

THE Signal

Bimonthly Publication of the
Society of Broadcast Engineers



The Association for
Broadcast and
Multimedia Professionals

www.sbe.org

Volume 35, Issue 4 • August 2022

SBE Awards Recognize Member Excellence

The 2022 SBE National Awards, which recognize excellence and achievement by individual members, SBE chapters and Sustaining Member companies, have been announced. The two highest individual awards are the Robert W. Flanders SBE Engineer of the Year and the James C. Wulliman SBE Educator of the Year.

The Robert W. Flanders SBE Engineer of the Year award is presented to a member who has excelled in his or her career while furthering the mission of the SBE. Candidates are nominated by their peers. The winner of the award for 2022 is Andrea Cummis, CBT, CTO of West Orange, NJ, and a current member of SBE Chapter 15 New York, NY.

The recipient of the James C. Wulliman SBE Educator of the Year award is recognized for outstanding service and excellence in sharing knowledge through teaching other broadcast engineers. The winner of the 2022 James C. Wulliman SBE Educator of the Year award is Marcos O'Rourke, CBRE, CBNE, of Costa Mesa, CA, and a member of SBE Chapter 47 Los Angeles.

Cummis has been an SBE member for 26 years. She has been an SBE board member since 2003 and has also served as treasurer,

vice president and is serving her first year as president of the Society. Chapter 15 nominated Cummis as its Chapter Engineer of the Year for her outstanding service to their chapter.

O'Rourke has been an SBE Member for 19 years and is on the Chapter 47 board as secretary. Marcos

has been a critical part to the chapter mission of creating educational videos for the broadcast community. He also has his own YouTube channel with hundreds of videos pertaining to everything that is a



Cummis



O'Rourke

see **AWARDS**, p. 11

SBE National Meeting Will Webcast from SBE22 Expo

If you aren't able to attend the SBE National Meeting this year in person, do the next best thing and tune in to the live webcast of the Annual SBE Membership Meeting. It takes place from 4 to 5 p.m. EDT (1 p.m. – 2 p.m. PDT) on Sept. 29. The meeting is part of the SBE National Meeting, this year being hosted by the SBE22 Broadcast and Technology Expo in Liverpool, NY.

Emceed by SBE President Andrea Cum-

mis, the webcast will include updates on the latest developments with SBE education, certification and frequency coordination. The newly elected officers and directors of the national SBE Board of Directors will be inducted.

To tune in, go to the SBE website (sbe.org) and follow the webcast link. Reminders will be emailed to members the day before and the day of the webcast.

SBE National Meeting events begin on Sept. 28 with meetings of the national SBE Certification Committee and the SBE Board of Directors. On Sept. 29, activities continue with the annual SBE Fellows Breakfast (invitation-only), sponsored by Kathrein USA, SBE Annual Membership Meeting (webcast live), sponsored by Blackmagic Design, Di-electric, Jampro and Markertek.

That is followed by the SBE Annual Awards Reception, sponsored by Comrex, and the SBE National Awards Dinner, sponsored by latakoo. Presentation of the society's major awards will be made, including the Robert W. Flanders SBE Broadcast Engineer of the

Year, James C. Wulliman SBE Educator of the Year, and the SBE Technology Award to a Sustaining Member company. The keynote speaker for the Awards Dinner will be noted media consultant Skip Pizzi.

SBE chapters will be presented with awards recognizing achievement for Best Chapter Communications, Best Regional Educational Event, Greatest Member

see **NATIONAL MEETING**, p. 9

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The Ramada by Wyndham, Liverpool, NY, is the site of the 2022 SBE National Meeting

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The Signal is published bimonthly by the Society of Broadcast Engineers, Inc., 9102 North Meridian Street, Suite 150, Indianapolis, IN 46260.
©2021 Society of Broadcast Engineers, Inc.
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SBE Election: Vote by August 17

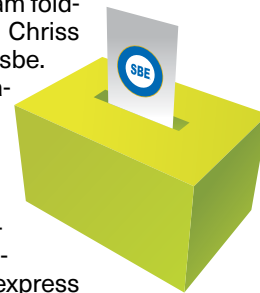
The annual election of SBE officers and directors is currently underway. Up for election are all four officers for one-year terms and half of the 12 directors for two-year terms.

All ballots are due by 4:30 p.m. EDT on Aug. 17. Voting is via an online ballot, except for those members who have opted out of electronic voting this year or who have not provided the SBE national office with an email address. They will receive their ballots through the mail. An email test message was sent on July 5, and the ballot link was sent to valid email addresses on July 15. Reminder emails were also sent if an online vote was not yet cast. If you did not receive your email

ballot, check your spam folder first, then contact Chriss Scherer (cscherer@sbe.org) at the SBE National Office.

For members who received a paper ballot in the mail, your ballot must be received in the SBE National Office by mail, express delivery or in person (no facsimiles) by 4:30 p.m. ET on Aug. 17.

If you have not yet cast your vote, be sure to do so today.



Certification Question



SBE CERTIFIED

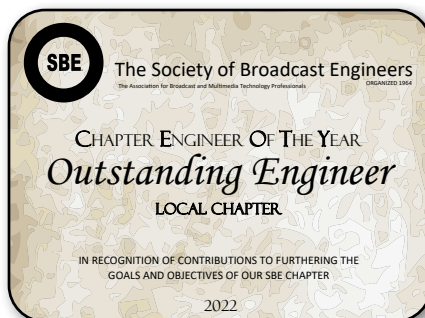
Answer on page 6

A VU meter is used to measure:

- A. audio program levels
- B. average audio levels
- C. both A and B
- D. neither A nor B



SBE Chapters Recognize Their Own Engineers of the Year of 2022



In conjunction with the SBE National Awards program, SBE members who are honored by chapters as a chapter engineer of the year are automatically entered into consideration for the Robert W. Flanders SBE Engineer of the Year award.

Chapters set their own criteria to make their selections. These six SBE members were selected by their chapters for the local honor this year.

Chapter 1 Binghamton

- Bill Sitzman

Chapter 15 New York City

- Andrea Cummis, CBT, CTO

Chapter 17 Minneapolis

- Michael Davison, CBNT

Chapter 38 El Paso

- Glenn Leffler, CPBE

Chapter 70 Northeast Ohio

- Brett Patram

Chapter 80 Fox Valley (WI)

- Mark Friedman, CEV, CBNT

The chapter honorees will be featured in an upcoming issue of *The Signal*.



The trust offers scholarship and educational programming and grants that benefit broadcast engineering and the broadcast engineer. Submit tax-deductible donations, payable to the Ennes Educational Foundation Trust, to the Society of Broadcast Engineers; 9102 N. Meridian St., Suite 150; Indianapolis, IN 46260.

THANKS TO THE FOLLOWING SUPPORTERS FOR THEIR CONTRIBUTIONS

Harold E. Ennes Scholarship
Anthony Fox, Newport News, VA
SBE Chapter 55, St. Louis
SBE Chapter 3, Kansas

Youth Scholarship
Thomas Lange, Sheboygan, WI
Kishore Persaud, Catonsville, MD

Ennes General Fund
Anthony Fox, Newport News, VA

sbe.org/ennes



LETTER FROM THE PRESIDENT

By Andrea Cummis, CBT, CTO
SBE President
acummis@sbe.org

Trauma All Around Us

We are living at a crazy time, where it feels like stress and trauma are constantly around us. Collectively, we have been dealing with the COVID pandemic for two and a half years, and there is no end in sight. At work, everyone is expected to get more work done with fewer resources, all while keeping our staff safe from COVID, not to mention the constant worry about keeping ourselves and our families safe as well. Add to that the 24-hour news cycle, including social media, which brings us news of the war in Ukraine, attacks on women's rights, racial issues, attacks on LGBTQ+ rights, high profile sexual assault cases, and so many mass shootings. It's hard to imagine not being stressed out, depressed and anxious all the time. According to a scientific brief released by the World Health Organization (WHO), in the first year of the COVID-19 pandemic, global prevalence of anxiety and depression increased by a massive 25%, so if you are feeling this way, you are not alone.

I've been trying to find a way to help other people during this difficult time, since I've been dealing with depression for most of my life, and I know how hard it can be to keep going. Many people have been sharing their personal stories of trauma, which I understand can help us figure things out and can make us feel like we are not alone in what we have been through. So much of what's going on takes me back to something I went through in college. I'll send up a trigger warning and say that if you need to stop reading at this point, I totally understand.

In 1976, I was a freshman engineering student at Carnegie Mellon University. It was a Saturday night, and I was asleep in my room. There was a party next door, and as you can imagine, it was pretty loud. I woke up to see the outline of a man in my bedroom doorway. I didn't know that my roommate had left her window to the fire escape unlocked. I sat up and started screaming for help, but no one could hear me because of the party next door. As I wake, the outline becomes more real and he runs toward me and starts hitting me in the head like I'm a punching bag. At some point he stopped hitting me, grabbed a pillow, and put it over my face to get me to stop screaming. At this point I thought I was going to suffocate, so I stopped screaming. Then he dropped his pants...

I wasn't very cooperative, and my head and nose were bleeding profusely. At some point he let me up to get cleaned up a bit. He stood behind me to make sure I didn't try to get away, but I could see his face clearly in the mirror and I made sure I memorized it, and I got him to talk to me so I could memorize his voice too. Finally, he just gave up and left, and I called the police. They came quickly, and I was able to provide a really good description. They seemed to know who it was right away, as this wasn't his first-time causing trouble.

