Recruit a New Member During the Membership Drive

The annual Society of Broadcast Engineers membership drive is underway. The drive is an effort to recruit new members to the society, and you can benefit from your recruiting efforts as you help the Society grow.

When you recruit a new member during the Member Drive, you will be entered into the drawing for prizes donated from our Sustaining Members and the SBE. If you recruit a new Sustaining Member, you’ll earn five entries into the prize drawing. And if you recruit three or more Regular or Associate Members or one Sustaining Member you will also receive an upgrade to SBE MemberPlus.

You already know the benefits of being part of the society, so share it with your colleagues. Need a list? Go to tinyurl.com/SBEreasons. The annual SBE Membership Drive began March 1, so recruit someone now through May 31 to be eligible to win a prize. The grand prize is airfare and hotel to attend the SBE National Meeting.

As a further bonus, for every new member you sponsor you will receive $5 off your 2023 dues (up to $25).

SBE Sustaining Members who have contributed prizes are noted on page 14. We thank these SBE Sustaining Members for their support. Start recruiting now, and make sure your recruits list your name on their SBE membership applications so you get the credit. Full details about the Membership Drive are at sbe.org/drive.

SBE Events, Sessions Highlight NAB Show

The NAB Show returns, packed with exhibits, sessions and plenty of opportunities to meet with manufacturers, vendors and colleagues. As you plan to make the best use of your time at the convention, include the many SBE events on your convention calendar. While the Ennes Workshop highlights the SBE’s educational offering on Saturday (see page 8 for more information), the main event for SBE members is the annual Membership Meeting, which will be followed by a reception.

Note that all the SBE events will be held in the Las Vegas Convention Center this year. The new West Hall is now open.

The Membership Meeting will be held on Monday, April 25, at 5:00 p.m. in LVCC room W307/W309. The Membership Meeting brings you up to date on all the SBE activities and programs, and it includes a milestone-service recognition of SBE chapter certification chairs, and updates on the society’s plans, programs and government relations efforts. Everyone attending will be eligible to win prizes, including a Studio Camera 4K Pro (courtesy of the Membership Meeting sponsor Blackmagic Design), three restaurant gift cards, and two SBE-logoed hats. You’ll want to get to the meeting early as well, because the first 125 people in attendance will receive an SBE-logoed tote bag.

The Membership Reception starts immediately after the meeting at 6:00 p.m. in room W211/W212. Light snacks and drinks are made possible from the generous support of several Sustaining Member sponsors. Lots of prizes will also be awarded, including gift cards, broadcast equipment and Maine lobsters. Check the list of event sponsors on page 9 of this issue.

The SBE booth is LN4, which will be located in the North Lobby of the LVCC. Be sure to check the complete event schedule on the SBE NAB Show events page on our website (sbe.org/nab), which is also linked from the home page.

Another helpful resource to plan your convention time is our SBE Sustaining Member Online Resource Guide (sbe.org/guide). All these sources provide details for SBE committee meetings, the board of directors meeting, SBE certification exams, and the daily booth prize drawing.
OVERVIEW

Experts since 1997, QCommunications was officially founded in 2006 and has since worked on a range of diverse projects, providing clients with extensive support and quality services in the REPACK FCC program. After recognizing the need, QCommunications recently expanded, adding the Veteran owned and operated QForce Airborne Division. With QForce, we now also offer a wide range of services in the broadcast and cellular infrastructure, employing a variety of terrestrial and aerial platforms to fulfill all the data collection and deliverable needs of the client. Utilizing decades of industry experience and invaluable knowledge, QForce is your go-to resource for all of your needs.

- QForce leverages proven Unmanned Aerial Systems (UAS’s) technology tested globally state-of-the-art RF analyzer and antenna equipment to produce a full Comprehensive Coverage Verification via Field Study.
- QForce’s multiple point and at height inspection process allows for real time/accurate, non-interpolated data.
- QForce pilots are meticulously trained for months and FAA certified via the Part 107 Commercial Unmanned Aerial Pilot License.
- QForce uses customer fabricated and RF shielded American manufactured Unmanned Aerial Systems.
- QForce is fully licensed and insured in multiple industries.

