Award Winners Recognized Virtually

On Sept. 22, the SBE held its first virtual Membership Meeting and Award Presentation (MMAP). While the traditional in-person National Meeting could not be held, the SBE was able to hold a meeting of the Board of Directors and an online Fellows Reunion as part of the events.

The MMAP originated from the studios of Texas A&M University’s KAMU-TV. SBE President Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE, presided over the event, which combined what had traditionally been two separate events. The SBE thanks the MMAP sponsors, who are listed on page 8 of this issue. The replay of the MMAP is available on the SBE YouTube Channel (sbe.org/youtube).

The program included a report on the business and activities of the society and the induction of the directors and officers for their new terms on the Board. Wayne Pecena was sworn in for his second one-year term as SBE president, as were Vice President Andrea Cummis, Secretary Kevin Trueblood, and Treasurer Ted Hand. Incumbent directors Stephen Brown, Roswell Clark, Kirk Harnack, Thomas McGinley, and Shane Toven were sworn in for their new two-year terms. Fred Willard was sworn in for his first two-year term as a director. The event marked the completion of Vinny Lopez’s term as a director.

The re-elected and new directors join Mark Fehlig, Charles “Ched” Keiler, Geary Morrill, Jason Ornellas, Chris Tarr, and Dan Whealy, who are midway through their two-year terms.

Welcome New SBE Executive Director James Ragsdale

In January of this year, the SBE announced that Executive Director John Poray would retire at the end of 2020. John has been the society’s executive director for 28 years. In March, the process began to find a candidate to fill the position when SBE President Wayne Pecena proposed to the board that a five-person Executive Director Search Committee (EDSC) be formed with the goal of seeking out qualified candidates for the position and presenting a finalist to the board for approval. The tasks of the committee included writing a job description, establishing qualifications, proposing a fair compensation package, posting of the position, interviewing candidates and presenting a finalist to the board for approval. SBE Past President Joe Snelson, CPBE, 8-VSB, chaired that committee.

After receiving and reviewing multiple applications, the field was narrowed to three candidates. From those three, one was recommended to the SBE Board of Directors, which was reviewed at a board meeting held on Sept. 22. The Board approved the appointment of James Ragsdale of Anderson, IN. Mr. Ragsdale will officially begin work on Jan. 1, 2021.

Most recently, Ragsdale was the VP for finance at Anderson University. Ragsdale also completed his undergraduate degree at Anderson. In that role, he managed the operational budget for the private, liberal arts education institution, participated as member of the university president’s leadership team, and oversaw the business office, human resources, physical plant, police and security, and auxiliary services.

Before his position with Anderson Uni- see EXECUTIVE DIRECTOR, p. 15

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Mark Fehlig, P.E., CPBE
2021 SBE National Meeting to be Held During NAB Show

The announcement in September that the NAB was moving its spring 2021 show in Las Vegas from April to October resulted in a number of broadcast industry organizations who hold events in the fall to reschedule, or at least rethink, their plans.

The SBE Board of Directors, during its meeting on Oct. 26, voted to conduct the 2021 SBE National Meeting during the 2021 NAB Show, Oct. 9-13. The National Meeting is always held in the fall, but in conjunction with a regional broadcast-related event. The move to hold it during the NAB Show takes into account the likelihood that most SBE members would not be in a position to attend two industry events scheduled close together in the fall.

SBE National Meeting events to be held during the NAB Show include the fall Board of Directors Meeting, Fellows Breakfast, SBE Annual Membership Meeting and Awards Presentation, and the SBE Membership and Awards Reception.

Other SBE events typically held as a part of the NAB Show are also tentatively planned, including the Ennes Workshop, Certification, Education and Frequency Coordination Committee meetings, SBE exhibit booth, certification exams and a frequency coordinators meeting. Specific days and times for SBE events will be announced in mid-2021.

Certification Question

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

Answer on page 6
Looking Ahead to 2021

The first commercial radio broadcasts began 100 years ago. While many accounts of history credit KDKA in Pittsburgh, PA, as being the first, others differ in this regard and consider prior broadcast efforts from amateur stations. What is clear, Westinghouse and KDKA were early players in the industry, and several stations began commercial broadcasting across the nation around the same time. Regardless of who deserves the first title, our industry and the broadcast engineering profession began 100 years ago. A lot has changed in the industry over the last century and some things have not changed.

AM radio remains essentially the same over those 100 years. Yes, the technology used to generate that AM carrier has drastically changed, and the frequency response was modified by NRSC standards, but the service has remained the same. The most basic receiver, or that cat whisker or crystal detector receiver many of us built as kids still works today. We have seen monochrome television broadcast updated to color and then eliminated altogether when digital TV broadcast was mandated by the FCC. Many a NTSC TV has found its way to the landfill, yet that crystal detector AM radio still works.

As a broadcast engineer, we have plenty to look forward to in 2021 technology-wise. After all, the challenges of that ever-evolving technology is what keeps us motivated and excited about our industry. The ability for a broadcaster to implement AM digital transmission is one of the most significant changes for the AM broadcaster in decades and offers a real solution to economically revitalized AM radio. Agree or disagree with the recent FCC decision for all-digital AM, but the voluntary aspect is significant as well for an individual station to make the decision for its market whether it’s an early adopter, a later adopter, or the wait-and-see approach. The HD Radio MA-3 all digital mode offers advantages over the previous attempts to implement the hybrid analog/digital mode.