The police took me to the hospital, where I got 10 stitches in my head, had a broken nose and many other injuries. I figured from all the injuries that I had been hit in the head about a dozen times.

The police caught the guy and I went to identify him in a lineup. There must have been more than 30 women there who had all been raped, many by the same guy. Only two of us were willing to press

charges and be witnesses in court. It turned out that he was the 16-year-old son of a very rich man, and he had been getting away with all sorts of crimes for years. They could afford the best defense lawyer in the area, which made this all even harder. Evidence disappeared and court dates kept getting changed at the last minute. Basically, they did everything they could to make us give up, but neither of us did. We got him charged as an adult which was a big win early on. It took a year of my life, meeting with police and district attorneys to get prepared to go to court. But we finally put him away for 10-15 years.

Working Back

That year I could barely think or function. I managed to take some classes and hold down a job recording classes for the philosophy department, but I couldn't take any engineering classes because I couldn't actually retain any of the information I was learning. I was in shock, and my brain had shut down in an effort to take time to heal.

But I was lucky, this could have all been much worse. I've gotten all the questions over the years: Was I out at a bar, or a party? What were you wearing? Did you know the guy? Were you flirting with him? So many other questions! All these questions where someone is trying to blame the victim and excuse the bad guy. For me this was all simple since I was in my room asleep. I wasn't embarrassed or ashamed, I hadn't done anything wrong, and I did a lot of things right. But for many women it's not so straightforward, and they are made to feel like it was their fault somehow. They don't call the police, or they decide not to press charges because this is all really difficult. You have to endlessly relive the worst thing that has ever happened to you while you rehearse what you are going to say in court. You can't start to get over it because you are always reliving it!

I spent an extra year in college because of all of this. During my remaining years at CMU I would be a witness at the hearing every year where that guy tried to get out for good behavior, making me relive the experience annually for another three years. As hard as it was, I still showed up and made sure he didn't get released early.

I'm not writing this looking for pity or sympathy, I managed to live through all of this with very little help from anyone. I wish no one would ever have to go through this sort of trauma, but unfortunately it happens all the time. I find that lately, with the endless bad news all around us, sometimes it's hard just to get through the day, I'll see or read something that will put me right back in this terrible place.

I'm asking for you to question what you think you know about the people around you, and how they are doing right now. You may never know what they have been through, and what they may be struggling with. Please try to be kind and patient, even though it seems so hard to do that right now. Remember that everyone is being affected by all the issues around us in different ways.

Take care of the people around you, and don't forget to take care of yourself! If you need help, reach out to someone. Check in on the people you care about. If you think this article could help someone you know, please feel free to share it. I hope sharing this experience will help someone feel like they aren't the only one to go through something horrible. I've shared this story with some of my friends over the years. Sadly, many of them have had their own terrible stories to share with me. If you want to talk with me about this, or want to share your story with me, or even just need someone to talk to and don't know who to reach out to, I'm here for you! Please reach out: president@sbe.org.

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EDUCATION UPDATE

By Geary Morrill, CPBE, AMD, CBNE
Chair, SBE Education Committee
gmorrill@sbe.org

Mentorship Program Enhancement Coming Soon

There are subtle changes coming in the SBE Mentor Program this fall, so Mentoring Committee Chair Chris Tarr, CPBE, AMD, DRB, CBNE, and I spoke recently about what's in store.

Geary: I don't know if I was involved from day one when the Mentor Program began, but I suspect you probably were. How long has the SBE mentor program been in operation?

Chris: The first committee chair was Kim Sacks. She departed our SBE board fairly soon after and that's when I stepped in. I believe it's been four years. We're at 50 mentors and 62 mentees as of June 16. I actually assigned two more pairings today.

Geary: In recent conversations of your Committee, you've heard from folks that don't feel qualified to be a mentor; They don't feel they could answer all mentee's questions.

Chris: They think they're not qualified. They are. It seems they believe they're expected to have answers to everything. In reality, no one person can do that. I always joke that I have a

Rolodex of people smarter than me that I call on when I get stuck.

Geary: So, the idea is to make it easier for folks to feel comfortable becoming a mentor. Tell me about that.

Chris: What we're going to do is open mentorship for anybody who wants to participate, even if you don't have, as I like to call it, the inch-deep and a mile-wide body of knowledge. Basically, we're not going to assign one-to-one mentors to everybody. The people who really want to be deeply involved with the program and who want to guide mentees through the program will be assigned mentees, and there will also be others acting as kind of mentor specialists. So for example, if I'm not really knowledgeable about ATSC 3.0, but my mentee wants to learn about it, I can connect that mentee with a person who has that knowledge to get the specific ATSC 3.0 questions answered. This allows mentors access to an entire body of knowledge, and they don't feel they have to personally have the knowledge or experience to answer every question. This should allow a larger pool of mentors to participate in the mentor program to specialize in areas they're comfortable in. And that's a real positive for everybody.

Geary: I've also heard some folks think taking on a mentee is going to just be too time consuming. This should help eliminate that concern too, right?

Chris: Sure. Even with the low maintenance required, sometimes people feel they just don't have time. Or they feel like they're not prepared to fully take on a single mentee as a project. This will allow these folks to participate without the commitment of talking to their mentees once or twice a month. This is a way for people who wouldn't otherwise be able to make that commitment to get involved and stay in their wheelhouse with comfort knowing that whatever questions they're going to field are in areas they feel competent to answer.

Geary: This should also open mentoring for those folks not working in broadcast engineering but with expertise in a related area.

Chris: Perhaps things like project management. I know studio people who've never had to deal with tower erection or a transmitter installation, but are pretty well rounded on their own. That might not be a question they're able to answer for their mentee, so they can get that question answered by the person who has done it a million times. And vice versa. That person may have a mentee who has some studio questions and maybe he or she hasn't done studios, and now can rely on this other person to answer this question. It's a good experience for everybody: The mentee gets a really nice, well-rounded education with really solid advice. And the mentors aren't under so much pressure to have all the answers available right away.

Geary: And there's a plan to make this information easy to find for our primary direct mentors?

Chris: Those I like to call guiding mentors are provided a list of the specialist mentors to find somebody who can better answer a mentee's question. They'll manage that experience as they have the list. It rounds out an ability of mentees to get the answers that they seek, by involving people who can answer questions they're comfortable with or cover topics that they know, really, really well. I think it's a win-win for everybody.

Geary: I can see where having that information might also benefit a direct mentor in their work role as well.

Chris: It's relationship building. So as mentors get to know each other, and work among themselves, that benefits everybody. I think it forwards our society's goals of education and fellowship in a really positive way. We look to implement this enhancement in the next mentorship cycle, which will take place in the fall.

Chris welcomes questions or comments you might have about the SBE Mentor Program. Reach him at ctarr@sbe.org. If you have other thoughts about educational efforts, I'd love to hear from you. gmorrill@sbe.org. If you're attending the SBE Annual Meeting in Syracuse next month, perhaps we can chat while there.



Tarr

Education Almanac

Webinars by SBE

Aug. 9: CBNT & CBNE Study Topics 8: Webinar Series Review
sbe.org/webinars

Leadership Development Course

Aug. 3-5: Atlanta
sbe.org/ldc

SBE Ennes Workshops

Oct. 6: Richmond, VA
Oct. 22: GABCON, Atlanta
Nov. 9: Michigan Assoc. of Broadcasters
Contact the SBE to arrange an SBE Ennes Workshop in your area.
sbe.org/ennes_workshop



For more information on any SBE education program click the Education tab at sbe.org, or contact Education Director Cathy Orosz at the SBE National Office at 317-846-9000 or corosz@sbe.org.



CERTIFICATION UPDATE

By Ralph Hogan, CPBE, ATCS3, DRB, CBNE
Chair, SBE Certification Committee
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How to Become SBE Certified

Are you interested in SBE certification? Where do you start? Well, you can jump into SBE Certification at any level for which you have the years of experience. The SBE offers entry-level, five-, ten- and 20-year experience level certifications. Also, there are two operator levels that don't require any experience.

Acquiring SBE Certification is not an FCC requirement for radio and TV station operators. Nevertheless, it is evidence of an individual's qualifications to serve as an operator at a broadcast station and will certainly be useful when seeking employment or advancement. Each radio and television station has its own policies and procedures, and many have a written station manual. However, the FCC Rules and basic operator procedures apply to all stations. The *SBE Certification Handbook for Radio Operators* and the *SBE Television Operator's Certification Handbook* fill the needs of broadcast stations and operators today.

The SBE Radio and Television Operator Certifications are a great way to demonstrate to a prospective employer that you have acquired the basic knowledge to operate a radio or television station and comply with FCC rules and regulations.

In the early 1980s, and as part of its deregulation process, the FCC abolished the mandatory requirement for radio station operators and engineers to hold an FCC license of any class. That left the industry without a tool for measuring a prospective employee's proficiency in station operations. Since that time, the Society of Broadcast Engineer's Program of Certification has become the industry's benchmark standard for gauging an individual's knowledge, skills, and abilities required for the operation of a broadcast station.

To have a standard teaching and testing of material, the *SBE Certification handbook for Radio Operators* was created. The handbook helps operators learn more about the technical and business facets of a radio station. Its broad-scope contents are extremely helpful to seasoned professionals as well as anyone who is new to the radio station business. The handbook is currently in its third printing and is utilized by schools, stations and individuals throughout the United States.