QForce leverages proven technology of the course of years of development inclusive in all services we provide. QForce is operated in a para-military structure and follows explicit guidelines and procedures, thus producing complementary deliverables with the least amount of risk to our customers, surroundings, and QForce Teams.

- RF Engineering - Broadcast Pattern Verifications Coverage Verifications
- Broadcast Tower Mapping RF Mapping Construction Drawings
- PSAP Verification (Q3/2021) Rehome E911 Accuracy Testing KPI Accuracy TXT2911 Rehome
- COW (Q4/2021)
  Drive Testing Pre-Post Swap Cluster Testing Single Site Verification Troubleshooting Pre-launch Cluster Operations
- Site Survey/Tower Studies 3D Digital Twins/Photogrammetry Models 3D/2D Geo-mapping/Site Survey Infrared/Thermal Inspection
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Board of Directors

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SBE Awards: Nominate Today!

Who will be the next Robert W. Flanders SBE Engineer of the Year award recipient? Perhaps you know someone worthy of the honor. Nominate that person today. Individuals can also be nominated directly for the national award. National award nominations need to be submitted to the National Office by June 15.

Also, Chapter Engineer of the Year award recipients, nominated by SBE Chapters, are automatically entered into consideration for the Robert W. Flanders SBE Engineer of the Year award. Each chapter can establish its own criteria for the chapter award.

There are other honors as well. The James C. Wulliman SBE Educator of the Year; the SBE Technology Award; Faculty Innovation of the Year; Best Technical Article, Book or Program by an SBE Member; Best Article, Paper or Program by a Student Member; and the Freedom Award are among the accolades. There are also a series of statistical awards.

Of the 13 awards recognizing chapters that are presented each year, a local chapter or SBE member submits nominations for 10 of them. Many SBE members are highly qualified and deserving of recognition. Likewise, many chapters do an excellent job promoting the ideals and goals of the SBE. Please nominate these members and chapters so they can receive the recognition they deserve.

For more information about all the SBE National Awards, visit sbe.org/awards or contact Megan Clappe at the national office or by email at mclappe@sbe.org. Recognition by your peers is the highest honor. Honor your colleagues today.
Finding the Next Generation of Broadcast Engineers

As long as I've been going to SBE meetings (far too many years to mention), one of the regular topics of discussion has been, “Where are the new broadcast engineers going to come from? How do we find young engineers and get them interested in what we do?”

As many of us head towards retirement, there are very few people interested in filling our positions. Many engineers retire only to come back as consultants since there is still a need for engineers, but new talent is hard to find. For people studying engineering, it may be more attractive to become a software engineer and work regular hours behind a desk, instead of having to be on call 24/7 and work really hard for comparatively little pay.

An old friend of mine, Andy Gladding, has taken a big step towards solving this problem. I met Andy many years ago when he was a radio engineer at Fox Network in New York City. I had been hired to design the new XM radio rooms, and I was lucky enough to work with Andy on installing the Enco radio servers. We've been friends ever since.

After working at many places in the New York City area, Andy is now the chief engineer of Salem Media of New York where he works on shows such as The Mike Gallagher Show, AM 970s, The Joe Piscono Show, and the Kevin McCullough Radio Program, as well as handling all engineering planning and maintenance responsibilities for the New York cluster.

Andy went to college at Hofstra, and he has also worked as the chief engineer for Hofstra University radio station WRHU since 2015. The station is part of the Lawrence Herbert School of Communication (LHSC), which is a full-service institution, providing students training in journalism, media studies, public relations, audio/ radio, television and film.