Virtualization of the entire radio broadcast facility is rapidly gaining momentum from both a technology standpoint, as well as being accepted by the industry. This approach is simply a continuation of the economic and technology impact of the information technology (IT) industry on the broadcast technology facility. The broadcast station in the cloud is just another software-as-a-service (SaaS) offering from the IT cloud technology world.

ATSC 3 or NextGen TV rollouts continue across the country at a rapid pace. At the time of writing this column, the Austin, TX, Oklahoma City, OK, and the Mobile-Pensacola, FL, markets join the ranks of having an ATSC 3 station on the air. Projections indicate that more than 60 TV markets will have ATSC 3 available in 2021 reaching 70 percent of the US population. In reality, a proper description is likely one ATSC 3 transmitter in the market that is considered the “lighthouse” station shared by several individual stations to comply with the current FCC regulations.

At this point, the buildout of broadcast transmission capability far exceeds the availability and adoption of consumer ATSC 3 receivers. Once again looking back on history, this is an identical situation experienced when monochrome TV was introduced as demonstrated the classic “chicken & egg” analogy. This of course is expected to rapidly change in 2021 as consumer ATSC 3-enabled 4K televisions become readily available with product announcements from the major consumer manufacturers. How rapid consumers become ATSC 3 early adopters is yet to be seen, but market outlook projections are encouraging. And an ATSC 3.0-enabled smartphone has been announced as well. Plenty of new technology, features and capabilities to keep the broadcast engineer busy and learning.

Before we leave 2020 and look to 2021, I would like to take a moment to offer a last thank you and hearty congratulations to John Poray for his 28 years of dedicated service to the SBE. John has been the face of SBE for my entire membership experience, and he has personally directed and touched every aspect of the society during his tenure. Please join me in offering your thanks and congratulations to John before he retires as the SBE executive director on December 31. As we look to 2021, I continue to offer thanks to the SBE staff members who keep the business side of SBE moving right along while observing the COVID guidelines of the state of Indiana and the city of Indianapolis. As I look to 2021, I welcome Jim Ragsdale as the executive director of the SBE in January.

I personally want to know your suggestions, comments and concerns. Your feedback is essential to our collaborative effort as we all seek the “new normal” ahead. Please reach out to me at wpecena@sbe.org or by phone at 979-845-5662 for a more personal exchange. Always, a sincere Thank You to those I have heard from. In the meantime, stay safe, stay healthy and keep learning!

Attend the 2021 SBE Leadership Development Course

The SBE is proud to continue its offering of the SBE Leadership Development Course and has scheduled the 2021 program for June 8-10, 2021, in Atlanta, GA. Plan now to take part in this SBE tradition started in 1997.

Designed for broadcast engineers who have or aspire to have management responsibilities, the SBE Leadership Development Course is to help technical people acquire and develop skills for sound leadership, supervisory and management skills. The SBE Leadership Development Course is beneficial for those with or without prior management or supervisory experience.

The three-day event challenges attendees to refine leadership skills and better understand and improve interaction with others. Broadcast organizations may consider sending a group of employees to the course to share the experience of this highly interactive event. Registration includes all course materials, three days of instruction, the Leadership Development Webinar Series of three webinars, a certificate of completion, light breakfast and afternoon snacks. SBE Members receive a discount on registration. Rodney VanDeveer, a professional leadership and management trainer and retired professor of organizational leadership and supervision at Purdue University, teaches the course.

The cost is $670 for SBE members and $725 for non-members. The event takes place at Hyatt Place Atlanta South, in College Park, GA. Register at sbe.org/ldc.

“I like the dreams of the future better than the history of the past.”

~ Thomas Jefferson
SBE to Launch Technical Professional Training Program in January

Over the past several years, many people have identified the dearth of incoming technical talent as one of the most critical issues facing the industry today. During this time of ever-accelerating advances in technology, the average age and tenure of the very professionals tasked with making it all happen continues to increment upward. This can be clearly seen in review of the annual SBE Compensation Survey.

Like many other departments, the “farm system” of part-time employees and smaller market stations we’d been collectively accustomed to accessing for talent in times past became a casualty in the reductions of workforce and consolidation that followed the historic 1996 Telecom Act. Add elimination of electronic technology programs offered by both trade schools and colleges and the technical staffing needs become acute. Unfortunately, not much has been done to rectify this – until now.

Broadcasters need to not only actively recruit a new technical workforce, but will also have to take on the task of providing training specific to the needs of the industry. While the former is clearly beyond the scope of the Society, the latter is – to coin that well-worn cliché – “right up our alley.”

Utilizing programs developed by past and present SBE leadership, I feel we are uniquely positioned to provide yet another valuable service to the broadcast industry going forward: Training new entrants to the field of broadcast technology.

• Our extensive webinar offerings developed and cataloged for on-demand use of SBE members is regularly expanded and updated to reflect the latest developments in the industry. The advent of SBE MemberPlus provides access to the library for a fixed annual fee.

• The recently published SBE Engineering Handbook is a hard copy reference volume for hands-on use in designing and maintaining technical facilities.

• The SBE Mentor Program provides a new entrant to our profession regular access and guidance from a seasoned professional - a personal touch not unlike days of old when the senior staff would take the new guy or gal under their wing to show them the ropes.

