The Annual Membership Meeting of the
Society of Broadcast Engineers will be
webcast live from the Boston suburb of
Danvers, MA on Wednesday, Oct. 3 from
3:30 to 4:30 p.m. ET (12:30 to 1:30 p.m.
PT). The meeting is part of the Society of
Broadcast Engineers National Meeting,
held in conjunction with the Media Re-
source Expo (MRE) and hosted by SBE
Chapter 11 of Boston.

The one-hour webcast will in-
clude updates and reports on the
Society’s activities and programs,
the induction of newly elected na-
tional officers and directors, and
a special segment featuring ATSC
President Mark Richer in a one-
on-one conversation with SBE
President Jim Leifer. Richer and
Leifer will discuss the progress
being made with ATSC 3.0/Next
Gen TV and its implementation.

To view the webcast, go to the
SBE website, sbe.org, and click
on the SBE Annual Membership
Meeting link. The SBE Annual
Membership Meeting webcast
is sponsored by Blackmagic Design, Di-
electric, Drake Lighting, DVEO, IMT Vi-
slink, Lawo and Technical Broadcast Solu-
tions, Inc.

Leifer Elected to Second Term as SBE President

The 2018 election for the SBE national board of directors con-
cluded on Aug. 22. Jim Leifer, CPBE, was re-elected as the
society’s president. Leifer is senior manager of broadcast op-
erations at American Tower Corporation, Andover, MA.

Regarding the election, President Leifer said, "I thank SBE
members for their support and the Board of Directors for their
work over the last year. Looking ahead, I am eager to discuss
the ideas from the SBE strategic planning meeting held in June,
and then implement those approved by the SBE Board of Direc-
tors. This will enhance the membership experience as we em-
brace new technologies and new ways of performing the work
of the SBE."

Others serving one-year terms as officers, which begin on
Oct. 3, are:

• Vice President: Robert "RJ" Russell, CPBE; president, Tech-
nical Broadcast Solutions, Inc.; Middletown, DE
• Secretary: Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE;
director of engineering, Texas A&M University - KAMU-FM & TV;
College Station, TX
• Treasurer: Jim Bernier, CPBE, CBNE; senior director, Tech-
wood Engineering, Turner; Atlanta

Serving two-year terms on the board of
directors, which also begin Oct. 3 are:

• Stephen J. Brown, CPBE, CBNT; direc-
tor of broadcast engineering, Woodward
Radio Group; Appleton, WI
• Roswell Clark, CPBE, CBNT; senior
director of radio engineering, Cox Media
Group; Clearwater, FL
• Kirk Harnack, CBRE, CBNE; senior so-
lutions consultant, Telos Alliance; Nash-
ville, TN
• Vinny Lopez, CEV, CBNT; chief engineer,
WSTM/WTVH/WSTQ-TV; Syracuse, NY
• Thomas McGinley, CPBE, AMD, CBNT; president, McGinley
Enterprises; Missoula, MT
• Shane Toven, CBRE, CBNT; field engineer, Educational Me-
dia Foundation; Laramie, WY

See ELECTION, p. 3
TERADEX LINK PRO

Bonded Cellular WiFi Router

Blazing-fast Internet and maximum 4G/LTE redundancy so you can stream, browse and broadcast wherever you go.

2.4 / 5GHz WiFi
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linkpro.teradek.com
Those elected will be sworn in on Oct. 3, 2018, during the SBE Membership Meeting. They will join the other six directors who have another year remaining in their terms (Andrea Cummis, CBT, CTO; CTO, WLVT-TV, Roseland, NJ; Mark Fehlig, PE, CPBE, 8-VSB, senior systems engineer, Jampro Antennas/Alan Dick, Walnut Creek, CA; Ted Hand, CPBE, 8-VSB, AMD, DRB, director of engineering/operations, Cox Media Group, Charlotte, NC; Stephen H. Lampen, CBRE, consultant, San Francisco, CA; Kimberly K. Sacks, CBT, director of engineering, iHeartMedia, Loveland, CO; Kevin Trueblood, CBRE, CBNT, director of engineering, WGCU Public Media, Estero, FL. Also continuing on the board is Jerry Massey, CPBE, 8-VSB, AMD, DRB, CBNE, immediate past president.)

CQ Certification Question

An angstrom (abbreviated Å) is:

A. 10⁻¹⁰ meters
B. 10⁻⁹ meters
C. 10⁻⁶ meters
D. None of the above
The first hints of fall have arrived on Boston. Preparations for the SBE National Meeting have been underway, and will be about to start as you read this. Thanks to all our event sponsors and our meeting host, the Media Resource Expo, for making the National Meeting possible.

As you know, the SBE election closed in August, and six director seats and all the officers were on the ballot. I'm pleased to begin my second term as SBE president, and I welcome the new directors who begin their terms at the National Meeting. As I look back at my first term, we have accomplished much within the society. The SBE held a strategic planning session on Saturday, June 9, in Indianapolis. The meeting ran a full day, from 9 a.m. to 9 p.m. Attending were 32 members and staff from across the country. That included many SBE members representing chapters, the board of directors, five members of the SBE staff and our facilitator participating in the day-long event.

A strategic planning committee was formed to review and present the results of this session to the board in Boston. From their recommendations, action points will be acted on as the board approves them.