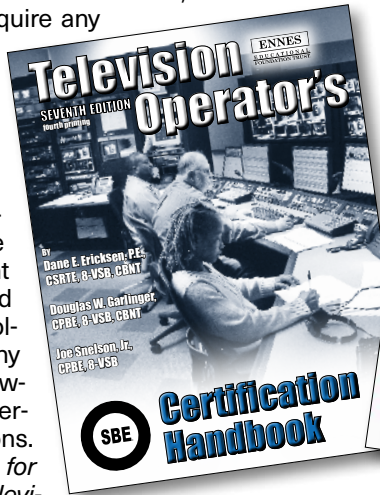
Just like the radio operator, there was once a requirement that television operators hold an FCC First Class License. This provided employers with an indication that the applicant had demonstrated enough technical knowledge to pass elements one through four of a federal government exam. In 1994, the SBE National Certification Committee, in cooperation with the Ennes Educational

Foundation Trust, developed the *SBE Television Operator's Certification Handbook* and television operator certification to target the entry-level, non-technical pool of applicants that fill master control positions in today's television marketplace. It also provides a good first step for those interested in

pursuing a technical career in broadcast engineering. Many stations now make certification a requirement for employment for their operators. Now in its 7th edition, the book and certification covers the latest developments in digital television.

Both exams are designed for the entry level, non-technical pool of applicants that fill master control positions in today's television marketplace. These exams are unique that they cover the material covered in their corresponding handbooks. Check out the SBE website under the certification tab for more information,

and order the handbooks through the SBE Bookstore.



Goodbye to the Old, Hello to the New

The National Certification Committee has been a part of SBE since the Program of Certification was established by the SBE Board of Directors in 1975. At present, there are eight engineering certifications, two operator certifications, one networking engineer certification and one broadcast networking technologist certification – each valid for

a period of five years. There are also four specialist certifications to establish a benchmark of individual strengths for those already certified at specific certification levels.



Erickson



Snelson

The National Committee members keep the certifications current and develop new ones as the industry changes. We have been lucky enough to have Dane Erickson and Joe Snelson on the committee for 33 and 21 years respectively. They have both asked to step down from the National Certification Committee. The Certification Program would not be where it is today without their contributions! They will be missed.

We are lucky enough to be able to add three new committee members in the last six months. Jim Leifer, RJ Russell and Shane Toven are valued members of the broadcast engineering community, and we're thankful they have joined us. Welcome aboard.



Leifer



Russell



Toven



Answer from page 3

The answer is B

A VU meter is used to measure average levels of audio frequency signals. Such meters employ special ballistics that average out complex waveforms to properly indicate program material that varies simultaneously in both amplitude and frequency.

SBE Certification Achievements

CONGRATULATIONS



LIFE CERTIFICATION	<p>Certified Senior Radio Television Engineer (CSRTE) Steven Benedict, Vancouver, WA - Chapter 124</p> <p>Certified Professional Broadcast Engineers and Certified Senior Broadcast Engineers who have maintained SBE certification continuously for 20 years, are at least 59½ years old and are current members of the SBE may be granted Life Certification if so requested. All certified who have retired from regular full-time employment and are at least 59½ years old may be granted Life Certification if they so request. If the request is approved, the person will continue in his/her current level of certification for life.</p>	
JUNE EXAMS	<p>Certified Broadcast Networking Technologist (CBNT) Michelle Davies, Pineville, NC - Chapter 93</p>	
SPECIAL PROCTORED EXAMS	<p>Certified Audio Engineer (CEA) Ricky Barrow, Clarksville, TN - Chapter 103</p>	<p>Certified Video Engineer (CEV) Ricky Barrow, Clarksville, TN - Chapter 103</p>
SBE CERTIFIED SCHOOL COURSE COMPLETION	<p>Certified Broadcast Technologist (CBT) <i>DINFOS</i> Kyle Cacon, Simi Valley, CA - Chapter 47 Bernabe Garcia, Alexandria, VA - Chapter 37</p>	
CERTIFIED BY LICENSE	<p>Certified Broadcast Technologist (CBT) Stephen Jackson, Sterling, VA - Chapter 37 Brian Nelson, Columbia, MD - Chapter 37</p>	
CERTIFIED RADIO OPERATOR (CRO)	<p>Griffin Ambler, Safety Harbor, FL <i>Friendswood High School</i> Isabelle Le, Friendswood, TX Clayton Morgan, Friendswood, TX <i>Texas Association of Broadcasters</i> Alan Brown, Goldthwaite, TX Erick Casas, Edinburg, TX Roger Creech, Hillsboro, TX Thomas DeLuca, III, Kerrville, TX</p>	<p><i>Texas Association of Broadcasters (cont.)</i> Jorge Garza, Edinburg, TX Bradley Goehl, Austin, TX Timothy Masters, Cedar Creek, TX Jonathan Meyer, Ransom Canyon, TX Nicole Morris, Kingsville, TX Jacob Rockey, Austin, TX Chris Sisemore, Wolforth, TX Rojith Thomas, Austin, TX</p> <p><i>Scottsdale Unified School District Career and Technical Education</i> Aidan Dimmel, Phoenix, AZ Natalia Gonzalez, Phoenix, AZ Andrew Nally, Phoenix, AZ Olivia Nandin, Phoenix, AZ Matthew Sablone, Scottsdale, AZ Ethan Williams, Scottsdale, AZ</p>
CERTIFIED TELEVISION OPERATOR (CTO)	<p><i>Columbus Career and College Academy</i> Kaiya Batten Trinity Cooper Saphira Lawrence Laney Peacock</p>	<p><i>Kent State University</i> Joey Beardsley, North Jackson, OH Mitchell Bezik, Kent, OH Christopher Canty, Cincinnati, OH Will Cavanaugh, Painesville, OH Taylor Cooper, Butler, PA</p> <p><i>Kent State University (cont.)</i> Mason Cox, Copley, OH Shane Handlovitch, Coraopolis, PA Kyle Miller, Bellbrook, OH Tony Perialis, Warren, OH Khushali Shah, Kent, OH Benjamin Slone, Middletown, OH</p>
RECERTIFICATION Applicants completed the recertification process either by re-examination, point verification through the local chapters and national Certification Committee approval and/or met the service requirement.	<p>Certified Professional Broadcast Engineer (CPBE) Eric Morris, Westville, OK - Chapter 56</p> <p>Certified Senior Radio Engineer (CSRE) Mark Johnson, Panama City, FL - Chapter 106 Ali Abdul Sater, Eugene, OR - Chapter 76</p> <p>Certified Broadcast Radio Engineer (CBRE) Robert Fields, San Antonio, TX - Chapter 69 David Halperin, El Paso, TX - Chapter 38</p> <p>Certified Broadcast Television Engineer (CBTE) Robert Byrne, Sugar Land, TX - Chapter 105 Michael Marshall, Tallahassee, FL - Chapter 106 Gregory Wynter, Toronto, ON</p>	<p>Certified Broadcast Radio Engineer (CBRE) Digital Radio Broadcast Specialist (DRB) Jacob Bechtold, Fargo, ND - Chapter 17</p> <p>Certified Broadcast Television Engineer (CBTE) 8-VSB Specialist (8-VSB) Jay Ballard, Middleton, MA - Chapter 11</p> <p>Certified Audio Video Engineer (CEAV) Gregory Lesko, Monroe, NC - Chapter 45</p> <p>Certified Broadcast Networking Technologist (CBNT) Ali Abdul Sater, Eugene, OR - Chapter 76</p> <p>Certified Broadcast Technologist (CBT) Nicole Alexander Wildomar, CA - Chapter 131 David Erickson, Anchorage, AK - Chapter 89 William Flud, Adams, TN - Chapter 103 Chad Hayes, Calgary, AB David Kolesar, College Park, MD - Chapter 37 Gregory Lesko, Monroe, NC - Chapter 45 Lewis Soli, II, Hayden, AL - Chapter 68 Jimmy Wilken, Corpus Christi, TX - Chapter 29</p> <p>Certified Television Operator (CTO) Gayle Saugstad, Vermillion, SD David Thum, Vermillion, SD</p>

Got your SBE Certification pin?
sbe.org/pins



Get Notified of SBE JobsOnline Updates

The SBE JobsOnline assists SBE members in locating available broadcast engineering positions throughout the country. It is comprised of job openings that have been submitted to this site by prospective employers. Each job listing contains essential information about the position. Jobs are listed in the order they are received, with the most recent listings at the top. Anyone can view the listing summaries, but only SBE members can access the details.



The service has a feature to notify you by email when new job listings are posted. You can also set criteria based on the type of job you are looking for to filter the results. Once a search is entered you can have those results emailed to you regularly.