• The SBE Certification Program entry-level certification (CBT) demonstrates a comprehension of legal and technical requirements of station operation. The SBE CertPreview for this certification level can be utilized by a mentor to curate the preparation experience of a mentee utilizing the webinar library supplemented with the mentor’s knowledge and experience.

All rolled up

Integrating these elements into an easily accessible system makes the task of a mentor much simpler, as it alleviates the need to be an educator/presenter and replaces it with being a facilitator. For the mentee, it provides an understandable structure that provides knowledge and confidence in preparation to become a net contributor for their employer.

This program is designed to be deployable by group broadcasters, independent broadcasters and even state associations. Ideally, the mentor would come from within the ranks of the organization in which the mentee is employed, however it can be performed by any qualified engineer willing to invest the time.

In conversations with many seasoned engineers, I’ve heard over and over again stories of individuals who played a major role in their early professional development. I know I’m one of those, having been blessed to work directly with folks like LaVerne Poast, Fred Velhmeyer, Dave Gorman and Steve Church in my early career. If that describes you as well, I encourage you to consider “paying it forward” by engaging as a mentor as our Society rolls out this new initiative. This may be an excellent way for retired members to have an impact on the next generation of broadcast technology professionals as well.

Having been involved as a mentor since that SBE program started, I know I’ve found it to be quite rewarding. Watch for the formal launch of the Technical Professional Training Program in a few short weeks.

One final thought: Initiatives like this are due to the efforts and vision of a group of forward thinking members that participate on the SBE Education Committee. This group meets via conference call/Zoom on a monthly basis to explore how we can best serve our membership and industry with the knowledge to perform our roles most effectively. I welcome your participation on this committee. Consider this an invitation to join us. Just drop me a note indicating your interest at gmorrill@sbe.org and I’ll make sure you are included in our meeting invitations.
Show your SBE Certification Proudly

The SBE certification program is the only professional recognition available to broadcast engineers that provides standards of professional competence. It is the primary method of verifying the attainment of educational standards in the industry. Here’s some useful information to help you achieve that.

Years of Experience

SBE certifications are based on an individual’s years of experience in the broadcast engineering field. Broadcast engineers can apply for a certification once they meet the year requirements. An associate degree counts as two years of experience and a bachelor’s degree counts as four years of experience for all levels except Certified Professional Broadcast Engineer. No experience is required for entry level.

Life certification is available to those who are retired or may also be granted to professional broadcast engineers and senior broadcast engineers who have maintained certification continuously for 20 years and are current members of the SBE upon application.

Listing Certifications

Broadcast engineers may hold multiple certifications. SBE certifications are listed from highest (most experience required) to lowest. Specialist certifications are listed immediately after their corresponding category certification. Here are some examples.

- Joe Brown, CSRE, AMD, CBNT
- Kevin Jones, CBT, CBNT, CRO
- Heather Cosby, CSTE, CBRE, DRB
- Ray Osmond, CPBE, 8-VSB, AMD, CBNT

Most certifications stand-alone; however, some certifications supersede and replace existing certifications.

- CBTE is replaced with CSTE, which is replaced with CPBE.
- CBRE is replaced with CSRE, which is replaced with CPBE.
- CBNT is replaced with CBNE.

Names and Abbreviations

All levels of SBE Certification are placed into specific categories as well. Here are those categories.

**OPERATOR LEVEL**
- Certified Radio Operator (CRO)
- Certified Television Operator (CTO)

**TECHNOLOGIST LEVEL**
- Certified Broadcast Technologist (CBT)

**BROADCAST NETWORKING LEVEL**
- Certified Broadcast Networking Technologist (CBNT)
- Certified Broadcast Networking Engineer (CBNE)

**SPECIALIST LEVEL**
- 8-VSB Specialist (8-VSB)
- ATSC3 Specialist (ATSC3) (coming soon)
- AM Directional Specialist (AMD)
- Digital Radio Broadcast Specialist (DRB)

**ENGINEERING LEVEL**
- Certified Broadcast Technologist (CBT)
- Certified Audio Engineer (CEA)
- Certified Video Engineer (CEV)
- Certified Broadcast Radio Engineer (CBRE)
- Certified Broadcast Television Engineer (CBTE)
- Certified Broadcast Networking Engineer (CBNE)
- Certified Senior Radio Engineer (CSRE)
- Certified Senior Television Engineer (CSTE)
- Certified Professional Broadcast Engineer (CPBE)

So now that you know how to properly list your certifications, be sure to include them when appropriate, including business cards, email signatures, LinkedIn and other online profiles. You can also add the SBE Certified logo.

Need more details on SBE Certification? Find it online at the SBE website. Here are two links to get you started.

sbe.org/certification
sbe.org/about/press-resources

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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