With all the constant changes it was exciting to see how many participated and look forward to trying new things to enhance the membership experience, and how we can embrace new technologies and new ways of doing the work of the SBE.

I want to take a moment to say thank you to all the members who have reached out to me with ideas and encouragement. I have had the pleasure of attending several regional and local meetings. It is also nice to see so many new people who have joined the SBE.

The SBE Mentor Program continues to develop, and with the support of our board, our members are embracing the program. I encourage those participating to continue, and if you are interested contact the SBE National Office so you can be added to the growing list.

SBE Joins Professional Certification Coalition

Since February 2018, a number of states have considered legislation that could restrict how holders of SBE certifications, and hundreds of other non-governmental certifications, are able to use them. The intent has been to remove perceived employment barriers and is focused on state professional licensing laws. However, language affecting voluntary certifications offered by private organizations has been swept up into these bills.

The legislation varies by state. Some define certifications as solely created by the state, while others limit holders of certifications from using them to promote their business, or indicate their knowledge and experience to current or potential employees.

Legislation in Louisiana was successfully amended earlier this year, but a new law in Missouri went into effect earlier this summer that defines certification as only authorized by the state. Legislation is pending in Ohio, Illinois and Michigan.

The SBE has joined the Professional Certification Coalition (PCC), which was formed to challenge these legislative efforts. The coalition is led by the American Society of Association Executives and the Institute for Certification Excellence. It currently numbers more than 78 organizational members. The group is waging a campaign focused on educating state legislators and their staffs on how this legislation will negatively affect thousands of their constituents. Their aim is to modify the bills to remove any effect they have on certifications offered by private, non-profit associations and other certification granting organizations.

The SBE will be an active participant in this effort and may call on individual SBE members who hold SBE certifications to contact their state legislators. Watch for further updates in The Signal, SBE-news and SBE Legislative Updates and Alerts.
The Next Broadcast Engineer

A common topic found in many industry publications over the last two or three years indicates a growing concern for where the next generation of broadcast engineers will come. I expect you have been involved in similar conversations and even some lively debate exchanged regarding the future of broadcast engineering. I have certainly had this conversation many times through my travels. Conversation with station managers at state broadcast conferences this summer in Kansas, Missouri, Tennessee, and Texas indicate that they too have concerns. There are often more questions than tangible answers and many look to the SBE for the answers. Needless to say, this topic has been on the radar of your SBE Board for some time, and it was a major focus of the recent Strategic Planning Conference held this past June in Indianapolis. The 2018 SBE Compensation Survey indicated that the majority of SBE member’s ages range from 61-64 and have worked in the field for 36-40 years. I expect this demographic represents the industry as a whole.

Let’s face the reality that the path many of us took to a career in broadcast engineering rarely exists anymore. Amateur radio peaked my interest in electronics in the mid-1960s in junior high and high school. My “Elmer’s” family owned the local AM/FM broadcast station and I spent time “helping” the chief engineer as much as possible. Later on in life, I realized he was the one doing the real helping. Experience gained from employment at a local radio/TV repair shop while in high school provided me employment when I went off to college and got my first paid job at a broadcast station. Even at a small Texas TV station, the engineering staff provided mentors in essentially all areas of broadcast technology of the time, from the studio to the transmitter. Formal classes in high school and college brought a deeper understanding of electronics fundamentals, but the hands-on aspect with an experienced mentor not far away provided my real broadcast engineering knowledge base. This “old school” career path to broadcast engineering rarely exists today.

Change is a Constant

As I look back at my own career, I often lose sight of the stability of technology that existed in my early career years. There simply was not much significant technology change. Beginning in the 1980s, the rate of change picked up, new technology was introduced in all facets of the industry, and technology life cycles became shorter. The regulatory side of the industry changed as given to those in the industry. Change will occur in the career path one takes to the technology side of broadcasting. Station management should also be prepared to meet compensation and working environment norms as they compete for qualified talent within the IT industry. Change will occur in how station management might sustain their operations through the availability of outsourced service offerings. Every aspect of the industry we know today will be affected by change as change will occur to meet the industry need to survive. Change creates an opportunity for the SBE educational programs to insure we have the proper mix of content offered in a format delivered at the right time to fulfill member needs.

Remember, SBE MemberPlus gives you access to all the latest SBE webinars including the entire webinar on-demand library at no additional cost. If you currently don’t hold the MemberPlus option, you can upgrade your membership at any time. Your SBE Education Committee wants to know your professional development needs. Let us know your thoughts on current and future programs, lend your advice and guidance to your SBE Education Committee to help establish the right mix of educational content to meet your professional development needs.

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New ATSC 3.0 Certification In the Works

Last April, the National Certification Committee announced that SBE is creating an ATSC 3.0 Specialist Certification with the help of the Advanced Television Systems Committee (ATSC). I want to give you an update on our progress since that announcement.

The National Certification Committee created specialist certifications about 11 years ago to establish a benchmark of individual proficiency for a specific subject. The program currently offers three specialist certifications: 8-VSB Specialist (8-VSB), AM Directional Specialist (AMD) and Digital Radio Broadcast Specialist (DRB). With any of the specialist certifications, the individual applying to take the exam must first hold a five-, ten- or 20-year engineering level certification as the host certification. Specialist exams are three hours in duration and consist of 50 multiple-choice questions. Additionally, one essay-type question is appropriately selected for each designation.