Over the last few years, Andy and his colleagues at the radio station and university have expanded an old program from when Andy was a Hofstra student: WRHU Engineering’s Tech Thursdays. Their sessions have ranged from training workshops that teach basic skills such as soldering and cable termination to broadcast hardware troubleshooting, systems design and transmission systems construction. I was the guest speaker at one session to introduce the students to the SBE. This program is helping students find internships in broadcasting including working with WABC-TV’s engineering department.

The Society of Broadcast Engineers is working with Andy to create a student chapter at Hofstra. This will give the students an opportunity to be introduced to the many engineers in the New York City chapter, as well as the ability to participate in all the meetings to prepare for SBE certification exams, and of course membership gives the students access to SBE JobsOnline. SBE15 in New York City is actively working with Andy to set up SBE certification exams at Hofstra this spring to make it easy for all the students in the broadcast engineering program to obtain their first SBE certifications. They already have almost 40 students interested in testing!

Other projects Andy and the Hofstra group are discussing with SBE15 include:

- To have a space that serves as an official SBE NY chapter satellite office with the intent of welcoming all SBE engineers to campus at any time to use the facility and interface with students.
- To hold regular workshops, trainings and other presentations that could involve some hands-on activities for the students.
- Host a full-blown broadcasting day. This would be a day of networking with hiring managers, vendors and other areas of interest. This could potentially be the same day as certification testing at Hofstra every semester when possible.

I look forward to the SBE working with other colleges with communications departments to create similar programs all over the country so we can find and train people interested in broadcast engineering and help them find jobs when they graduate, and ultimately a great career they will love.

2022 SBE Leadership Development Course Set for August

The SBE has set the date for the 2022 SBE Leadership Development Course in Atlanta: Aug. 3-5. Make plans now to take part in this SBE tradition that started in 1965.

Specifically designed for broadcast engineers who have or aspire to have management responsibilities, the SBE Leadership Development Course is for technically adept people to acquire and develop skills for sound leadership, supervisory and management skills. The course is equally beneficial for those who are already in management and for those without prior management or supervisory experience.

The cost is $670 for SBE Members and $725 for Non-Members. Look for details and register at sbe.org/ldc. Questions? Contact Education Director Cathy Orosz at 317-846-9000 or coroasz@sbe.org.
Webinars by SBE Launches CBNT/CBNE Series

Things certainly changed as a result of the pandemic. It accelerated many changes already underway, none more than IT-centric solutions replacing wide swaths of broadcast infrastructure. The Certification Committee developed the CBNT and CBNE certifications to indicate proficiency with this technology, and SBE Past President Wayne Pecena, CPBE, 8-VSB, AMD, ATSC3, DRB, CBNE, developed day-long study sessions to advance the knowledge of our members. The pandemic canceled such in-person educational events, even though the need for this knowledge has become more acute.

As a result of conversations within and outside the SBE Education Committee, Wayne has developed an alternative that puts this knowledge in the hands of anyone having access to an internet connection. And it’s been enhanced to address recent trends in implementation. I spoke with Wayne about a new Webinars by SBE series available starting this month.

Wayne: [Study topics sessions] were originally presented across the country, all in-person as opposed to being online, and a full day in length.

Geary: So now you’re presenting these study topics in an eight-part webinar series.

Wayne: Each lecture will be an hour, with questions at the end [of the session]. The very first webinar will cover a bit of an introduction, with background of the two certifications and their requirements. The last session will include a review of the material presented throughout.

Geary: And the way these sessions are scheduled, someone who is going for a certification will be able to take that exam relatively soon after the last session.

Wayne: Yes, technically within three days. There’s an application deadline in June for the August exam window [at local chapters]. There’s a reminder in each session for folks wanting to get certified [upon conclusion] to submit their application in time. This will be similar to those in-person sessions.

Geary: The August exam deadline is June 10 for applications. Of course, some folks may not want to commit to the August exam until they’ve gone through all eight sessions, and there is another exam window in November.

Wayne: There’s nothing that keeps them tied to the August timeframe. And if you’re just interested in the knowledge without taking an exam, these [sessions] are pretty comprehensive. There will be recommended reading assignments. Expect to spend two to three hours of self-study. Obviously if you don’t do them, you don’t do them. But there’ll be some resources there.