Go to sbe.org/jobs to see the listings. SBE members will log in to see the full details. Once you are logged in, click the "searching" link to set filter criteria (or select all listings), and run the search. You will then see the option to have updates emailed to you.

sbe.org/jobs

Chapter Check

Chapter 59 Kansas City

In June, SBE Chapter 59 Kansas City met at the Johnson County Public Library Central Resource

Branch, which has several meeting rooms available for public use. Following lunch and the business portion of the meeting, the group toured the Maker Space, which offers 3D printing, laser

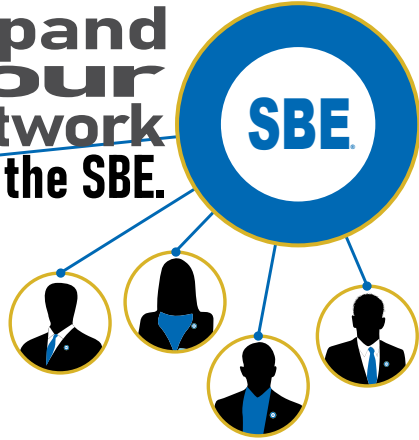


engraving, vinyl transfers, an electronics bench, and a CNC router among the available tools.

Membership Drive Brings 68 New Members

Each year, the Society of Broadcast Engineers, the association for broadcast

**Expand Your Network
Join the SBE.**



and multimedia technology professionals, conducts a member recruitment drive. The drive calls on current SBE members to encourage their non-member colleagues to join the association. This year, 68 individual members were recruited by 61 current members. The recruiters represent 43 different SBE chapters.

The SBE Membership Drive ran from March 1 until May 31. As a recruiting incentive to members, the SBE asks for prize donations from SBE sustaining member companies. In addition, the recruiter will earn \$5 per new member (up to \$25) off his or her 2023 membership dues. 11 sustaining member companies plus the SBE provided prizes this year, ranging from shirts and hats to broadcast equipment. The SBE donated

logo items, a copy of CertPreview, and a free Webinars by SBE registration. The theme for the 2022 drive was Expand Your Network.

All the recruiters were eligible for the Membership Drive Grand Prize: A trip to the SBE National Meeting this fall. (A cash prize option is available if the winner is not able to travel to the SBE National Meeting.) That meeting will be held during the 2022 SBE 22 Broadcast & Technology Expo in Liverpool, NY. The Grand Prize winner this year is John Conway of Owasso, OK.

The SBE thanks the sustaining members who provided prizes: Blackmagic Design, Broadcasters General Store, Davicom, Heartland Video Systems, Iatakoo, LBA, Orban, Shively Labs, Sutro Tower, Telos Alliance, and Tieline.

Prize Donor	Prize	Winner	Location	Chapter
SBE	Trip to the SBE National Meeting	John Conway	Owasso, OK	56
Blackmagic Design	ATEM Mini Extreme ISO	Stephen Brown	Appleton, WI	80
Broadcasters General Store	BGS tumbler and \$20 Starbucks gift card	Maria Laing-Smith	Camarillo, CA	47
		Danny Shoen	Lexington, KY	35
		Vince Forcier	Falls Church, VA	37
		Craig Seelig	Honesdale, PA	2
		William Armstrong	Hollywood, FL	53
John Collinson	New Port Richey, FL	39		
Davicom	\$50 Amazon gift card	William Harland	Chandler, IN	121
Heartland Video Systems	\$100 Amazon gift card	Charles Kinney	Atlanta, GA	5
	Heartland Video Systems backpack	Aaron Hume	Shoreline, WA	16
	Heartland Video Systems coffee mug, mouse pad	Julio Bonet	Miami Lakes, FL	53
	Heartland Video Systems drinking glass	Thomas Ray	New Windsor, NY	15
	Heartland Video Systems knit cap, Heartland Video Systems bound notebook	Robert Kelley	Tamuning, GU	126
	Heartland Video Systems swag pack	Jonathan Iler	Savannah, GA	5
	Heartland Video Systems tote bag, mouse pad	Aaron Carter	Bangor, ME	11
	Heartland Video Systems/Ericsson throw	Bruce Hart	Louisville, OH	70
	Heartland Video Systems/Thomson t-shirt	Blake Thompson	Akron, OH	70
	Rocketbook smart notebook	Josh Bohn	Pelham, AL	68
USB wireless charger base	Pierre Lonewolf	Kotzebue, AK	89	
Iatakoo	Bose QuietComfort headphones	James Leifer	Port Saint Lucie, FL	11
LBA	\$250 in LBA online safety courses	Christopher Tarr	Mukwonago, WI	28
Orban	1101e card and breakout cable	Arthur Clardy	Lafayette, LA	72
Shively Labs	\$100 L.L. Bean gift card	Jeffrey Juniet	Casselberry, FL	42
Sutro Tower	Sutro Tower swag pack	Chuck Kelly	Noblesville, IN	25
		Bradley Rakestraw	New Albany, MS	68
		SeVern Ashes	Vermillion, SD	74
		Lee Deprey	Cary, IL	80
Telos Alliance	Telos swag pack	Gery Jezbera	Wilcox, NE	87
		Jennifer Wolfe	Myrtle Beach, SC	107
		Evan Adkins	Ashland, KY	116
Tieline	\$25 Amazon gift card	Stavros Hilaris	Washington, DC	37
		Jason Quinn	Albuquerque, NM	34
SBE	Webinars by SBE registration	Ryan Stotts	Mt. Juliet, TN	103
		David May	Lexington, KY	147
		Steve Young	Fort Smith, AR	56
		Josh Roberts	Lynchburg, VA	78
		James Ellett	Tampa, FL	39
SBE	SBE coffee mug and magnet	Daniel Carpenter	Westerville, OH	52
		John Conway	Owasso, OK	56
		Joseph Fleming	Midlothian, VA	60

NATIONAL MEETING, from p. 1

Growth, Highest SBE Certified Chapter and Highest Meeting Attendance. Winners of the local SBE Chapter Engineer of the Year will also be recognized.

The SBE National Meeting and the SBE22 Broadcast and Technology Expo will be held at the Ramada by Wyndham, in Liverpool, NY, part of the Syracuse metro. The Expo events are all held on Sept. 29 with a trade show and technical presentations. The annual event attracts broadcast engineers and technicians from New York and the surrounding states.

Registration for the Expo is required and is free. Visit the Expo website (sbe22.org/2022-expo) for details and to register.

Tickets for the SBE National Awards Reception and Dinner (\$16) are available through the SBE website (sbe.org) and by telephone, Monday through Friday from 8:30 a.m. to 4:30 p.m. EDT at 317-846-9000. There is no registration or fee to attend the Annual SBE Membership Meeting.

Accommodations at the Ramada by Wyndham, Liverpool may be reserved by calling 315-457-1122. The SBE has a limited number of rooms reserved at the discounted rate of \$111. Ask for the SBE22 Expo room rate to receive the discount. By booking and referencing the Expo you can receive the room discount, and the show organizers receive a credit to offset costs.

The SBE National Meeting and the SBE22 Broadcast and Technology Expo are open to anyone interested in media technology. We invite all SBE members to take advantage of this opportunity and attend all of the events on Sept. 28 and 29.

SBE Awards Dinner Tickets

bit.ly/2022SBEdinner

SBE22 Broadcast & Technology Expo

sbe22.org/2022-expo

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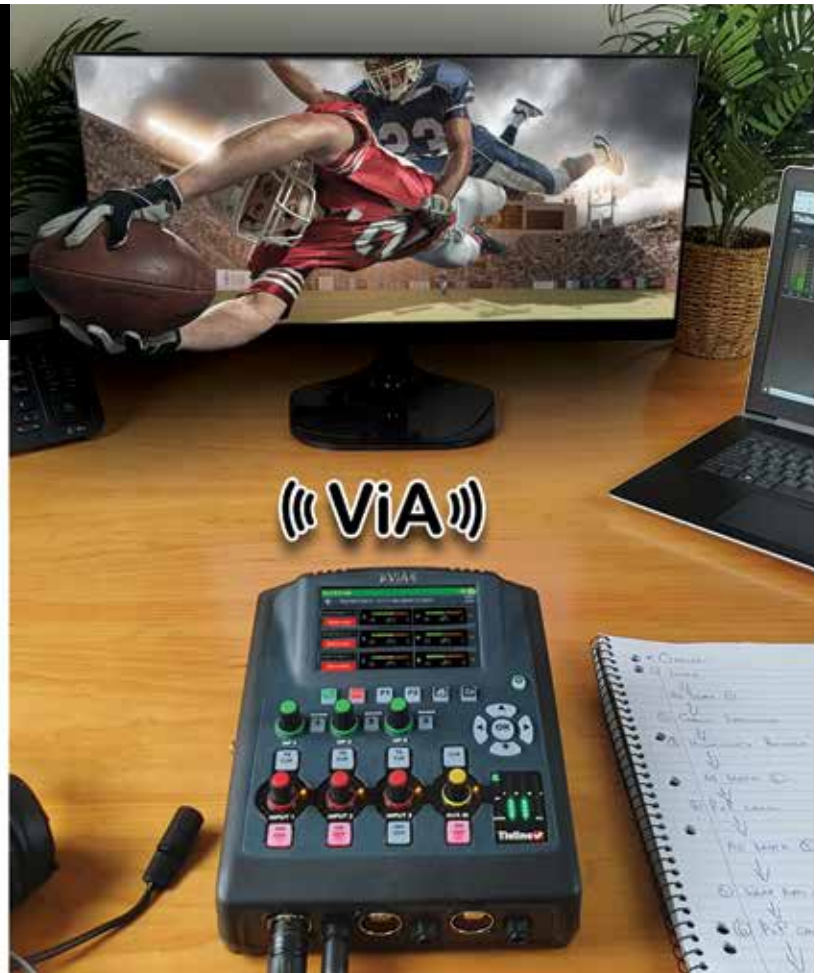
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LEGAL PERSPECTIVE

By Stephen Hartzell and Coe Ramsey
SBE Regulatory Counsels
shartzell@sbe.org, cramsey@sbe.org

6 GHz (and Other ULS) License Modifications Revisited An Inadvertent Part 2 to Our June 2022 Article

In the June edition of this column, we discussed the 6 GHz band and encouraged station engineers to check the accuracy and completeness of (and to file to modify as warranted) the specs for their Part 74, Part 90, and Part 101 licenses as memorialized in the FCC's ULS database. To that end, we stated (in relevant part) as follows:

PCNs for "Major" Modifications to Your Licenses. FCC Rule Section 1.929 establishes that some types of license modifications for BAS (and other wireless licenses used by broadcasters) are "major" and some are "minor." Keep in mind that "major" modifications will require stations to go through the regular PCN frequency coordination process, which means that if you need to file for a major modification to remedy incorrect ULS information it will likely take at least two weeks (and probably more like a month) to get through the necessary process before you are even able to file your application(s). While it may be obvious that certain types of modifications (such as a change in the transmit location) might be "major," some station engineers seem surprised to learn that some other modifications—such as from an outdated analog-only or analog-digital composite emission designator to a digital-only emission designator—are considered "major" under the rule.