On Aug. 27, 2018, the National Certification Committee held a teleconference meeting and approved the addition of the five-year Certified Broadcast Networking Engineer (CBNE) to the list of possible host certifications. Therefore, if the ATSC 3.0 Specialist certification is something that you are interested in pursuing, make sure you hold a required host certification by the time you are ready to take the ATSC 3.0 exam. The ATSC 3.0 specialist is on track to be released during the second quarter of 2019. We are targeting the June 2019 exam session for the first set of examinations.

The SBE Education Committee has released the first ATSC 3.0 webinar covering a system overview of the 3.0 standard with a plan for a series to be rolled out later in 2018-2019. Gary Sgrignoli of Meintel, Sgrignoli & Wallace, LLC (MSW) is planning to present a traveling roadshow starting in 2019 similar to what he presented during the digital transition covering RF systems including SFNs and STLs. An SBE CertPreview update will also be released prior to the first exams covering this field of specialization. The CertPreview will have sample questions to give the examinee an idea of what to expect on the actual exam.

Closer to the release of the exam, a reference list of books, webinars, roadshows, websites and other tools that the examinee can utilize to prepare for the new specialist exam will become available. This test will initially focus on the 3.0 System, Physical Layer and include Single Frequency Networks (SFNs) and STLs. To be successful, a thorough knowledge of IP networks is recommended.

The answer is A

The angstrom (ångström in the original Swedish) is a unit of length equal to 10⁻¹⁰m (one ten-billionth of a meter) or 0.1 nanometer.

October 2018

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**Certification Achievements**

**LIFE CERTIFICATION**
- Certified Broadcast Engineer (CPBE) - Johnny Stigler, Euless, TX
- Certified Broadcast Engineer (CPBE) - 8-VSB Specialist (8-VSB) - Jerry Whitaker, Morgan Hill, CA
- Certified Broadcast Engineer (CPBE) - AM Directional Specialist (AMD) Digital Radio Broadcast Specialist (DBR) - Harold Kneller, Punta Gorda, FL

- Certified Broadcast Engineer (CPBE) - Certified Senior Television Engineer (CSTE) - James Cutright, Fredericksburg, VA
- Certified Broadcast Engineer (CPBE) - Certified Senior Television Engineer (CSTE) - Kenneth MacKinnon, Miami, FL

- Certified Broadcast Networking Engineer (CBNE) - Certified Audio Engineer (CEV) - Certified Broadcast Networking Engineer (CBNE) - Certified Audio Engineer (CEV) - Certified Broadcast Networking Engineer (CBNE) - Certified Audio Engineer (CEV)

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day, Oct. 2 and include a meeting of the national SBE Certification Committee and the fall meeting of the SBE Board of Directors. On Wednesday, Oct. 3, activities begin with the annual SBE Fellows Breakfast, sponsored by Kathrein USA. Following the SBE Annual Membership Meeting will be the SBE Annual Awards Reception, sponsored by Comrex, and the SBE National Awards Dinner, sponsored by The Telos Alliance. Richer will be the keynote speaker for the dinner.

The SBE National Awards Dinner features the presentation of the society’s major awards, including the Robert L. Flanders SBE Engineer of the Year to Mark Person, CPBE, AMD, CBNT of Brainerd, MN, and the James C. Wulliman SBE Educator of the Year to Jeff Welton, CBRE of Hackett’s Cove, NS.

The SBE will present the SBE Technology Award to Davicom for its Cortex 360 Site Management System.

The award for the Best Chapter Regional Educational Event goes to The 2017 Broadcasters Clinic, held in Madison, WI. Rob Sobol of Hillights won the award for Best Technical Article, Book or Program by an SBE member for his article, “NOC, NOC. Who’s There” in AGL Magazine.

A number of chapters will be recognized for their accomplishments in member growth, attendance and certification. These categories recognize chapters in two divisions. Division A, with membership less than the national median and Division B, for chapters greater than the national median.

For greatest percentage growth in new members, the winners are:

Class A: Chapter 57, Rochester, NY, Chapter Chairman, Gregory Carter, CBT, CBNT

Class B: Chapter 118, Montgomery, AL, Chapter Chairman, Wiely Boswell, CBRE, CBNE

The two chapters with the highest percentage of SBE certified members:

Class A: Chapter 115, Southern Idaho, Chapter Chairman, Thomas Kettwig, CBT

Class B: Chapter 131, Inland Empire, Chapter Chairman, Wayne Murphy, CPBE, CBNE and Certification Chairman Paul Claxton, CPBE, CBNE

The two chapters with the highest average percentage of member attendance at chapter meetings:

Class A: Chapter 145, Magic Valley, Chapter Chairman, Thomas Lowther, CSRTE, CBNT

Class B: Chapter 79, Austin, TX, Chapter Chairman, Ed Rupp, CBTE, CBNT

The dinner program concludes with the presentation of the SBE Fellow membership rank to Jerry Massey, CPBE, 8-VSB, AMD, DRB, CBNT of Greenville, SC, SBE immediate past president.

MRE includes media, production and A/V exhibits and technical sessions with close to 40 companies participating. All MRE activities and the SBE National Meeting events will take place at the Doubletree by Hilton Boston North Shore. Reservations can be made by calling 978-777-2500. Ask for the SBE room block.