Geary: Unlike study session of the past, folks can go back and review each sessions as many times as they like, because they’re all “in the can.”

Wayne: Absolutely. If someone says he can’t be there for eight [live sessions], they’re all available on-demand. You can simply go back, and there’s a handout package with all the slides, a summary of reference information and 10 takeaway bullet points for each session. I’ll also include summary questions of the material at the end of each session.

I originally thought there wouldn’t be any new material, but there is new material. If you look at my other webinars, everything is focused on IP networking or cybersecurity. There’s a lot of stuff beyond that in a broadcast environment, like digital media workflows, metadata and digital storage. And interfaces like RS-232 and RS-485, and mod bus, which a lot of remote control manufacturers like to use. Plus AES67. So if we’re going to do all that, I might as well include some Dante, Livewire and Wheatnet info. In preparing for SBE Certification, there’s also cabling and Wi-Fi. It’s a real balance between prep study for an exam and expanding one’s overall knowledge of IT in a broadcast environment.

I really want to emphasize that I do not have any insight into the question pool on the actual certification exams. Yes, I have seen the CertPreview. Yes, I have taken both exams.

Geary: I can confirm that I felt well prepared for taking both the CBNT and CBNE exams based on the material covered in the in-person study sessions I attended, as well as reference material that were recommended. Is there anything else we should make sure people understand that are using this series towards their certification?

Wayne: I think we want to emphasize we’re trying balance between serving two [certification] audiences. One focused on either or both certifications. Obviously, you could get a CBNT first and get the CBNE after. You might even skip the CBNT altogether potentially. Because the CBNE is a “professional level certification” it has an experience requirement of five years, like CBRE- or CBTE-level exams.

Geary: When the shift to IT-based technology started, there were some who jumped on board immediately, and others who didn’t. For the latter, this is going to be a great opportunity to get up to speed in a user-friendly manner, as they can take in this info as they wish.

I look forward to the new series reaching an even larger percentage of SBE membership.

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.
Volunteer Service Recognized

The SBE is made up of a multitude of volunteers. There are six employees who work at the National Office, but the real momentum of the SBE is because of those who dedicate their personal time to further the goals and objectives of broadcast engineering through the SBE. This includes, but is not limited to the Board of Directors, all the various SBE committees in addition to the Certification Committee, and the local chapters including the chapter certification chairmen.

Every year at the annual membership meeting during the NAB Show, the SBE recognizes the local certification chairs who devote volunteer time to the Program of Certification. These local certification chairs receive a plaque on their recurring five-year anniversaries. What follows is a list of those who will be recognized in April.

Thank you very much to all the volunteers who devote so many hours to the SBE and the certification program!

National Certification Committee
Hal Kneller, Jr., CPBE, AMD, DRB, CBNE: 10 years
Cris Alexander, CPBE, AMD, DRB: 15 years
David Priester, CPBE: 15 years

Still Time to Renew Your SBE Membership

It is still not too late to renew your membership in the Society of Broadcast Engineers and retain your membership benefits. If you are a Member, Senior, Student, Associate or Fellow member, you may renew online at sbe.org. Click on “Renew Membership” in the upper right-hand corner of the website home page (or the hamburger drop-down menu on a mobile device). The online system is available 24/7, is secure, and accepts Visa, MasterCard and American Express. The system automatically generates a receipt, sent to your email address. You will need your member number and website password to access the renewal system, but if you don’t have them handy, there is an automated retrieval system available to you on the renewal page.

When renewing, consider joining more than 1,000 fellow SBE members who have chosen the SBE MemberPlus option over the past year. For $175, the SBE MemberPlus option provides all of the benefits of traditional membership, plus access to all archived SBE webinars and all new SBE webinars produced through March 31, 2023. That’s more than 100 webinars covering a broad range of broadcast/media technology, regulatory and safety topics.