Here's a special shout out to one particularly diligent SBE member (to protect his identity, we will refer to him as Dan Engineer Eric Engineer Joe Engineer) who took the time to contact and gently remind us that "minor" modifications for many ULS licenses are also subject to the PCN frequency coordination process, even though licensees are not required to include evidence of such coordination with their minor mod ULS applications. Of course, Joe Engineer is correct—not that our article said otherwise—and that's an important point for folks to remember whenever they are preparing to make minor modifications to their licensed ULS parameters. Hence this follow-up in this month's *The Signal*.

Digging Deeper

More specifically, here is what the FCC's Wireless Telecommunications Bureau Staff said more than a decade ago on the topic of Section 101.103(d) frequency coordination for minor modifications of Part 74 BAS licenses: "Although evidence of frequency coordination is not required to be submitted with an application for a minor modification, prior coordination must be completed prior to implementing most minor modifications to fixed microwave link Part 74 BAS stations, with certain limited exceptions as described [below]. Section 1.947 requires that licensees making permanent minor modifications to their license to notify the Commission by filing Form 601 within thirty (30) days of implementing any such changes." As noted, there "are certain limited exceptions to the prior coordination requirements in Section 101.103(d) as follows:

- First, modifications to TV BAS 2 GHz fixed links are not subject to the requirements of Section 101.103(d). Such modifications are subject to the coordination procedures in Section 74.638(c) of the Commission's Rules.
- Second, the filing of modification applications without completing prior coordination is permitted where the purpose of the application is to provide receive site data that is missing due to legacy forms and databases. A modification application filed for the purpose of adding missing receive site data may be filed without completing the PCN process as long as the missing data is consistent with any data already existing in the ULS database and when the proper supporting documentation is attached.
- Finally... Section 101.103(d) requires prior coordination in those instances where facilities 'could affect or be affected by' the new proposal in terms of frequency interference. Some minor modifications, such as minor modification to delete a path or frequency, or to reduce the occupied bandwidth would not affect or be affected by existing stations and therefore would not need to be coordinated under the requirements of Section 101.103(d)."

Of the "limited exceptions" to the prior coordination rule, the second one may be particularly relevant to broadcast engineers who need and want to supply missing receive site data for their 6 GHz licenses.

One final concept that bears mention: Please always keep in mind that it would not constitute a good engineering practice to ever rely on an article—whether written by a lawyer, engineer, doctor, mechanic, professional gambler, astrophysicist, boat captain, or palm reader—as the sole source for instructions on how to proceed with spending company money on a project with regulatory implications. We recommend that you always consult first with the relevant professional(s) with whom you have a consultative relationship in order to ascertain whether and/or how to best move forward with your project based on your unique facts and circumstances.

LINK

FCC Rule Section 1.929
[tinyurl.com/FCC1-929](https://www.fcc.gov/regulatory/policies/rulemaking/rule-section-1-929)

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FOCUS ON THE SBE

By James Ragsdale
SBE Executive Director
jagsdale@sbe.org

54 Chapters Earn Quality Chapter Status

For many SBE members, the local chapter provides access to affordable continuing education and a ready network of contacts and friends in the industry. The SBE recognizes chapters that meet those needs by rewarding them with an annual rebate of a portion of the SBE dues paid by its members. The chapters have to qualify for the rebate by holding at least five meetings during the calendar year and documenting those meetings to the national SBE office. Documentation includes a brief description of the meeting and a list of attendees.

In 2021, 54 chapters qualified for Quality Chapter status, and the SBE paid out a total of almost \$28,000 to them. Chapters typically

use the money to fund their own operations. Expenses can include website hosting fees, printing, postage, scholarship programs, and sometimes meals for chapter meetings or social events. The SBE instituted the rebate system many years ago to help chapters avoid the administrative burden of collecting local dues, instead, allowing them to concentrate on producing successful meetings and other chapter functions. Below is a list of chapters that attained Quality Chapter status during 2021 and received a cash rebate from the national SBE office in June of this year. Our congratulations to them and to their leadership!

Chapter	Chair
1 Binghamton	Gary Talkiewicz
2 Northeastern Pennsylvania	Al Kornak
3 Kansas	Richard Abraham
9 Phoenix	Eric Schechter
14 Connecticut Valley	Frederick Krampits
15 New York City	Conrad Trautmann
16 Seattle	Alexander Brewster
17 Minneapolis	Jon Blomstrand
21 Spokane	Jerry Olson
22 Central New York	Thomas McNicholl
24 Madison	Matthew Mommaerts
25 Indianapolis	Chuck Kelly
30 South Bend	Jakob Foglesong
33 Southwestern Ohio	James Stitt
37 District of Columbia	J. Eric Hoehn
38 El Paso	Jose Castro
39 Tampa Bay Area	Edwin Allen
40 San Francisco	Arthur Lebermann

Chapter	Chair
43 Sacramento	Jack Davis
45 Charlotte	Brad Humphries
47 Los Angeles	Matthew Anderson
48 Denver	Amanda Hopp
51 Tri-Cities	John Mazza
52 Central Ohio	John Owen
53 South Florida	Carlos Sanchez
55 St. Louis	Terrence Dupuis
56 Tulsa	Donald Dobbs
57 Rochester	Gregory Carter
58 Northeast	Scott Mason
59 Kansas City	Stephen Hendrix
67 North Texas	William Ryan
68 Birmingham	Tim Costley
69 Alamo Area	Christopher Anderson
70 Northeast Ohio	Blake Thompson
72 New Orleans	Ernest Kain
74 Midland	Mark Voris

Chapter	Chair
76 Eugene	Dennis Hunt
78 Blue Ridge	Robert Whitley
80 Fox Valley	Martin Jury
85 Central Western	Brian Ryel
91 Central Michigan	Richard Thomas II
93 Raleigh-Durham	Frederick Engel
96 Rockford	Ben Pflederer
102 Grand Rapids	Mark Wittkoski
103 Nashville	James Campbell, III
109 Des Moines	Gregg Richwine
111 Huntsville	Kevin Kidd
113 Knoxville	Robert Holden
115 Southern Idaho	Thomas Kettwig
122 Youngstown	Wesley Boyd
124 North Oregon	Everett Helm
131 Inland Empire	Robert Army, Jr.
141 Medford	David Katz
145 Magic Valley	Thomas Lowther

AWARDS, from p. 1

part of radio broadcasting. One nominating member mentioned that "Passing our trade is at the heart of what we do, and Marcos embodies that to a T."

Technology Award

BlackMagic Design has won the Technology Award for the URSA Broadcast G2, a flexible, powerful camera designed for both traditional and online broadcasters. The three-cameras-in-one design allows it to work as a 4K production camera, a 4K studio camera or a 6K digital film camera.



Blackmagic Design URSA Broadcast G2

The SBE Wisconsin chapters and the Wisconsin Broadcasters Association have won the Best Educational Event for the Wisconsin Broadcasters Clinic held in October 2021. The clinic includes three days and two nights of educational session. The attendees were treated to nationally known presenters, including a few SMPTE Fellows and some first-time presenters sharing their in-the-trenches experiences implementing ATSC 3.0 and SMPTE 2110. An especially meaningful presentation was "By the Book: A Review of Common ABIP Violations" by Chapter 24 member Dennis Baldrige, who unfortunately lost his battle with cancer in December 2021.

Chapter 15 New York won the Best Chapter Communication. Chapter 15 does not have a traditional newsletter, however, it has multiple channels in use to communicate to its members, including an email list,



the Chapter 15 website, sbe15.com, a Twitter and Facebook page, and a Zoom account.

Statistical Awards

The following awards are determined with statistical information based on Dec. 31, 2021, figures on file at the SBE National Office. Chapters with 26 members (the chapter median) or fewer are Class A. Chapters with 27 member or more are Class B.