SBE members can register for MRE online at the SBE website by clicking on the MRE website link. It’s free if done by midnight, Oct. 2. Register separately to attend the SBE National Awards Reception and Dinner ($16) through the SBE National Office website or by telephone, Monday - Friday from 8:30 a.m. to 4:30 p.m. ET at 317-846-9000. Live music will accompany the reception and dinner.

Thanks To Our National Meeting Sponsors

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Awards Reception

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Awards Dinner

THE TEOLOS ALLIANCE

Chapter Check

Chapter 93 • Raleigh/Durham, NC

After a 2.5-year hiatus, Chapter 93 met in August. The chapter leaders are calling the effort a chapter reboot.

Chapter 103 • Nashville

Mike Arnold (N8NWA) shows a digital mobile radio (DMR) “hotspot” that transmits and receives on the UHF (70 cm) amateur band. It then connects via WiFi (or wired) to the public internet. Attendees talked and listened to amateurs in other countries in good quality coded digital audio.
Chapter 38 El Paso
Lawrence Montenegro (l) receives his award from Chapter Chair Jose Castro.

Chapter 17 Minneapolis
Mark Persons, CPBE, AMB, CBNT, (r) received his chapter’s honor.

Chapter 32 Tucson
Aaron Diezman received the award posthumously. He died in January 2018.

Chapter 70 Northeast Ohio
John Hovanec, CSRE, AMD, DRB, CBNT, (r) receives his award from Chapter Chair Blake Thompson, CBNT.

Chapter 80 Fox Valley
Dave Driessen (r) receives his award from Chapter Chair Steve Brown, CPBE, CBNT.

RF201: RF Safety Course
The SBE presents an ongoing advanced RF series: RF 201. The series kicked off last summer and continues with an RF Safety course on Nov. 15 from 1 to 4:30 p.m. The course is designed for broadcast station personnel, including chief and assistant chief engineers, transmitter site engineers, ENG and SNG maintenance personnel and management who need to have an understanding of RF safety issues and regulations. Instructing the course is noted RF safety expert, Richard Strickland of RF Safety Solutions.

The 2018 SBE RF Safety Course provides an updated overview of RF radiation issues and practices for broadcasters, including: Proving compliance at a broadcast site; biological effects of RF radiation and the distinct differences between RF radiation and ionizing radiation; FCC and OSHA regulations - what they are and what you need to do to comply; workplace hazards; transmitter sites; SNG and ENG trucks; remote operations (where news personnel can find problems such as on rooftops); the unique issues at AM stations; RF hazard protection equipment; and signs - what they mean and what you need.

Other modules in the RF201 series include:
Module 1: FM Transmitter Systems
Module 2: FM Antenna Systems
Module 3: AM Directional Antenna Systems
Module 4: Transmitter Site Grounding

ATSC 3.0/Next Gen TV Webinar Series
On Sept. 12, the SBE held the first of a multi-part webinar series on ATSC 3.0/Next Gen TV. Part 1 provided an overview of the ATSC 3.0 system capabilities including physical layer, signaling, audio, video, captions, interactivity and advanced emergency messaging. It also included an introduction to the suite of Standards and Recommended Practices documents and an overview of the SBE ATSC 3.0 Specialist Certification.

Madeleine Noland, chair of Technology Group 3 of ATSC (TG3), was the presenter. Noland is a consultant with LG Electronics. She was the 2016 recipient of the prestigious ATSC Lechner Award for her leadership roles related to the development of the ATSC 3.0, Next Generation Broadcast Television suite of Standards. The webinar is available now on-demand from the SBE website.

The series continues on Oct. 17 with Module 2: Overview of the Physical Layer, presented by Luke Fay, sr. manager technical standards, Sony Electronics. The presentation will cover the scope of the physical standards, the architecture of the physical layer, its functional descriptions and the mandatory modes of operations, followed by a few optional technologies and a summary.

Fay is vice-chair of the ATSC Technology Group 3 (TG3), chair of ATSC TG3 Specialist Group on Physical Layer and vice-chair of ATSC TG3 Specialist Group on Interactive Environment for ATSC 3.0.

The SBE will continue the ATSC 3.0 webinar series through 2019. For dates and registration visit sbe.org/webinars.

Register for all Webinars by SBE at sbe.org. All Webinars by SBE can be viewed live or on-demand. Purchase webinars individually. SBE MemberPlus members have free access to all Webinars by SBE.

Completion of SBE webinars qualifies for SBE recertification credit under Category I of the Recertification Schedule.
Early this year, a well-known American corporation began making its case to the FCC for available spectrum for Wireless Power Transfer (WPT). This is not a new idea at all. Nikola Tesla had plans for supplying power to the world without the need for wires. The Tesla coil was created in 1891. Tesla’s plans, however, were for a global wireless power grid that any home, business, or vehicle could tap into at will. We are coming right back to that concept now, and the renewed interest in WPT for vehicles stands to challenge even further the RF environment at MF and HF at least, including the AM broadcast band.

In the past, the applications for WPT involved recharging small battery-operated devices. However, Wireless Power Transfer for Electric Vehicles [WPT(EV)] poses a very real threat to AM broadcast radio spectrum due to the prevalence of electric vehicles and the benefits offered by vehicle-to-roadside WPT(EV). WPT typically uses frequencies in the LF and MF range, and allows charging of electric vehicle batteries without having to plug into a power source.