You may also renew your membership by mail, completing and returning the renewal form and your payment to the SBE national office: Society of Broadcast Engineers, 9102 N. Meridian Street, Suite 150, Indianapolis, IN 46260; or by fax at 317-846-9120.

Traditional and MemberPlus Members

Membership renewal was due April 1. SBE By-laws provides for a three-month grace period (extends through June 30). If you chose the SBE MemberPlus option in 2021 and you did not renew by April 1, be aware that your SBE MemberPlus option benefits ended on April 1, 2022, and your membership was automatically converted to traditional membership for the duration of the grace period. If you renew during the grace period (or after), you can restore your free access to all SBE webinars by taking the SBE MemberPlus option.

Chapter Certification Chairs
Paul Holzwarth, CBTE: Chapter 6
Doug Garlinger, CPBE, 8-VSB, ATSC3, CBNE: Chapter 25
James Arcaro, CPBE: Chapter 70
Michael Echenique, CSTE: Chapter 131

James C. Campbell, CPBE: Chapter 103
Rusty Armitage, CPBE: Chapter 113

Dennis Vigil, CSTE, 8-VSB, CBNT: Chapter 34
Elvir Hadziselimovic, CSTE, 8-VSB: Chapter 62
Philip Mowbray, CPBE: Chapter 81
Brett Lockhart, CPBE: Chapter 85

Mark Simpson, CPBE, AMD, DRB, CBNE: Chapter 32

Robert Locke, CPBE, CBNT: Chapter 3
Donald Strauss, CPBE: Chapter 55
James Leedham, CPBE, CBNT: Chapter 74

Mark Quella, CPBE: Chapter 11
James Hermanson, CPBE, CBNT: Chapter 24

Thomas Alderson, CSTE: Chapter 21
Rick Ryan, CPBE: Chapter 28
Robert Bell, CPBE: Chapter 30
Brian Morgan, CPBE: Chapter 49
Carl Davis, CPBE: Chapter 93

Robert Good, Jr., CPBE: Chapter 41
Robert Venditti, CSRTE: Chapter 43

The answer is E

SBE Certification Achievements

CONGRATULATIONS

LIFE CERTIFICATION

Certified Professional Broadcast Engineer (CPBE)
- James Kauffman, Ocoee, FL - Chapter 42
- John McKinley, Gahanna, OH - Chapter 52
- Daniel A. Kaiser, Pittsburgh, PA - Chapter 8
- Cheryl Andrus, Columbus, OH - Chapter 28
- Christopher Frey, Medford, MA - Chapter 11
- Mark Watson, Albany, OR

Certified Broadcast Networking Technologist (CBNT)
- Mark Watson, Albany, OR

Certified Broadcast Technologist (CBT)
- Steven Beltzel, Trenton, OH - Chapter 33
- Gregory Beveridge, Thornton, CO - Chapter 48
- Peter Fountain, Lititz, PA - Chapter 22
- Michele Muller, San Mateo, CA - Chapter 40
- Mark Watson, Albany, OR

Certified Television Operator (CTO)
- Mark Watson, Albany, OR

Certified Radio Operator (CRO)
- Mark Watson, Albany, OR

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.

CERTIFIED PROFESSIONAL BROADCAST ENGINEER (CPBE)

FEBRUARY EXAMS

Certified Broadcast Radio Engineer (CBRE)
- Ron Davis, Nephi, UT - Chapter 62
- Certified Broadcast Telecommunications Engineer (CCTE)
- Scott Spengler, Provo, UT - Chapter 62

Certified Broadcast Networking Technologist (CBNT)
- Walter Lanier, Killeen, TX

SPECIAL PROCTORED EXAMS

Certified Broadcast Networking Technologist (CBNT)
- Ryan Cox, Bonney Lake, WA - Chapter 16

CERTIFIED RADIO OPERATOR (CRO)

Certified Broadcast Radio Engineer (CBRE)
- Ben Endow, Phoenix, AZ - Chapter 9
- Robert Weller, Washington, DC - Chapter 37