Percentage Growth of New Members:

Class A: 145 Magic Valley, ID
Class B: 30 South Bend, IN

Highest Percentage of Certified Members:

Class A: 96 Rockford, IL
Class B: 52 Central Ohio

Highest Percentage of Member Attendance at Meetings:

Class A: 57 Rochester, NY
Class B: 58 Northeast NY



ENGINEERING PERSPECTIVE

By Fred Engel, CPBE, ATSC3
Chief Technology Officer, PBS North Carolina
fengel@pbsnc.org

A PBS Station Perspective on Implementing ATSC 3.0

After three long years, the National Association of Broadcasters (NAB) 2022 Convention returned in April, allowing us once again to reconnect with old friends and make new ones, collaborate with vendors and experience cutting-edge technologies in person. ATSC 3.0 NextGen TV took center stage at the Las Vegas Convention Center's new West Hall alongside a number of excellent presentations on the progress of deployments, applications and new products. PBS North Carolina (PBS NC) was honored to receive the NAB Broadcast Engineering and IT Conference's award for the best television engineering paper for a paper entitled "ATSC 3.0 as a Use Case for Public Safety Communications."

PBS NC is committed to the transition to ATSC 3.0. Six years ago, we began working with public safety communications officials in North Carolina to address a critical problem: how to replace a decades-old, analog voice-paging system with one driven by ATSC 3.0 to improve the quality of communications and greatly reduce the amount of time needed to get critical messages to first responders.

First, PBS NC developed an ATSC 3.0 lab to test products, applications and concepts. We then launched two ATSC 3.0 transmission facilities: one in partnership

with Capitol Broadcasting Company in the Raleigh-Durham market, and our WUNK-TV transmission facility in Greenville. The latter is a full-power, UHF transmission facility serving over 10,000 square miles in Eastern North Carolina. This site is our over-the-air

Hayes of Iowa PBS and I presented a session entitled "ATSC 3.0/NextGen TV PBS System Status (or How Do We Get There?)," which focused on challenges faced by public broadcasters. We explored legal, regulatory, financial and technical concerns and whether a flash cut—transitioning from the existing ATSC 1.0 broadcasting technology to ATSC 3.0—could be the answer.

Unlike the FCC-mandated analog-to-digital TV transition two decades ago, ATSC 3.0 is a voluntary effort by broadcasters. For the analog-to-digital transition, full-power broadcasters were given a second channel for their digital signal. With the recent Spectrum Auction Repack and the reduced number of television channels available, this is no longer an option. Also, during the analog-to-digital conversion, the federal government offered a nationwide coupon program to assist viewers

with non-digital televisions to receive digital broadcasts. The Set-Top Box program provided a device that would receive both analog and digital transmissions and display them on an older television set.

We've looked at markets where there are no sharing opportunities and identified the number of households that might lose service if we did a flash cut. With that number and a generally accepted percentage of over-the-air viewers, we determined potential costs. For our WUNE-TV facility in northwest North Carolina, we determined that about 33,000 households would be affected. For WUNU-TV, in the southeastern part of the state, 25,000 households would be impacted. Assuming a price point of \$100 per set-top box, a \$3.3M investment would be needed to address WUNE and \$2.5M to address WUNU.

The goal of our presentation at the PBS Annual Meeting was to begin a dialogue on this critical issue with public broadcasters and the wider broadcast industry. We all see the benefits of ATSC 3.0, and we've identified a cost for sites to address receiver issues. Now let's find ways to accelerate its adoption.



The PBS North Carolina NextGen TV lab.

test facility for public safety communications concepts and other datacasting efforts.

PBS NC is a statewide network consisting of 12 full-power transmission facilities and other lower-power facilities. Our broadcast footprint covers nearly the entire state and provides coverage to bordering states. We serve the third largest public media market in the country.

There are many challenges to transitioning a facility to ATSC 3.0. They range from business needs like finding sharing partners and legal and financial issues to concerns about not disenfranchising our viewers. Frankly, the technology challenges are minimal by comparison.

For public broadcasters, the transition can be especially difficult. Public broadcasters often have several program streams, which make a sharing agreement hard due to capacity issues for host stations. And many state networks and rural public broadcasters do not have viable sharing partners that align with the legal coverage requirements implemented by the FCC.

At the virtual PBS Annual Meeting in May, PBS NC's Don Smith, Lonna Thompson of America's Public Television Stations, Bill