WPT(EV) is high duty cycle, will be located in residential areas, and its harmonics are likely to be spread across a band of frequencies. It is easy to forecast that WPT(EV) would be installed at residences of electric vehicle owners, generating noise that could obscure radio reception in and around residential environments. It is also conceivable that regular charging of electric cars on roadways would create RF emissions along such roadways that would make AM broadcast reception impossible.

WPT(EV) uses induction coupling from a charging pad on the floor under the vehicle without the need to plug the vehicle into a charging point. While the technology is still under development, some installations for public service vehicles, typically buses, are already in operation, using charging frequencies around 20 kHz. Discussions are underway within the International Telecommunication Union (ITU) over the introduction of WPT(EV) on a widespread basis across Europe.

The International Amateur Radio Union (IARU) has released a White Paper entitled *Unwanted Emissions in the Spurious Domain from Wireless Power Transfer For Electric Vehicles on Frequencies Allocated to the Amateur Service*, which seeks the support of other countries “to ensure that spurious emission limits are set for WPT(EV), which will protect incumbent radio services in the urban/suburban residential environment. World Radiocommunication Conference (WRC-19) agenda item 9.1.6 calls for “urgent studies” of WPT(EV) to assess its impact on radio-communication services and to study suitable harmonized frequency ranges that could minimize its impact on the radio spectrum. In a 2016 report entitled *Applications of Wireless Power Transmission via Radio Frequency Beam*, the ITU called WPT “game-changing” technology. “We will be able to become free from lacking electric power when [it] will be supplied wirelessly,” the report said.

Practical Use Studies

In Europe, where there are ongoing studies of WPT(EV) and interference potential, the existing spurious emission limits were developed with a degree of “discounting” because of the probability of colocation of emitter and receiver, duty cycle of the emitter and whether the frequency of emission coincided with the receiver frequency. In the case of WPT(EV), however, these factors do not apply because of: (1) The projected density of deployment of WPT(EV), such that a WPT(EV) installation could be within 20 meters of every property; (2) The duty cycle of WPT(EV) is high (charging times of 6-12 hours have been quoted); and (3) The harmonic content of WPT(EV) is high.

Domestically, charging systems are expected to use a frequency around 85 kHz. The fear is that this poses a real risk to radio communication resulting from the harmonics that the high-power WPT(EV) installations would generate. The IARU paper said that, while it is not yet clear what the actual spurious performance of WPT(EV) will be, it is apparent that in order to provide adequate protection to radio services in residential environments, the existing limits would have to be tightened significantly.

Researchers at Stanford University have been able to transmit electricity wirelessly to a moving object nearby. If their technology is scalable, they may have discovered a way to allow electric cars to recharge in motion, eliminating issues of charging station availability and EV battery range. That would likely result in electricity becoming the standard vehicle fuel worldwide. A coil in the bottom of the vehicle could receive electricity from a series of coils connected to an electric current embedded in the road.

For WPT, the major limitation is that the battery-containing device must be kept very close to the energy supplying device, in order to transfer useful amounts of energy across the gap. Moving the two units too far apart reduces energy transfer and efficiency drops. So the WPT engineers strive to keep the transfer efficiency as high as possible, since a low efficiency means that some power purchased by the consumer is not beneficially used for charging. The transfer efficiency level of wireless charging devices could be critical for recharging a plug-in electric car’s batteries that require large amounts of power. High-power wireless power transfer, to be efficient, necessitates use of a higher frequency. Higher power and higher frequency produces new concerns about high ambient noise levels and significant amounts of power being radiated. Most of the radiated power will be captured and used to charge the battery, but some will be radiated. So there are not only radio frequency interference issues but human radio frequency exposure hazards as well. Where WPT is ubiquitous in residential and industrial areas, or if part of vehicle to roadside intelligent transportation systems, this is a problem that can become unmanageable very fast. FCC hasn’t the resources to address this issue after the fact. RF location and remediation would be impossible. And as we have said before, AM broadcast listeners do not complain to the FCC of interference. They simply utilize other media.
Two Appointed to Ennes Scholarship Committee

The Ennes Educational Foundation Trust has been an important part of the activities and mission of the Society of Broadcast Engineers since the inception of the Trust in 1980. Organized by Chapter 25 of Indianapolis as a scholarship fund to memorialize the work and contributions of Harold E. Ennes, the chapter gave the Trust to the national SBE in 1981 to broaden its exposure. The mission of the Trust was expanded several years later to include educational programs and grants to support educational projects benefiting the field of broadcast engineering.

The Scholarship Committee of the Trust consists of three members of the SBE. Their responsibility is to review all of the scholarship applications and select the recipients. I am sad to tell you that earlier this year we lost two of the three committee members. In March, Ron Arendall of Dublin, OH, who served on the Scholarship Committee for many years and was a past president of SBE, passed away. He served as director of engineering at TV stations in several cities during his long career. In July, Mike Scott, of Puyallup, WA, passed away unexpectedly. Mike was retired from Bates Technical College in Tacoma where he served as an instructor and tutored many into the field of broadcast engineering. Mike had been on the committee about ten years. In addition to their Ennes Trust roles, both men contributed mightily to the SBE, both locally and nationally.

