treasurer; Robert Vice, coordinator of Young Professionals (YP); and Peter Eckstein who is now the president of the IEEE-USA; and Richard Mortimore, president of the IEEE student branch at NYIT.

Some photos of the events are shown below. All other event photos can be found at the Region 1 student activities web site at http://sites.ieee.org/r1/committees/students/.



Lecturing, listening, talking, eating and networking at SLTW, Newark, NJ, December 2014



John Schmidt, SM and 2014 chair of Long Island Section

As the chair of the Long Island Section, I often encouraged the chairs to adopt a strategy that I thought best for our Section. Instead of doing all of the IEEE Section work themselves, they should recruit volunteers who, as members their respective committees, could share the burden. Recently, I was recently asked by one of those chairs to put my suggestions in writing and in response I created what you are about to read in the following.

One of my resources on this subject is the material written by Tom McKee, president and owner of Volunteer Power, and Advantage Point Systems. Mr McKee gave multiple presentations at IEEE Sections Congress, including Tips and Tricks for Getting Young Professionals to Volunteer and Recruiting and Volunteer Succession Planning. He was also one of the invited speakers at the closing ceremonies of those events. At his presentations Mr McKee covered many of the techniques to close a deal with reluctant volunteers and he spoke about some common mistakes we make while recruiting. I had applied those techniques in other organizations, and discovered that they are valid and get results. Links to his articles are given at the end of this note and I highly recommend them.

Before starting the process

Before we recruit, it is critical to know, and to be able to explain, the details and responsibilities of the position we are recruiting for.

Potential volunteers are busy and balancing many other demands on their time. I am surprised how often I have been approached to be a volunteer, yet the recruiter could not clearly define their request. The question "Can you ...?"

needs to be followed by a discussion of the perspective time and effort obligations, and duration of the commitment.

We need to approach recruiting like we approach a business deal, so both sides understand what is expected. We need to use what McKee calls the 'Duct Tape' technique – "Duct Tape your mouth shut and listen" so that we can unambiguously understand what the volunteer is capable and willing to do in terms of time and effort, and to get a sense of what they want in return. This is a negotiation and it is an important part of the process that is often skipped.

Face to Face recruiting

The best recruitment method is the 'face to face, look them in the eye' request. By doing that, we can establish a dialog explaining to the potential volunteer what the position entails and why we think they would be a valuable resource. We can listen to them, modify our expectations to match what they can do, and start to understand what their expectations are.

Broadcast recruiting:

The worse way to recruit is to stand up at a meeting and just announce that volunteers are needed, and yet this is often the default way of recruiting, and it fails for many reasons. No one feels special when the request is broadcast – 'any warm body will do'. Those who do volunteer may not be capable or qualified. A more qualified person may hold back when someone else volunteers. In many situations, no one speaks up because they are already busy and do not know what the position entails.

Every Volunteer is paid

What does the potential volunteer want out of the position? People volunteer for a reason, even if they are not conscious of it, and we need to pay attention to those reasons.

Some people volunteer because they want to feel that they are part of the group — include them on all emails, list them on all rosters, and invite them to all meetings. Some crave recognition — acknowledge their contribution publically at every opportunity. Again, some don't want recognition but the quiet satisfaction of having helped — thank them in private.

Volunteering involves a cost, which must be balanced against the reward the volunteer gets in return. When the reward is too little and for too long, the volunteer ceases to be a volunteer. When recruiting, and when managing our volunteers, we need to be aware of this dynamics. Why our volunteers are volunteers is as important as what they do. Apply the duct tape and listen, and whenever possible, pay your volunteers in whatever form that has been negotiated earlier!

In summary, when a position opens up I have found that it is best to:

1. Write a clear description of the position with the details of the responsibilities,

- including all the deliverables and deadlines
- 2. Interview prospective volunteers in our network, and being able explain precisely what is expected and why they would be a good fit for the position. Be ready to modify our expectations.
- 3. If we cannot fill the position with people within our network we can then go to the announcement method, again and be ready to explain the position and interview prospective volunteers, with an eye to their qualifications and if they will find the experience rewarding.

References from the Volunteer Power website:

The Seven Deadly Sins of Recruiting Volunteers: http://www.volunteerpower.com/articles/7Sins.asp

Why People Volunteer:

http://www.volunteerpower.com/articles/Why.asp

Oh, By the Way! The Four Words that Volunteers Hate to Hear:

http://www.volunteerpower.com/articles/OhBy
TheWay.asp ◆





The tour will take you to Europe (France, Switzerland, and Germany), 6-17 May 2015, as described on the Web page. The links on this page takes you information on a tentative itinerary, hotel accommodations, and pricing. Additional details and IEEE Milestone visits will be added shortly.

The tours are planned with Life members and their companions in mind, and the pace of the tour is set for seniors; however, all IEEE members are welcome.

Lou Luceri, LSM, Life Member Coordinator in Region One writes:

Colleagues,

The Life Member Committee is pleased to announce the **2015 IEEE Life Member Technical Tour**, which will take place 6-17 May 2015. Stops are planned in Paris, France; Geneva, Switzerland; and Munich, Germany

The tour will include both cultural/historical stops, as well as a number of Technical Sites/Tours.

Details regarding registration/fees, as well as the preliminary itinerary can be located at:

http://www.ieee.org/societies communities/geo activities/life members/tech tour europe.html

The itinerary has not been completed. The finalization of the visits to Technical Sites and IEEE Milestones are being worked on. Details will be added soon.

Please see attached for the Life Member Newsletter article that highlighted tour.

As the Regional Life Member

Share this information with the all

Coordinator, I ask that you please the Life Members.

HOW TO REACH THE 22 IEEE SECTIONS OF REGION 1

NORTHEASTERN AREA (AREA CHAIR: JASON HUI, SENIOR MEMBER)

New Hampshire: http://www.ieee-nh.org/ Boston: http://www.ieeeboston.org/

Maine: http://ewh.ieee.org/r1/maine/me_ieee.html Providence: https://ewh.ieee.org/r1/providence/ Worcester County: http://users.rcn.com/ieeeworc/

CENTRAL AREA (AREA CHAIR: BABAK IZADI, SENIOR MEMBER)

Green Mountain (Vermont): http://sites.ieee.org/gm/

Springfield: www.ieee.org/go/springfield
Berkshire: http://ewh.ieee.org/r1/berkshire/

Mohawk Valley: https://webinabox.vtools.ieee.org/wibp_home/index/R10021 Mid-Hudson: https://webinabox.vtools.ieee.org/wibp_home/index/R10019

Schenectady: http://sites.ieee.org/schenectady/

WESTERN AREA (AREA CHAIR: ALEXANDER LOUI, FELLOW)

Rochester: http://rochester.ieee.org/

Buffalo: http://www.ewh.ieee.org/r1/buffalo/ Syracuse: https://ewh.ieee.org/r1/syracuse/

Binghamton: https://webinabox.vtools.ieee.org/wibp_home/index/R10003

SOUTHERN AREA (AREA CHAIR: ROBERT PELLEGRINO, LIFE SENIOR MEMBER)

North Jersey: http://sites.ieee.org/northjersey/news/newsletters

New York: http://ewh.ieee.org/r1/new_york/

Connecticut: http://www.ieeect.org/

Long Island: http://sites.ieee.org/r1?s=Long+Island

New Jersey Coast: http://sites.ieee.org/r1?s=New+Jesey+coast

Princeton/Central Jersey: http://ewh.ieee.org/r1/princeton-centraljersey/