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<tr>
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<th>RECERTIFICATION</th>
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<td>Certified Professional Broadcast Engineer (CPBE) Sergio Beristain, Mexico City, Mexico</td>
<td>Certified Broadcast Networking Engineer (CBNE) Tyler Garner, Roanoke, VA - Chapter 78</td>
<td>Certified Broadcast Technologist (CBT) Tyler Garner, Roanoke, VA - Chapter 78</td>
<td>Certified Broadcast Engineer (CBRE) Paul Shults, Andover, MA - Chapter 11</td>
<td>Certified Broadcast Technologist (CBT) C. Jason Mancebo, Meridian, ID</td>
<td>Certified Radio Operator (CRO) Olin Morris, Seattle, WA - Chapter 16</td>
<td>Certified Broadcast Operator (CBO)</td>
<td>Applicants completed the recertification process either by reexamination, point verification through the local chapters and national Certification Committee approval and/or met the service requirement.</td>
</tr>
<tr>
<td>Certified Broadcast Radio Engineer (CBRE) George MacKnight, Germantown, OH - Chapter 33</td>
<td>Certified Broadcast Technologist (CBT) C. Jason Mancebo, Meridian, ID</td>
<td>Certified Broadcast Technologist (CBT) C. Jason Mancebo, Meridian, ID</td>
<td>Certified Broadcast Radio Television Engineer (CBRTE) Brian Goodman, Eau Claire, WI - Chapter 112</td>
<td>Certified Broadcast Technologist (CBT) Russell Blanchette, Litchfield, NH - Chapter 110</td>
<td>Certified Radio Operator (CRO) Olin Morris, Seattle, WA - Chapter 16</td>
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</tr>
</tbody>
</table>

#### AUGUST EXAMS

- **Certified Broadcast Networking Engineer (CBNE)**
  - Tyler Garner, Roanoke, VA - Chapter 78

- **Certified Broadcast Technologist (CBT)**
  - C. Jason Mancebo, Meridian, ID

### SPECIAL PROCTORED EXAMS

- **Certified Broadcast Technologist (CBT)**
  - Tyler Garner, Roanoke, VA - Chapter 78

- **Certified Broadcast Operator (CBO)**
  - Andrew Harper, Honolulu, HI - Chapter 50

### SBE CERTIFIED SCHOOL COURSE COMPLETION

- **Certified Broadcast Technologist (CBT)**
  - Cleveland Institute of Electronics Mark Smith, Wolcott, CT - Chapter 14

- **Certified Broadcast Operator (CBO)**
  - Russell Blanchette, Litchfield, NH - Chapter 110

### CERTIFIED BY LICENSE

- **Certified Broadcast Operator (CBO)**
  - Kent Verbeck, Minden, NE

### CERTIFIED RADIO OPERATOR (CRO)

- **Certified Broadcast Operator (CBO)**
  - Russel Blanchette, Litchfield, NH - Chapter 110

### CERTIFIED TELEVISION OPERATOR (CTO)

- **Certified Broadcast Operator (CBO)**
  - Andrew Jonas, Graham, TX

### RECERTIFICATION

- **Certified Broadcast Operator (CBO)**
  - Bob Collorn, Bradenton, FL - Chapter 39

- **Certified Broadcast Operator (CBO)**
  - Richard Feinberg, Norman, OK - Chapter 85

- **Certified Broadcast Operator (CBO)**
  - Robert McCormick, Chicopee, MA - Chapter 11

- **Certified Broadcast Operator (CBO)**
  - Michael Petz, Fairview Heights, IL - Chapter 55

- **Certified Broadcast Operator (CBO)**
  - Gordon Stankey, Regina, SK

- **Certified Broadcast Operator (CBO)**
  - Logan Swift, Santa Ana, CA - Chapter 47

- **Certified Broadcast Operator (CBO)**
  - Rachel Copher, Milwaukee, WI

- **Certified Broadcast Operator (CBO)**
  - Joel Hime, Tucson, AZ

- **Certified Broadcast Operator (CBO)**
  - Joe Neubau, Tucson, AZ

- **Certified Broadcast Operator (CBO)**
  - Andrew Schildberg, Tucson, AZ

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MMAP from p. 1

ing the Robert W. Flanders SBE Engineer of the Year award to RJ Russell, CPBE; the James C. Wulliman SBE Educator of the Year award to Fred Baumgartner, CPBE, CBNT, and Roland Robinson, CBTE, CBNT, CTO; the SBE Technology Award to MultiCAM Systems for the Air Bridge; and Best Educational Event to Chapter 37 Washington, DC, for the Next-GEN TV Summit held Jan. 16, 2020.

A special presentation of the SBE John H. Battison Award for Lifetime Achievement was awarded to Mark Persons, CPBE, AMD, CBNT. The announcement of the award was a surprise to Persons, who found out as he was being recognized during the meeting.

The SBE’s two newest Fellow members, Ralph Beaver, CBT, and Jim Leifer, CPBE, were also recognized during the virtual meeting.

The SBE plans to hold its 2021 National Meeting events in October 2021 in Las Vegas during the 2021 NAB Show. Details on the events will be announced as they are determined.
2021 Committee Chairs

At the SBE Membership Meeting and Awards Program, SBE President Wayne Pecena announced the committee chair appointments for the coming year, which were reviewed and approved by the Board of Directors at its meeting on Sept. 22.