The Trustees of the Trust, Doug Garlinger, Tony Peterle and Dale Scherbring, who oversee Trust activities, appointed two very qualified members to fill the scholarship committee vacancies. We welcome Tom Weber of WISH-TV and Kenny Elcock of WRTV-TV, both in Indianapolis. Thank you for taking on this important annual task. They join Ed Karl, of Warrenton, MO, who has served on the scholarship committee for more than 25 years.

SBE Strategic Plan Update

Since our one-day strategic planning conference was held on June 9, a small task group has been working to review and analyze the findings in the report submitted by our facilitator, Rodney Vandevene. They are developing recommendations that they will deliver to the national SBE Board of Directors at its meeting on Oct. 3 just outside of Boston, in Danvers, MA, during the SBE National Meeting.

National SBE Board members, Jason Ornellas, Kevin Trueblood and Wayne Pecena are members of the task group and have been joined by SBE President Jim Leifer and me. There have been a number of meetings held by conference call. As of this writing, the final recommendations were still being drafted, but I can tell you that, broadly speaking, the recommendations will include the objectives of attracting new and younger individuals to the SBE (and to the field of broadcast/media engineering) and to provide members with services and programs that meet the needs of today’s, and tomorrow’s, media engineer.

The Board will discuss and eventually adopt specific objectives. These objectives will then be fleshed out with specific, measurable action steps. Some of these action steps will undoubtedly be drawn from the many ideas that were generated during the June 9 meeting. The Board will provide members with an update following the meeting.
Polite Rejection Letters

Cox Media Group owns 14 television stations in ten markets. We also sport 13 translators in five markets and 56 radio stations in 11 markets. The repack has graced ten of our TV licenses in nine of ten markets. I’m the guy that oversees the repack and receives the rejection letters from the FCC.

So who’s reading this? If you haven’t been repacked, you are probably backing away slowly and hoping it isn’t contagious. If you have a date, well... you are hard at work making that date. So that leaves the niche audience, those who haven’t started the reimbursement process.

Don’t Fear Rejection

It’s coming soon to a reimbursement request near you. You can take acetaminophen (seriously, Tylenol lessens the emotional pain of rejection) or you can learn what triggers the FCC repack administrators to reject your claim. Things start off innocently enough with a shot across the bow from a bot:

* FCC Form 399 Automatic Notice: Invoice Or Line Items Rejected*  
  Rejection Reason: Administrative Correction

Okay, we’re all reasonable people here, just need a little Administrative Correction and we’ll be on our way. And then clarification arrives:

* Invoice Repayment Request: WSCM-TV, Facility ID: 12345*
  *Your request(s) for reimbursement of channel relocation expenses has been received and is under evaluation. During our review, we have identified the following issue(s) that requires further information and/or supporting evidence:*

And friends, let me tell you, the issue(s) are various and manifold. Let’s look at some common reasons for rejection.

“The total you are requesting includes estimated sales tax. Repack Program guidelines do not allow reimbursement for estimated expenses.” And there you have it. If your submitted invoice has estimated shipping, tax or anything else preceded by the word ‘estimated’ you are going to trigger the bot. Please don’t trigger the bot.

“...invoice(s) does not clearly show that the described work was on behalf of WSCM-TV.” Every invoice must have station call letters or facility ID on the invoice. No exceptions. If that hardware store invoice is made out to SCM Broadcasting, it won’t fly. The bot hates that.

“Your payment request(s) for the invoice(s) referenced below is for less than the total amount due on the invoice(s).” Sometimes your transmitter invoice will show the down payment, progress payment, final payment and total payment. If it is not clear what part you are paying, it will appear you are paying less than the total amount. Include a cover letter.

“The following payment request has a mismatch between the invoice date that you entered in LMS and the date on the invoice attached to your request. Without exactly matching LMS Meta Data to the invoice data, your request for payment cannot be processed. -OR- the invoices were not submitted in pdf file format;”

The robot is in a frenzy now. And this is what finally got him there; “All invoice calculations used to support a payment request must be accurate/exact. When rounding, round down.” Just remember, the house wins all ties.

Here’s some good advice and a helpful tip: “The reimbursement requests for the following invoices include references to quotes and purchase orders. Please provide these vendor quotes and your purchase orders. Note: The review of your requests will be expedited if you attach the quote and purchase order to each invoice when uploading in LMS so that they are together in one multi-page document for each payment request.”

Don’t fall into the trap of attaching multiple copies of the same invoices for various line items you are claiming. It will be flagged as a duplicate invoice and rejected. “The invoice referenced below was uploaded in LMS for different payment requests, one for each invoice line item. Our reimbursement review system flags duplicate invoice submissions”

Here’s a common one: “The following payment request has a mismatch between the invoice number that you entered in LMS and the number on the invoice attached to your request.” Okay, now you’re just poking the bot...

I Can Fix This

So, it’s time to right some wrongs. You can’t do it though, because your Form 399 is locked. If you ask a repack coordinator they will unlock an item for you. A morose bot will inform you the invoice is unlocked for editing. After the correction or addition goes in you will hear from a new, upbeat bot. He tells you: “The cost component with the following details has been sent to Financial Ops.” This generally presages a deposit in your treasury account. Not always, but usually.