Certified Video Engineer (CVE)
- Alex Voss, Farmers Branch, TX - Chapter 62
- Certified Broadcast Telecommunications Engineer (CCTE)
- Derick Abbey, Rochester, NY

Certified Broadcast Networking Technologist (CBNT)
- Walter Lanier, Killeen, TX

CERTIFIED TELEVISION OPERATOR (CTO)

Certified Professional Broadcast Engineer (CPBE)
- Kaylin Arnold, Cave City, AR
- Nathaniel Ayers, Cave City, AR
- Christopher Bunch, Cave City, AR
- Austin Burba, Cave City, AR
- Cayden Burrow, Cave City, AR
- Caleb Cates, Cave City, AR
- Andrew Doyle, Cave City, AR
- Adrian Finney, Cave City, AR
- Brianna Finney, Cave City, AR

Certified Broadcast Networking Technologist (CBNT)
- Ivyette Galan, Cave City, AR
- Matthew Holliday, Cave City, AR
- Christian Jacobs, Cave City, AR
- Thomas King, Cave City, AR
- John Mahan, Cave City, AR
- Hunter McCain, Cave City, AR
- Joey Miller, Cave City, AR
- Michael Oswald, Cave City, AR
- Wyatt Prince, Cave City, AR

Certified Broadcast Radio Engineer (CBRE)
- Darrell McCalla, Vestavia, AL - Chapter 68
- Stuart Muck, Fond du Lac, WI - Chapter 80
- Friend Weller, Logan, UT - Chapter 62

Certified Broadcast Telecommunications Engineer (CCTE)
- Joseph Addaline, JR, New Smyrna Beach, FL - Chapter 42
- William McKenney, Middlefield, OH - Chapter 70
- Rick Morris, Wilmette, IL - Chapter 26
- Scott Nielsen, Layton, UT - Chapter 62
- Anthony Pfeifer, Pleasant Gap, PA - Chapter 15

Certified Audio Engineer (CEA)
- Mark Dubosky, Jacksonville, FL - Chapter 53
- Darrell McCalla, Vestavia, AL - Chapter 68
- Robert McKenzie, Laurel, MD - Chapter 132
- Seth Morth, Lebanon, PA - Chapter 41

Certified Video Engineer (CVE)
- Jonathan Bernstein, Washington, DC - Chapter 37
- Darrell McCalla, Vestavia, AL - Chapter 68
- William McKenney, Middlefield, OH - Chapter 70

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- Darrell McCalla, Vestavia, AL - Chapter 68
- William McKenney, Middlefield, OH - Chapter 70
- Arthur Reis, New Lenox, IL - Chapter 26
- Matt Rogers, Mason, OH
- Dennis Vigil, Albuquerque, NM - Chapter 34

Certified Broadcast Technician (CBT)
- Matt Antalek, Lancaster, MA - Chapter 11
- Ronald Castro, Petaluma, CA - Chapter 43
- Marc Fenton, Moreno Valley, CA - Chapter 131
- R. Allen Fowler, Murray, KY - Chapter 103
- Daniel Gonzales, Simi Valley, CA - Chapter 47
- John Kamps, Napa, CA - Chapter 40
- Darrell McCalla, Vestavia, AL - Chapter 68
- John O'Brien, La Canada, CA - Chapter 47
- Ryan Phillips, Seattle, WA - Chapter 16
- Joshua Rule, Myrtle Beach, SC - Chapter 107
- Stephen Tuzeneu, Middletown, CT - Chapter 45
- Billy Volek, Sioux Falls, SD

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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.

CERTIFIED PROFESSIONAL BROADCAST ENGINEER (CPBE)

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- Matt Rogers, Mason, OH
- Dennis Vigil, Albuquerque, NM - Chapter 34

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- Billy Volek, Sioux Falls, SD

Got your SBE Certification pin? sbe.org/pins

2021 SBE Compensation Survey Open

The SBE is conducting its seventh (and ongoing) compensation survey. Launched to provide practical information to SBE members about individual compensation (salary and benefits) based on facilities, market size and years of experience, SBE members will have access to the full report.