Committee Chair
Awards . . . . . . . . . . . . . . . . . Tom McGinley, CPBE, AMD, CBNT
By-Laws . . . . . . . . . Charles “Ched” Keiler, CPBE, 8-VSB, CBNE
Certification . . . . . . . . . Ralph Hogan, CPBE, DRB, CBNE
Chapter Liaison . . . . . . . . . . . . . . . . . Mark Fehlig, CPBE, 8-VSB
Education . . . . . . . . . . . . . . . . . . Geary Morrill, CPBE, CBNE
Fellowship . . . . . . . . . Troy Pennington, CSRE, CBNT
Electronic Communications . . . . . . . . . . . . . Dan Whealy, CBTE
Finance . . . . . . . . . . . . . . . . . . . . . .  Roswell Clark, CPBE, CBNT
Frequency Coordination . Ted Hand, CPBE, 8-VSB, AMD, DRB
Government Relations . . . Kevin Trueblood, CBRE, CBNT
International . . . . . . . . . Zhulieta Ibisheva, CBTE
Membership . . . . . . . . . . . . . . . . . . . . . Steve Brown, CPBE, CBNT
Mentoring . . . . . . . . . . . . . . Chris Tarr, CSRE, AMD, DRB, CBNE
Nominations . . . . . . . . . Roswell Clark, CPBE, CBNT
Publications . . . . . . . . . Jason Ornellas, CBRE, CRO
Social Networking . . . . . . . Kirk Harnack, CBRE, CBNE
Sustaining Membership . . . Fred Willard, CPBE, 8-VSB, CBNT
Technologies . . . . . . . . . Shane Toven, CBRE, CBNT

President Pecena also appointed two directors to serve on the SBE Executive Committee, which also includes all the officers and the past president. Roswell Clark and Geary Morrill were appointed and approved by the Board, and they join Pecena, Vice President Andrea Cummis, Secretary Kevin Trueblood, Treasurer Ted Hand, and Immediate Past President Jim Leifer.

SBE Launches ATSC3 Specialist Certification

In 2018, the Society of Broadcast Engineers tasked itself to create a new specialist certification to cover the upcoming transition to ATSC 3.0. A subcommittee of the Certification Committee, with input from ATSC experts, was created utilizing experts in the new technology, and through the efforts of all those involved, the SBE will be ready to administer the first ATSC3 Specialist Certification exams during the February 2021 certification exam period.

The application to take the exam for the new Specialist Certification is available on the SBE website. Like other SBE Specialist Certifications, an individual must hold a host SBE engineering-level certification. The exam will resemble other specialist exams, having 50 multiple-choice questions and the examinee’s choice of one of two essay questions. The multiple-choice portion of the exam is open book and the internet is allowed. The essay portion is closed book.

The COVID pandemic slowed the process to create the new certification. Delays in administering and evaluating beta test exams were the main slowdown.

There is not yet an SBE CertPreview sample exam available, but that is in development. There is an extensive list of reference materials available for preparation. That list is posted on the SBE website. It was also published in the June 2020 issue of The Signal.

To apply to take the SBE ATSC3 Specialist Certification exam, submit your application the SBE National Office by the Dec. 31, 2020, deadline. More information and the form is available at sbe.org/certification.

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The Integrity and Ethics of Broadcast Engineers

As I write this, the FCC order on digital AM has just been adopted. That is big news. But I am moved to write about another subject for this column, based on a matter now before the Media Bureau at the FCC. The subject is the ethical obligations of broadcast engineers. Having served as SBE General Counsel for 40 years now, I can count on one hand the number of times that the SBE Board of Directors has found it necessary to revoke an engineer’s SBE membership, and still have some fingers left over. This, I think speaks highly of the overall integrity and dedication to ethical principles of the SBE’s membership, and of broadcast engineers overall. In that same amount of time, I can honestly say that I have never had occasion to question the ethical integrity of any of the engineers that work at the Commission. Sure, we have disagreed, often actively, on policy matters, but on technical matters, I can always count on the accuracy and truth of technical findings by FCC staff. This speaks very well of the high level of integrity of the Commission’s engineers.

The only times during my tenure that an SBE member has had that membership revoked were those few cases when an engineer was found as a matter of fact to have violated the SBE Canons of Ethics. The SBE puts a lot of stock in the Canons of Ethics, and rightly so. The SBE’s Bylaws, at Section 3(a), say that “(a)ny Member may be suspended for a period or expelled for cause, such as violation of any of the By-Laws or Canons of Ethics of the Society or for conduct prejudicial to the best interests of the Society.”

The Canons of Ethics have not been revised or amended in a very long time, largely because they don’t need to be; they state principles of conduct for engineers that simply don’t change. The preamble to the SBE Canons of Ethics reads as follows: “Honesty, justice and courtesy form a moral philosophy when associated with mutual interest between human beings. This constitutes the foundation of ethics. Broadcast engineers should recognize such a standard of behavior not in passive observance, but as dynamic principles guiding their conduct and way of life. It is the duty of all broadcast engineers to practice their profession according to this Canon of Ethics.

The keystone of professional conduct is integrity. Broadcast engineers will discharge their duties with fidelity to the public and to their employers, and with impartiality to all. Broadcast engineers must uphold the dignity of their profession and avoid association with any enterprise of questionable character. Broadcast engineers will strive to be fair, tolerant, and open minded.” To me, the key element of this is the obligation of impartiality. It is what gives broadcast engineers the reputation for the highest levels of integrity. Indeed, Section 5 of the SBE Canons of Ethics states: “The Broadcast Engineer will express an opinion when it is founded on adequate knowledge and honest conviction while he or she is serving as a witness before a court, commission or other tribunal.”