NEW SUSTAINING MEMBER



- | | | |
|--|---|--|
| <p>AC Video Solutions • 2014
Andrea Cummis 201-303-1303
Consulting, Systems Design/Integration</p> | <p>Dielectric • 1995
Cory Edwards 207-655-8131
Radio & TV Antenna Systems and Monitoring</p> | <p>Linkup Communications Corporation • 2017
Mark Johnson 703-217-8290
Satellite Technology Solutions</p> |
| <p>American Tower Corporation • 2000
Tiffany Yu 603-930-9091
Development/Construction/Management</p> | <p>Digital Alert Systems, LLC • 2005
Bill Robertson 585-765-1155
Emergency Alert Systems</p> | <p>LYNX Technik • 2007
Steve Russell 661-251-8600
Broadcast Terminal Equipment Manufacturer</p> |
| <p>Barnfind-USA, Inc. • 2021
George Gonos 919-748-7373
Fiber Transport Solutions</p> | <p>DoubleRadius, Inc. • 2012
Jeffrey Holdenrid 704-927-6085
IP Microwave STL</p> | <p>MaestroVision • 2021
Claude Turcotte 888-424-5505
Broadcast Automation Software</p> |
| <p>Belden Electronic Division • 1991
Rose Lockwood 203-500-4743
Fiber and Copper Cabling Infrastructure</p> | <p>Drake Lighting • 2015
Dave Sheppard 270-804-7383
FAA Obstruction Lighting - Medium and High Intensity</p> | <p>Markertek • 2002
Adam June 845-246-2357
Specialized Broadcast & Pro-Audio Supplier</p> |
| <p>Birns & Sawyer • 2022
Jim Alcantara 323-466-8211
Systems Integration, Sales, Rentals</p> | <p>DTS Inc./HD Radio Technology • 2014
George Cernat 443-539-4334
HD Radio Technology</p> | <p>Micronet Communications Inc. • 2005
Jeremy Vize 972-422-7200
Coordination Services/Frequency Planning</p> |
| <p>Blackmagic Design • 2012
Terry Frechette 408-954-0500
Production Switchers, Digital Cameras, Routers, Video Editing and Monitoring, Color Correction, Video Converters</p> | <p>du Treil, Lundin & Rackley, Inc. • 1985
Jeff Reynolds 941-329-6000
Consulting Engineers</p> | <p>Moseley Associates Inc. • 1977
Bill Gould 805-968-9621 x785
Digital STLs for Radio and Television</p> |
| <p>Bracke Manufacturing LLC • 2012
Patra Largent 949-756-1600
RF & Microwave Components</p> | <p>The Durst Org. - 4 Times Square • 2004
Tom Bow 212-997-5508
TV/FM/Microwave Tower Site</p> | <p>MulticAM Systems • 2020
Mary Ann Seidler 207-776-5338
Fully automated live video production</p> |
| <p>Broadcast Depot • 2018
Tim Jobe 305-281-7540
TV, Satellite, Radio, IP</p> | <p>Econco • 1980
Debbie Storz 800-532-6626, 530-662-7553
New & Rebuilt Transmitting Tubes</p> | <p>MusicMaster • 2014
Jerry Butler 352-231-8922
Advanced Music Scheduling Solutions</p> |
| <p>Broadcast Devices, Inc. • 2015
Robert Tarsio 914-737-5032
Audio/RF Support Products</p> | <p>ENCO Systems Inc. • 2003
Samantha Bortz 248-827-4440
Playout and Automation Solutions</p> | <p>Nascar Productions • 2014
Abbey Kielcheski 704-348-7131
Live/Post Production Services</p> |
| <p>Broadcast Electronics Inc. • 1978
Perry Priestley 217-224-9600
Radio Equipment Manufacturer</p> | <p>ERI - Electronics Research • 1990
Zachary Bailey 812-925-6000
Broadcast Antennas, Transmission Line, Filters/Combiners, Towers and Services</p> | <p>National Association of Broadcasters • 1981
Industry Trade Association 202-429-5340</p> |
| <p>Broadcast Supply Worldwide • 1986
Shannon Nichols 800-426-8434
Audio Broadcast Equipment Supplier</p> | <p>Floral Systems • 2008
Shawn Maynard 877-774-1058
Television Broadcast Automation</p> | <p>National Football League • 1999
Michael Katzenoff 212-450-2368
Game Day Coordination Operations</p> |
| <p>Broadcasters General Store • 2004
Buck Waters 352-622-7700
Broadcast Audio Video Distributor</p> | <p>Heartland Video Systems, Inc. • 2011
Dennis Klas 920-893-4204
Systems Integrator</p> | <p>Nautel Inc. • 2002
Jeff Welton 877-662-8835
Radio Broadcast Transmitter Manufacturer</p> |
| <p>Burk Technology • 2019
Matt Leland 978-486-0086 x703
Transmitter Facility Control Systems</p> | <p>Hilights, Inc. • 2016
Timothy Nash 352-564-8830
Obstruction Lighting Maintenance</p> | <p>Nemal Electronics Int'l Inc. • 2011
Benjamin L. Nemser 305-899-0900
Cables, Connectors, Assemblies and Fiber Optic</p> |
| <p>Calrec Audio • 2016
Helen Carr 703-307-1654
Audio Mixing Equipment</p> | <p>Hitachi Kokusai Electric Comark • 2013
Jack McAnulty 413-998-1523
Manufacturer Broadcasting Transmission Equipment</p> | <p>Neutrik USA, Inc. • 2012
Fred Morgenstern 704-916-0368
Ruggedized Optical Fiber Systems</p> |
| <p>Cavell, Mertz & Associates Inc. • 2011
Gary Cavell 703-392-9090
Consulting Services</p> | <p>Indiana Broadcasters Association • 2019
Dave Arland 317-701-0084
Indiana Association for Radio & TV Broadcasters</p> | <p>Orban Labs, Inc. • 2011
Mike Pappas 480-403-8300
Audio Processing AMFMTV</p> |
| <p>Comrex Corporation • 1997
Chris Crump 978-784-1776
Audio & Video Codecs & Telephone Interfaces</p> | <p>Inovonics Inc. • 2012
Gary Luhrman 831-458-0552
Radio Broadcast Equipment</p> | <p>Potomac Instruments • 1978
Zachary Babendreier 301-696-5550
RF Measurement Equipment Manufacturer</p> |
| <p>Continental Electronics • 1976
Dale Dalesio 412-979-3253
TV and Radio Transmitters</p> | <p>Jampro Antennas Inc. • 2011
Alex Perchevitch 916-383-1177
DTV, FM-HD Radio, DVB-T/T2, ISDB-T, DAB</p> | <p>ProAudio.com- A Crouse-Kimzey Co. • 2008
Mark Bradford 800-433-2105 x560
Proaudio Broadcast Equipment Distributor</p> |
| <p>Crawford Broadcasting Company • 2021
Cris Alexander 303-481-1800
Media Company</p> | <p>JVC Professional Video • 2014
Edgar Shane 973-317-5000
Professional Video Products, Camcorders, Display Monitors, Recording Decks</p> | <p>Propagation Systems Inc. - PSI • 2010
Doug Ross 814-472-5540
Quality Broadcast Antenna Systems</p> |
| <p>CueScript • 2014
Michael Accardi 203-763-4030
Teleprompting Software & Hardware</p> | <p>Kathrein USA Inc. • 1985
Les Kutasi 541-879-2312
Antennas for Broadcasting & Communications</p> | <p>QCommunications • 2019
Tony zumMallen 816-729-1177
Services Behind the Scenes</p> |
| <p>Cumulus Media, Inc. • 2021
Conrad Traumann 212-419-2940
Audio Media Company</p> | <p>Kintronc Labs, Inc. • 2015
Brad Holly 423-878-3141
Radio Broadcast Antenna Systems - ISO9001 Registered Company</p> | <p>Quintech Electronics and Communications Inc. • 2002
James Herbstritt 724-349-1412
State-of-the-art RF Hardware Solutions</p> |
| <p>Davicom, Division of Comlab, Inc. • 2014
Louis-Charles Cuierrier 418-682-3380 x512
Remote Site Monitoring and Control Systems</p> | <p>latakoo • 2021
Paul Adrian 214-683-0791
Media Workflow Automation</p> | <p>QVC • 2011
Kevin Wainwright 484-701-3431
Multimedia Retailer</p> |
| <p>Dialight Corporation • 2006
David Jennings 732-919-3119
FAA Certified Obstruction Lights</p> | <p>LBA Technology Inc. • 2002
Jerry Brown 252-757-0279 x228
AM/MW Antenna Equipment & Systems</p> | <p>Rohde & Schwarz • 2003
Walt Gumbert 724-693-8171
Transmitters, Test & Measurement, Video</p> |
| | | <p>Ross Video Ltd. • 2000
Jared Schatz 613-228-0688
Manufacturer, Television Broadcast Equipment</p> |
| | | <p>Sage Alerting Systems Inc. • 2010
Harold Price 914-872-4069 x113
Emergency Alert Systems Products</p> |
| | | <p>SCMS Inc. • 2000
Bob Cauthen 800-438-6040
Audio and RF Broadcast Equipment Supplier</p> |
| | | <p>Shively Labs • 1996
Dale Ladner 888-SHIVELY
FM Antennas & Combiners</p> |
| | | <p>Shure Incorporated • 2012
Bill Ostry 847-600-6282
Microphones, Wireless Systems, Headsets</p> |
| | | <p>Sierra Automated Systems and Eng. Inc. • 2011
Al Salci 818-840-6749
Routers, Mixers, Consoles, Intercoms</p> |
| | | <p>Staco Energy Products Co. • 2010
Paul Heiligenberg 937-253-1191 x128
Manufacturer of Voltage Regulators, UPS</p> |
| | | <p>SuitLife Systems • 2019
Nigel Brownnett 310-405-0839
Manage. Monitor. Control</p> |
| | | <p>Sutro Tower Inc. • 1989
Raul Velez 415-681-8850
Broadcast Tower Leasing</p> |
| | | <p>Synthax Inc. • 2020
Brittany Hilton 754-206-4220
Audio Codecs and Converter Solutions</p> |
| | | <p>Technical Broadcast Solutions, Inc. • 2018
Robert Russell 302-414-0055
Engineering and Consulting Services</p> |
| | | <p>Televest USA, LLC • 2021
Andy Ruffin 937-475-7255
Antennas Transmitters Measurement Distribution</p> |
| | | <p>Telos Systems/Omnia/Axia • 2003
John Bisset 216-241-7225
Talk-Show Systems</p> |
| | | <p>Teradek • 2011
Jon Landman 949-743-5783
Camera-top ENG Solutions</p> |
| | | <p>Tieline The Codec Company • 2003
Dawn Shewmaker or Jacob Daniluck 317-845-8000
Audio Codec Manufacturer</p> |
| | | <p>Unimar Inc. • 2001
Thad Fink 315-699-4400, 813-943-4322
Tower Obstruction Lighting Designer, Manufacturer, Distributor</p> |
| | | <p>Vizrt Group • 2022
Anne Hrubala 917-771-8330
More Stories. Better Told.</p> |
| | | <p>Wheatstone • 2010
Jay Tyler 252-638-7000
IP Consoles, Routers & Processors</p> |
| | | <p>WideOrbit • 2012
Brad Young 415-675-6700
Radio Automation and Playout</p> |
| | | <p>Wireless Infrastructure Services • 2006
Travis Donahue 951-371-4900
Repacking Services - West Coast Turnkey Services</p> |

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Member Spotlight: Debra Grivois

Member Stats

SBE Member Since: 2013
Employer: WLWT, Hearst Television
Position: Director of Engineering
Location: Cincinnati, OH
Chapter: Originally Chapter 46 Baltimore, now Chapter 33 Southwest Ohio
I'm Best Known For: Writing a series of articles about the transition to digital television published in *TV Technology*.

Q. *What do you enjoy or value most about your SBE involvement?*

A. I value the opportunity to meet new people and to visit with friends. Learning more about technology from sessions or webinars is a bonus.

Q. *What got you started in broadcast engineering?*

A. While attending The Ohio State University in broadcast journalism, I took an audio production class. I thought I wanted to be a radio news producer. After that class, my focus was operations, production, and engineering.



Deb (center) and her parents enjoying a hike in Papago Park in Phoenix, AZ. Scenic photos are some of her favorite shots to take.

Q. *Who was your mentor or who in the industry do you admire?*

A. My mentor was the late, great Larry Pozzi who was the director of engineering for WCMH. He was a man of awesome character and a well-respected engineer.

father's slide rule from his engineering school days.

Q. *What do you like most about your job?*

A. What I like most about my job is seeing team members develop and succeed. It warms my heart to help someone reach a next step in his/her career.

Q. *When I'm not working I...*

A. ...play around with Adobe Photoshop and Premiere. My hobby is photography..

Q. *What's your favorite Gadget?*

A. My favorite gadget is my

SBE Compensation Survey: Certification Pays

The SBE conducted its seventh compensation survey from April 1 through early June. The survey goal is to provide practical information to SBE members about individual compensation (salary and benefits) based on the type of broadcast or multimedia involvement, market size, and job title category. 319 respondents answered the survey questions about salary and benefits.

We asked if respondents received a raise in the last year, and if so, how much, and to report benefits received. We also asked about contract engineering rates and practices.

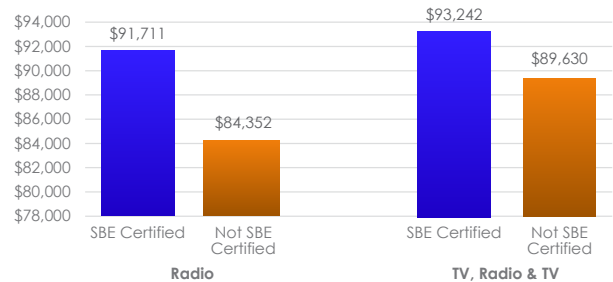
Respondents were asked if they held any

broadcast- or media-relevant professional certifications. We compared salaries of respondents with and without SBE Certification and reported the trend compared to past salaries. Typically, those who hold SBE certification earn a higher wage than those who do not.