Cox Media Group has some of the best directors of engineering in the business spending hours on this work. Since we have experienced nearly every possible permutation of rejection reasons, I hope readers will learn from this missive and spend their time efficiently raking in reimbursement funds, or worst case, inventing your own reasons for rejection. May all your reimbursement requests come true!
October 2018

Support the companies who support the SBE and the industry

Members With 25 or More Years of Membership
New Sustaining Members
Become a sustaining member. Apply online or call 317-946-9000.
Member Spotlight: Adam Niner

Member Stats
SBE Member Since: 2018
Chapter: 39 Tampa Bay Area
Employer: Ion Media Networks
Position: Support Engineer I
Location: Ketchikan/Clearwater, FL
I'm Best Known For: Perseverance.

Q. What do you value most about your SBE involvement?
A. The SBE has provided a lot of learning materials that are included with my membership. For someone who is new to the industry, these have been very helpful.

Q. What got you started in broadcast engineering?
A. At my college career fair, I walked up to Ion Media’s recruiting table thinking the sign said Ion Medals. Later on in the recruiting process I was intrigued by the challenges a career in television has to offer.

Q. What do you like most about your job?
A. The best part of the job is when I am able to troubleshoot and figure out why something doesn’t work. I have also enjoyed when I get to travel to a station and upgrade or install equipment.

Q. When I’m not working...
A. ...my hobbies include off-road RC car racing, fishing, and working on cars (specifically my Ford Mustang). Growing up in North Carolina I am also a big Nascar fan and never miss a race on TV and attend as many races as possible.

Strength in Numbers
Everyone who has been a member of the SBE has a unique member number. Adam holds SBE member number 33,000, meaning that after 54+ years of SBE history, there have been more than 33,000 people who held membership at some point.

The SBE is a member-driven organization. There’s strength in numbers.

Ennes Educational Foundation Trust Awards Four Scholarships
The Ennes Educational Foundation Trust has awarded four scholarships for 2018. Winners were chosen from applications received by July 1, 2018, from the previous 12 months.

The Harold E. Ennes Scholarship, Robert D. Greenberg Scholarship and John H. Battison Founder’s Scholarship are awarded to individuals interested in continuing or beginning their education in broadcast engineering and technology. The Youth Scholarship is specifically for a graduating high school senior interested in broadcast engineering as a career. Each scholarship awarded this year is for $1,500.

The Harold E. Ennes Scholarship recipient is Nick Thweatt of Blaine, WA. Nick is a board operator and engineering intern with Multicultural Broadcasting in Blaine, WA. Nick’s interest in electronics and radio began at a very young age, assembling radio receiver kits and listening to DX shortwave by night. Nick became a licensed General Class Amateur radio operator at age 13, call sign KE7NEI, and continues to enjoy the hobby. Nick is currently seeking an EE certificate at Washington Technical Institute.

Receiving the Robert Greenberg Scholarship is Chloe Rosario, originally from Long Island. Chloe is a junior at Queens University of Charlotte, NC, studying journalism and digital media with a focus in broadcasting and engineering. This summer, she completed a minor in Spanish while abroad in Madrid, Spain. She lives with her family in Lenoir, NC. She interns with the Carolina Panthers working in all aspects of broadcast as well as with the English and Spanish radio networks. Her interest in this field struck when she began her first internship and official job with Foothills Radio Group, LLC in Lenoir, NC, her junior year of high school. She’s been hooked ever since. She also likes to travel and scuba dive.

The John H. Battison SBE Founder’s Scholarship has been awarded to Emma Gabbert, a freshman at Minnesota State University, Mankato, majoring in mass media. She plans to use her major to pursue a career in broadcast television. Emma has started her career in media as the creator and administrator of the Mankato Class of 2022 Facebook Group, which has grown to a group of 1,200 members over the past eight months. She is also a reporter at KMSU 89.7, the MNSU Mankato campus radio station.

Parker Smith of Mesquite, TX, received the Youth Scholarship. Parker is a former student in the KEOM class in Mesquite Independent School District. He attends Texas State University and is majoring in mass communications. After college he would like to find a job where he can continue his passion for radio.

SBE President Jim Leifer, CPBE, said, “I congratulate the scholarship recipients as they further their education in broadcast engineering. Education is a cornerstone of the SBEs efforts, and through the Ennes Educational Foundation Trust, we welcome this next generation into the technical side of broadcasting.”
WELCOME TO THE SBE