Ethical Company

The SBE is not alone in its strong dedication to the highest level of integrity of its members. Article V, Section 3 of the Bylaws of the Association of Federal Communications Consulting Engineers (AFCCE) establishes as a standing committee the “Professional Ethics and Grievances Committee” whose job it is to “consider and report on all efforts to improve the professional conduct and ethics of engineering practitioners in the communications field, make such investigations of professional conduct and of abuses in connection with engineering practice by members and furnish information and make recommendations on the foregoing subjects to the Board of Directors and the Association.” Ethics is obviously a principal focus of AFCCE, which is laudable. So when the integrity and impartiality of a consulting engineer is drawn into question by the FCC, we tend to sit up and take notice. In a proceeding now ongoing in the Media Bureau, a low-power FM station has been accused by a second-adjacent full power FM station of causing interference to listeners of the full-power FM at various points near the transmitter site of the LPFM. In such cases, the accused LPFM is entitled to show that the alleged interference either does not exist or that the LPFM station is not the cause of the interference.

The licensee of the LPFM therefore retained a well-respected consulting engineer (and SBE-certified CPBE) who is located in a different state from the LPFM, to investigate the interference. The engineer did so using accepted methodologies, at all sites where the interference was claimed to have been experienced, and the engineer submitted a written report to the Audio Division, Media Bureau, concluding that no interference was found at the locations where the listeners of the full power FM station reported interference, or even at the transmitter site of the LPFM, where second-adjacent interference potential would be the worst. There was no rebuttal of the engineer’s showing by the full-power FM station.

There are a lot of other facts involved in the case, but the Audio Division’s response to the interference study submitted by the LPFM as a part of its response was this: “We also decline to consider [the consulting engineer’s] interference test results because [the consulting engineer] was retained by [the LPFM] and thus is not an independent party.” It is difficult to understand why the Audio Division concluded, as it did, that all consulting engineers are biased in favor of their client to the point that their work is summarily deemed unreliable. If a licensee is precluded from engaging an independent consulting engineer to conduct a technical analysis and to fairly present the engineer’s technical conclusions, simply because the licensee is paying for the engineering work, how, precisely, is the licensee supposed to address the technical issue presented? This case is now on administrative appeal. It is hoped that the Commission doesn’t really have this low an impression of the ethics, impartiality and integrity of broadcast engineers.
Thanks for the Memories!

It’s an oft-used cliché, but it fits the situation. After 28 years in one position with an organization, there are going to be a lot of memories. Of course, there have been a few I would like to forget and plenty of others I have forgotten. But here are some of the fond memories of people, places and things that I will take with me when I retire on December 31.

After the areas I have spent my life living in, the next place I’ve spent the most time in is Las Vegas, mostly to attend the annual NAB Show. I’ve come in contact with thousands of SBE members over the years who have come by the SBE booth and attended our membership meetings and receptions. I always came away from the show with a renewed appreciation for the enthusiasm broadcast engineers have for their life’s work. We know there are plenty of challenges in this business, but the enthusiasm that broadcast engineers have to roam the exhibit floor isles every year and attend technical sessions to learn about the newest technology is almost boundless, at least until the feet wear out.

My most memorable NAB Show was in 2014, when the SBE celebrated its 50th anniversary. We welcomed back many members to a special membership meeting and reception. It was especially heartwarming to have Jim Wulliman, sixth SBE National President attend. In their 90s, the “Father of SBE Certification program,” and his wife Ginny traveled from their southern Arizona home to be there. He spoke to the crowd, sharing his own memories and thoughts about the SBE.

In 2016, the SBE unveiled its 700-page Broadcast Engineering Handbook during that year’s NAB Show, with a press conference led by SBE President Jerry Massey. A hallmark event for SBE, the book was two years in the making, capably led by Editor-in-Chief Jerry Whitaker with more than 40 subject matter experts contributing – the majority of them, SBE members.

In 1994, the SBE held its first, live national satellite telecast, hosted by Chapter 24 in Madison, WI, during that year’s Broadcasters Clinic. I joined on the panel by SBE President Chuck Kelly, Vice President Terry Baun and SBE General Counsel Chris Imlay. The program was moderated by Chapter 24 Chair Leonard Charles and was supported by a great crew of SBE members who made sure the broadcast came off without a hitch. That program paved the way for the live webcasts the SBE now presents each year, each made possible by local chapter members with support from their stations.

In 2016, the SBE hosted an important Education Summit that brought together a small number of respected engineers within our industry to discuss the educational needs of broadcast engineers, and the business in general. The all-day discussion was hosted by the late John Lyons of The Durst Organization on the 68th floor of the new World Trade Center in New York City. During a break, John led us on a roof-top tour of the broadcast facilities being built.

New York City was also the site in 2002 of a much more melancholy event. I, along with New Yorker and then member of the national SBE Board, Conrad Trautmann, represented the SBE at an event to introduce a new book, Covering Catastrophe. The book recounted the tragic days and hours leading up to, during and after the attacks on the World Trade Center on September 11, 2001, through the experiences of the journalists who covered it. The SBE’s Ennes Educational Foundation Trust Relief Fund was named one of two charitable beneficiaries of the proceeds from the book. The SBE/Ennes Relief Fund itself raised a quarter of a million dollars, all of which went to the families of the six broadcast engineers and technicians who lost their lives while working at the top of the North Tower at the time of the attack.

An Evolving Society

I’ve had the pleasure to work with 15 of the SBE’s 31 presidents. Each brought their own unique contributions to the society. The first was Rick Farquhar, who interviewed me for this job back in 1992, along with Board member Fred Baumgartner. I am thankful they and the Board gave the opportunity to a young guy who was not a broadcast engineer, but rather in the field of association management. Those who followed included Chuck Kelly, Terry Baun, Ed Miller, Andy Butler, Troy Pennington, Ray Benedict, Chriss Scherer, the late Barry Thomas, Vinny Lopez, Ralph Hogan, Joe Snelson, Jerry Massey, Jim Leifer and current President Wayne Pecena.