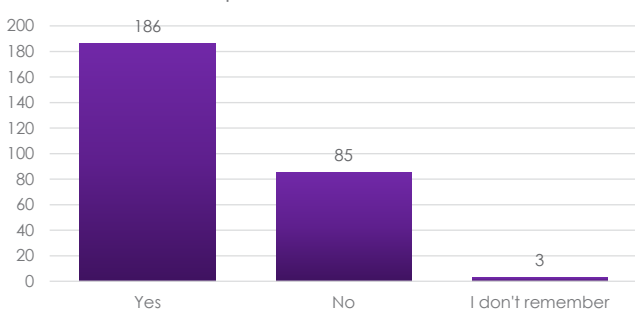
The survey report is available via the SBE Bookstore and is free to SBE members as a member benefit. You will need your SBE website login to access it. Also, the PDF report is password protected. The password is noted on the download page. Non-members can purchase the survey via the SBE Bookstore. Some survey highlights are shown here.

If you participated in the survey this year, thank you. We encourage your participation next year so we can provide the most useful results.

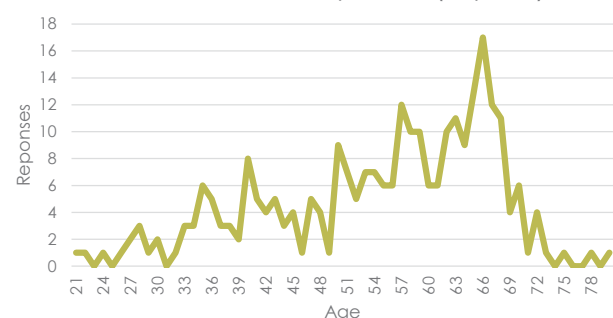
Average Salary With and Without SBE Certification



Did you receive a salary increase in the past 12 months?



Please tell us how old you are (in years):



WELCOME TO THE SBE

NEW MEMBERS

Harish J. Anderson - Atlanta, GA
Jeff Bates - Alexandria, VA
Brecken X. Beasley - Jacksonville, FL
Brandon P. Blair - Bangor, ME
Carlos Caal - Topanga, CA
Darzen Chang - North Potomac, MD
William J. Cruz - Indian Head, MD
John H. Degler, Jr. - Crescent City, CA
Earl R. Flanigan - Equality, IL
Christopher Fore - Dallas, TX
Nakyji J. Fox - Covington, KY

Ben Frecker - Columbus, OH
Clark D. Freeman - Winchester, KY
D.J. Asanga Gamage - Colombo, Sri Lanka
Bernabe J. Garcia - Alexandria, VA
Gary Gardner - Galax, VA
Ryan A. Gates - Great Falls, MT
Matthew W. Gramley - St. Petersburg, FL
Rick L. Griffith - Atlanta, GA
Ryan W. Hickok - New Brighton, MN
Stephen C. Jackson - Sterling, VA

Richard E. Jackson - Honesdale, PA
Robert Kupillas - Alexandria, VA
Doug Lambert - Miamisburg, OH
Melissa M. Lauby - Akron, OH
Georges Livanos - Toronto, ON
Michael Monte - Macungie, PA
Brian Moss - Wintersville, OH
Philippe Muzac - Brisbane, CA
Brian M. Nelson - Columbia, MD
Ronald P. Pearson - Anchorage, AK
Michael S. Quash - Midlothian, VA

Srinivas Ramamurthy - Union City, NJ
Juan Ramirez - Los Fresnos, TX
Atiba M. Riley - Seattle, WA
Jon P. Rowley - Columbus, OH
Lauren Rymza - South Bend, IN
Joe Savino - University Park, PA
Craig R. Seelig - Honesdale, PA
Benjamin J. Stiglets - Gulfport, MS
James B. Swisher - N. Chesterfield, VA
Christopher A. Williams - Portland, OR
Mike Wohrle - Cottage Grove, OR
Dave B. Yoro - Brisbane, CA

NEW STUDENT MEMBERS

Dalia Abdelvahab - Hempstead, NY
Julianne P. Amante - Williston Park, NY
James G. Beale, Jr. - Kinvil, NJ
Yaw Bonsu - Baldwin, NY
Makayla Bullard - Hempstead, NY
Nicholas Calvello-Macchia - Brooklyn, NY
Emily B. Campbell - Mineola, NY
Daniel F. DeCrescenzo - Lincroft, NJ
Jonathan M. DeSousa - Mineola, NY
James A. Epstein - Amagansett, NY
Andrew P. Fantucchio - Braintree, MA

Ashley A. Ferrante - Valley Stream, NY
Edward G. Fitzgerald - Bellafonte, PA
Meredith C. Frank - Howell, MI
Derek A. Futterman - Plainview, NY
David A. Gall - Fresh Meadows, NY
Cody E. Gee Sheridan Hmelar - Palo Alto, CA
Ryan D. Gineo - Glastonbury, CT
Jade M. He - Wayne, NJ
Rocco J. Law - North Bellmore, NY
Annemarie Lepard - Higganum, CT
Joshua J. Linsenber - Canton, MA

Kayla N. McKechnie - Hauppauge, NY
Max H. Milstein - Syracuse, NY
Tyler J. Mroczek - Uniondale, NY
Sean Mullen - Smithtown, NY
Priya D. Niehaus - Uniondale, NY
Ryan J. Pagano - Massapequa, NY
Matthew D. Paye - Smithtown, NY
Juan P. Pinilla - Glen Cove, NY
Jessica Ross - Brooklyn, NY
Kyle S. Russo - Commack, NY
Dexter B. Shmavonian - New York, NY
Carlos B. Silva - Framingham, MA

William F. Thompson - Edison, NJ
Maria Valdez - Hempstead, NY
Michael J. Ventuiae - Valhalla, NY
Alexander P. Wilenski - Malverne, NY

RETURNING SENIOR MEMBERS

Michael P. Sheffer - West Palm Beach, FL

RETURNING MEMBERS

David W. Bash - Alexandria, VA
Kyle Bell - Seminole, FL
Philip E. Carr - Clearfield, PA
John C. Chrystal - Las Vegas, NV
Ross Cooper - Houston, TX
Michael L. Cooper - New Albany, IN

Jose J. Cordova - Tucson, AZ
Tom S. Courtenay - Kenner, LA
Todd A. Dixon - Jemison, AL
Mitchell C. Ensley - Hendersonville, NC
Beau D. Hilbig - Austin, TX
Andrew Humphries - Murfreesboro, TN

Romualdo M. Lintag - Brisbane, CA
David I. Madison - Jenison, MI
James Poulette - Dublin, NH
Kieran Quan - Toronto, ON Canada
Robert C. Rogers - Ionia, MI
Devin T. Smith - Odenville, AL

Clay Stimeling - High Point, NC
Leslie Sugai - Bayside, NY
Scott F. Trask - Alpharetta, GA
Joey M. Verrett - Prairieville, LA
Andrew C. Zaiser - Bend, OR

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MEMBERS ON THE MOVE

Keaton A. Scovel, CBRE, is engineering operations manager for Iowa Public Radio, Des Moines, IA

Frank Maynard, CPBE, has retired from CBS Detroit after 37 years with WKBD and 22 years with WWJ.

Joshua King is president/CEO of Kintronic Labs, Bristol, TN.

Have a new job? Received a promotion? Send your news to Chriss Scherer at cscherer@sbe.org.

MARK YOUR CALENDAR

		S	M	T	W	T	F	S
SBE Certification Exams Aug. 5-15, 2022 <i>Application deadline closed</i>	Local Chapters sbe.org/certification							
SBE Leadership Development Course Aug. 3-5, 2022	Atlanta sbe.org/lhc							
SBE WEBxtra Aug. 15, 2022	online sbe.org/webxtra							
SBE Election Ends Aug. 17, 2022	sbe.org							
SBE Certification Exams Nov. 4-14, 2022 <i>Application deadline Sept. 9, 2022</i>	Local Chapters sbe.org/certification							
SBE WEBxtra Sept. 19, 2022	online sbe.org/webxtra							
SBE National Meeting Sept. 28-29, 2022	SBE22 Expo sbe.org							
SBE22 Expo Sept. 29, 2022	Liverpool, NY sbe22.org							
SBE WEBxtra Oct. 17, 2022	online sbe.org/webxtra							
SBE WEBxtra Nov. 21, 2022	online sbe.org/webxtra							
SBE WEBxtra Dec. 19, 2022	online sbe.org/webxtra							
Chapter Meeting Reports Due Jan. 15, 2023	sbe.org/rebate <i>Meeting reports determine a chapter's rebate</i>							
SBE WEBxtra Jan. 16, 2023	online sbe.org/webxtra							
SBE Certification Exams Feb. 3-13, 2023 <i>Application Jan. 2, 2023</i>	Local Chapters sbe.org/certification							
SBE WEBxtra Feb. 20, 2023	online sbe.org/webxtra							



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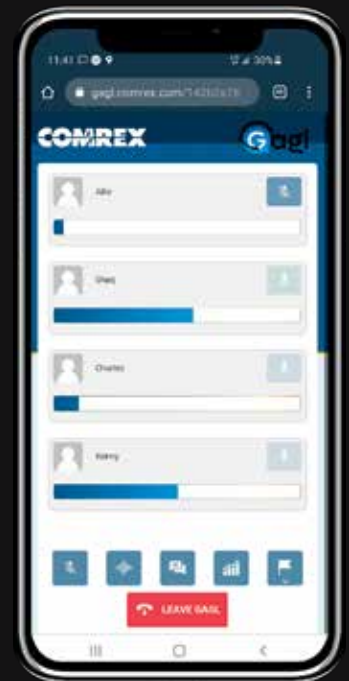
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