NEW MEMBERS
Scott Aune - Williston, ND
David P. Bachner - Vancouver, BC
Adam Reason - New York, NY
Jose M. Betancourt - Albuquerque, NM
Sharlene Birdsong - Indianapolis, IN
Paul E. Cargill - Evansville, WI
Cole N. Collins - St. Petersburg, FL
Brian W. Denn - Wixon, MI
Melvin W. Fowler - Birmingham, AL
Ian Fritzschke - Lakeland, FL
Jimmy D. Galam - Honolulu, HI
Tyler Garner - Roanoke, VA
Francisco Gutierrez - Corpus Christi, TX
Adam Hargrove - Black Creek, WI
Jonathan M. Nollon - North Richland Hills, TX
Emery J. Hudson - San Francisco, CA
Clay Johnson - Panama City, AL
William K. Jones - PFO, AE
Mikhail J. Kravchenko - Mt. Sterling, KY
Frank G. Long - Tallahassee, FL
Jose Macias - Altadena, CA
Shedrick Mask - Spring, TX
Lee A. Miller - Lubkin, TX
Jadeb Nielsen - South Pasadena, CA
Adam J. Niner - Pinellas Park, FL
Duncan J. Ober - Chico, CA
Robbie Omura - Honolulu, HI
Michael L. Ortiz - Watertown, NY
Gregory Pocai - Oyster Bay, NY
Anthony J. Porras - Las Cruces, NM
Chase W. ReBarker - Arlington, VA
Jonah R. Riner - Vidalia, GA
Shane E. Ross - Morrow, GA
Chad M. Santorilla - Astoria, NY
Ryan C. Schulte - St. Louis, MO
Derick Staley - Phoenix, AZ
Eric J. Tabor - Leesburg, GA
Austin Thomas - Conroe, TX
Brandon E. Travis - Independence, MO
Rocky Van Blaricom II - Sandy Valley, NV
Coleston L. Walters - Fayetteville, NC

RETURNING MEMBERS
John M. Albers - Irondeqal, AL
Charles B. Couch - Clearwater, FL
Joel A. Gasset - York, PA
Bert S. Goldman - Auburn, CA
Mike C. Harrison - Hoover, AL
Carl R. Harrison - Birmingham, AL
Paulette Hooker - Dallas, TX
James D. Hyett - Odenville, AL
Thomas H. Kofer - Kennesaw, GA
Keane H. Laguatan - Eugene, OR
Mary Beth Leidman - Indiana, PA
Milan Maksimovic - Oak Creek, WI
David C. Matys - Austin, TX
Kelly E. Moore - Dallas, TX
Wayne A. Nester - Columbus, NE
William J. Pabnaud - Morrisville, NC
Jake Robinson - Indianapolis, IN
Rick N. Singer - Oakton, VA
Dixie L. Sizer - Fort Mill, SC
Paul A. Spinelli - Kingsville, MD
David Whitehead - Atlanta, GA
Schyler L. Wood - Indianapolis, IN
Chris M. Wygal - Amelia, VA

NEW STUDENT MEMBER
Ray Bruster - Columbus, OH
Keith E. Ferguson - Fort Meade, MD
Matthew R. Huber - Carmel, IN
Haeni Jo - Antioch, TN
Patrick J. Licitra - Loxahatchee, FL
Ivan V. Morales - Los Angeles, CA

NEW ASSOCIATE MEMBERS
Jeff Surgeon - Pensacola, FL

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SBE Ennes Workshops
Affordable Educational Events In Your Region

Interested in hosting an Ennes Workshop in 2019? Contact Cathy Orosz at 317-846-9000 or corosz@sbe.org.

Chapter Check

Chapter 37
District of Columbia
In July, Chapter 37 had two guest speakers to cover both TV (ATSC 3.0) and FM repack issues. Roughly 25 people attended the meeting. Photo by Fred Willard, CPBE, 8-VSB, CBNT, chapter treasurer.

Chapter 24
Madison
In August, Steve Smedberg, representing Videstra, spoke to Chapter 24 about the company’s weather/tower camera systems.

Chapter 59
Kansas City & Surrounding Chapters
An SBE Ennes Education Workshop visited Kansas City in August to present a day-long series of informative sessions. The workshop was presented jointly by the Kansas Association of Broadcasters and the Missouri Broadcasters Association.

In Memoriam
Ron Arendall, CPBE
Member #4409
1933 - 2018
Fellow Member
Life Member
SBE President 1981 – 1983
Ennes Scholarship Cttee
MARK YOUR CALENDAR

SBE National Meeting
Boston, MA
Oct. 2 - 3, 2018
sbe.org

WBA Broadcasters Clinic
Madison, WI
Oct. 16 - 18, 2018
wi-broadcasters.org

SBE Certification Exams
AES Convention
Oct. 20, 2018
sbe.org/certification
Application deadline Sept. 21

Ennes Workshop
Indianapolis
Nov. 1, 2018
sbe.org/education/wkshp

SBE Certification Exams
Local Chapters
Nov. 2 - 12, 2018
sbe.org/certification
Application deadline Sept. 24

Members On The Move

Anthony Peiffer, CBTE, is a senior technician, broadcast operations at SiriusXM New York.

Chris Wygal, CBRE, is the chief engineer for the Summit Media stations in Richmond, VA.

Ed Noyes is the south central regional DOE for Cumulus Media, Columbia, SC.

Carl W. Davis, CPBE, was named to the North Carolina Association of Broadcasters Hall of Fame. He is the first engineer so named.

David Layer is vice president, advanced engineering at the National Association of Broadcasters, Washington, DC.

Scott Solko, CBRE, DRB, CBNT, is director of engineering of The Rush Limbaugh Show at Premiere Networks.

Have a new job? Received a promotion?
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Local TV Station Newsgathering

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The mobility that LiveShot provides is incredible. We can do a shoot at the drop of a hat. It’s made my job as a news director better, it’s made our reporters better, and it’s made our programming better.

- Jeff Nelson, News Director

Want an in-depth look at WDAY’s setup?
Watch the case study at www.comrex.com/liveshot/wday

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