Through those years the SBE grew in size and stature. In the 1990s there was much attention to growing the already well-established certification program and developing relationships with broadcast engineering professional organizations in other countries. The SBE took a huge leap in 1997 when it began a ten-year relationship with the National Football League to pro-

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FOCUS ON SBE
By John L. Poray, CAE
SBE Executive Director
jporay@sbe.org

Covering Catastrophe
1994: The live national telecast from Madison, WI.

2014: SBE sixth President Jim Wulliman and wife Ginny with SBE Executive Director John Poray during the SBE 50th Anniversary reception at the NAB Show in Las Vegas.
Mark Persons received the SBE John H. Battison Award for Lifetime Achievement during the SBE National Meeting and Awards Program, held online in October. Watch the replay on the SBE YouTube Channel (sbe.org/youtube). He shares some insight into his career and involvement with the SBE. Mark is an SBE life member and has 66 years of broadcast engineering experience.

I Never Had a Plan B

I t never occurred to me that I would be the recipient of the John H. Battison Award for Lifetime Achievement. Looking back, it all makes sense. I knew John as a wonderful outgoing man. He was a Spitfire pilot in the Battle of Britain defending England from the Germans in WWII. Many died. I am glad he lived to be a part of this great organization.

It must be in the genes. My father started in radio broadcast engineering in the mid-1920s at age 17. I was born into the industry in 1947. At age seven, I was learning Ohm’s Law and turning the knobs on our family’s 250 W AM transmitter at WELY in Ely, MN. Then at age 17, I completely wired KVBR Radio in Brainerd, MN, one of our family’s new stations. There was never a doubt that engineering was my life, not just a job.

The only deviation from broadcast engineering came when I enlisted in the U.S. Army in 1966 to complete my obligation to our country. I taught electronics and then was shipped off to Vietnam. That’s when I met Chief Engineer Chuck Kunze. He was a part of this great organization.

Appearance is important. Showing off individuality in a working environment is not good. I made it a point to shave and bathe daily to be like management in a dress shirt, but without a tie. On an overnight job, I wore different clothes the second day. Looking good helped justify charging more than other engineers.

It seemed I’d be a bachelor forever, but then Paula came along. We were married and she brought legal secretary experience to our business. Working 40+ hours a week, Paula took care of the billing and the books. She worked with clients on the phone and handled orders along with shipping and receiving packages.

It was too busy to think about membership in the SBE and missed the deadline to be grandfathered into the organization. One trip was to the 50 kW powerhouse WCCO Radio in Minneapolis. That’s when I met Chief Engineer Chuck Kunze. He was a wealth of knowledge on how the big boys did engineering. Chuck was a mentor. One thing led to another and he got me into the SBE, then gave me the first exam back in 1983. Moving up the ladder with more exams, it was CPBE, AMD, CBNT, and finally Life Certification, as well as Life Membership. The goal was to associate with like-minded people to talk broadcast engineering.

AM radio has always been close to my heart. I built five AM directional systems from the ground up and installed more than 40 C-QUAM AM stereo systems.

Participation in SBE or the industry did not stop after we shut down our business when I was 70. We had already been mentoring two radio broadcast engineers before the SBE Mentor/Mentee Program began. Joining that added two more to the list. The National Radio Systems Committee AM Improvement Working Group brought me into their fold. It is volunteer work and feels good to give back to the industry I grew up in.

The closest SBE chapter to my hometown of Brainerd, MN, is 125 miles south in the Twin Cities of Minneapolis and St. Paul. Attending meetings there took an entire day so it didn’t happen often. One SBE interaction was, and still is, the SBE HF HAMnet Chapter of the Air, hosted by Hal Hostetler, CPBE (WA7BGX) in Tucson. It is an amateur radio gathering on 14.205 MHz on the second Sunday of each month at 2400 GMT. That helped with SBE recertification points.

All broadcast engineers had amateur radio licenses in past years. Those who are not hams today may be missing the knowledge of how radio waves propagate across all frequencies. Seeing both sides of the radio frequency communications equation has helped immensely in my career. The ham radio hobby gives answers to otherwise sometimes perplexing questions in commercial work. It all makes sense.

Designing and building gadgets for stations was a fun part of my life’s work. That included everything from digital timers to microphone preamplifiers to headset amplifiers to microphone mute buttons. Some of my designs wound up being manufactured, starting with the Maxi-Tel Remote Broadcast Telephone, which later evolved into the Zercom Max-Z and Zii. I love to tell stories on the Tech Tips section on my website, mwpersons.com.

Today with the threat of COVID, I attend SBE Twin Cities Chapter 17 monthly meetings via Zoom from my office. That is convenient. To my dismay, the annual chapter summer picnic, at the Shoreview transmitter site, was cancelled this year. I am looking forward to again seeing and talking with engineers in person next summer. Until then, I’ll leave the soldering iron on my workbench.
Member Spotlight: Kenny Elcock

Member Stats
SBE Member Since: 1996
Chapter: 106 Florida Panhandle
Employer: Black News Channel
Position: Director of Engineering
Location: Tallahassee, FL
I’m Best Known For: Having a passion for the industry and technology alike.
Q What do you value most about your SBE involvement?
A Becoming an advocate for men and women who support the growth of our industry day in and day out. The SBE has allowed me to represent many young people of color who aspire to use their technical gifts to serve the industry.
Q What got you started in broadcast engineering?
A I attribute my passion for broadcast to my first mentor, my junior high school principal, James Rodgers. He allowed me to be a member of the AV club in the eighth grade and then recommended me for a part-time after-school technician job at the local cable company, in which he was a silent minority local partner.
Q Who do you consider to be a mentor?
A Doug Garlinger has been a professional and personal mentor since the first day I stepped into his office in South Bend, IN, to take my first certification exam.
Q What do you like most about your job?
A I am driven by the opportunity to pass along technical knowledge and industry experience to other senior engineers and up-and-coming industry changers. Then looking into their eyes or recognizing their body language when they “get it.”
Q When I’m not working...
A ...am mentoring. I am a coach at heart. Coaching molded me into the person I am today. I am blessed and fortunate that many of my previous hires are now chief engineers at many television stations across the nation.
Q What’s something people don’t know about you?
A My family name is derived from an English pet (a rooster). I was born in Trinidad, but the ancestor roots extended through a slave plantation in Barbados.

MEMORIES from p. 11

2011: SBE President Vinny Lopez interviews SBE founder and first President John Battison.

Kenny with his best friend and wife, Leda, going to Sunday brunch and the Grand Ole Opry.

From the SBE staff at the National Office: Congratulations on your retirement. We will miss you as a leader and as a friend. May retirement bring you many happy moments.
~ Megan, Debbie, Scott, Cathy & Chriss
SBE Fellow Nominations Open

by Troy Pennington, CSRE, CBNT
Chair, SBE Fellowship Committee

SBE members: Do you know an SBE member who has contributed to the success of an SBE chapter or the broadcast industry? Has this person exhibited a dedication to the advancement of the broadcast engineer, the field of broadcast engineering and the Society of Broadcast Engineers itself? Someone like this deserves to be recognized for his or her efforts. Consider nominating him or her for the SBE Fellow rank of membership.

Fellow membership is the highest level of SBE membership. It’s a form of recognition for someone who has contributed significantly to the society, the field of broadcast engineering or its allied professions, or by disseminating his or her broadcast knowledge and promoting its application in practice. Eighty-seven members have been recognized with the honor in the society’s almost 57 years of existence.

To nominate a member, candidates must be proposed in writing by a voting member to the Fellowship Committee. The nomination must include a comprehensive professional history of the nominee and an explanation of why the candidate is deserving of this honor. The nomination must also include the written endorsements of at least five other voting SBE members. All nominations are to be kept confidential. No others besides the nominators and the members of the Fellowship Committee should be aware of the nomination. Moreover, the nominee should not be made aware that he or she has been nominated.

Nominations for 2021 must be received no later than March 15, 2021, for consideration. The Fellowship Committee will bring the names of nominees to the Board of Directors for consideration and election at the April 2021 meeting. The SBE secretary will notify those elected. Awards will be presented at the SBE National Meeting and Awards Program during the 2021 SBE National Meeting held during the 2021 NAB Show in Las Vegas. Submit your nominations to Fellowship Committee Chair Troy Pennington, CSRE, CBNT; 6156 Hampton Hall Way; Hermitage, TN 37076, or to tpennington@sbe.org.

Who are SBE Fellow Members?

Visit sbe.org/fellows

EXECUTIVE DIRECTOR from p. 1

University, he was the senior financial analyst at Ascension Technologies, where he managed the operational and capital budgets for Indiana Market and St. Vincent Health system. Other career work includes treasurer and controller at Church of God Ministries and practice administrator at Anderson Family Practice Associates.

Ragsdale earned his bachelor of arts in business management and public affairs at (then) Anderson College, and his masters of business administration in finance from Indiana University.

On the announcement, SBE President Wayne Pecena said, "Following all the extensive work by many people to arrive at the final selection of Jim Ragsdale to be the SBE’s new executive director, I welcome Jim and look forward to working with him to continue furthering the goals of the SBE and providing superior services to our members. I also want to thank SBE Past President Joe Snelson for his work leading the Executive Director Search Committee, and all the efforts of the EDSC and the Executive Director Search Advisory Group members."

Status on the search and review process was reported in previous issues of The Signal. The original field of 28 candidates was narrowed to three finalists, who were all interviewed in person by the committee. The Committee unanimously chose Ragsdale to recommend to the Board.

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Jan. 15, 2021
sbe.org/rebate

Meeting reports determine a chapter’s rebate.

**SBE Certification Exams**
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sbe.org/certification
Application deadline Dec. 31, 2020

**SBE WEBxtra**
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Feb. 15, 2021
sbe.org/webxtra
March 15, 2021
sbe.org/webxtra
April 19, 2021
sbe.org/webxtra

**Members On The Move**

Dustin Hapli, CBNE, is director of technical operations, at Entercom in the Greater Chicago Area. He was previously at Entercom in the Tampa Bay area.

Greg Lesko, CEAV, CBT, is the owner of Lesko Webcasting, Hampton Roads, VA. He was previously with Newport News Public Schools.

Jason Ornellas, CBRE, CRO, is regional director of engineering - West Region for Bonneville International. Based in Sacramento, he oversees stations in Sacramento, San Francisco and Seattle.

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

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