While each annual survey has seen a successful response rate, your participation is important to provide the large sample pool for the most reliable results.

All survey responses are anonymous. Find the survey link in email communications and on the SBE website. With your help we can provide a useful and practical resource to SBE members.

Highlights of the survey will be reported in The Signal. The full report will be available for download to members from the SBE website. Take the survey today.
The SBE Ennes Workshop
Saturday, April 23, 2022 | LVCC W311/W313

10:35-10:40 a.m.
Welcome
Tom Mikkelsen
Opening comments
SBE Executive Director Jim Ragsdale

10:40-10:55 a.m.
Technology Road Map Update. A review of the variety of advanced technology solutions and their progress for implementation into the broadcast and network architectures.
Stan Moote, CTO, IABM

10:55-11:15 a.m.
What’s New and What’s Old with ATSC panel discussion. Planning ATSC 1.0 Sunset, continuing update on the progress of ATSC 3.0 and Nextgen TV.
Joe Addalia, Director of Technology Projects, Hearst
Del Parks, President of Technology, Sinclair
Tom Mikkelsen
Stan Moote, CTO, IABM

11:15-11:35 a.m.
Virtual LED Walls Sets panel discussion
Stan Moote, CTO, IABM
Rob Fowler, Director of Business Development, Brompton Technology
Tom Shelburne, Executive VP - Sales & Operations, Mo-Sys Engineering

Tom Mikkelsen and Stan Moote are the co-chairs/moderators of the SBE Ennes Workshop.

SBE EVENTS

SBE Certification Committee Meeting
Saturday, April 23, 2022
6:30 p.m. - 10 p.m.
LVCC W210

SBE Board of Directors Meeting
Sunday, April 24, 2022
8 a.m. - 12 p.m.
LVCC W210

SBE Education Committee Meeting
Sunday, April 24, 2022
2 p.m. - 3 p.m.
LVCC W210

SBE Membership Meeting
Monday, April 25, 2022
5 p.m. - 6 p.m.
LVCC W307/W309

SBE Member Reception
Monday, April 25, 2022
6:15 p.m. - 7:15 p.m.
LVCC W211/W212

SBE Daily Booth Drawing
Sunday and Tuesday in booth LN4 at 5:00. Monday during the SBE Membership Meeting.

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BOOTH W6311

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Spring Brings Changes: A Play in Three Acts

**Act 1: The Bar**

It’s the same old story: A DJ, a baker, and a bagpiper walk into a bar... You know how this one ends. The bagpiper calls it a day, and the DJ and baker attempt to fill the piper’s ghillie brogues as they slog through the regulatory bog. (Or something like that.)

We are grateful to Chris Imlay (obviously the bagpiper) for his multiple decades of service to the SBE, and we, the DJ (Coe) and the baker (Stephen), are honored to have the opportunity to bring our multiple decades of broadcasting legal experience to the table to serve the regulatory legal needs of the SBE. Chris may have taken his final curtain call for the SBE, but we’re pretty sure that we’ll continue to bump into him backstage with his VIP pass. Thank you Chris!

**Act 2: The Bank**

Not for nothing, as of this writing a hot-off-the-presses FCC Public Notice announced that repacked/displaced television stations would be allocated their full 100 percent verified expenses for their channel change projects. While this is one of few pieces of good news to come out of the Broadcast Incentive Auction (and post-Auction transition), it deserves mention that, for most broadcasters, the Auction wasn’t so much about money as it was about the loss of irreplaceable spectrum and further crowding of the UHF band that stations had come to rely on in many markets for wireless mics operations.

**Act 3: The Blank**

Speaking of wireless mics operations, we want to catch you up briefly on TV white spaces developments (TVWS). While the continued increase in the quantity of local broadcast news and live sports and entertainment events has escalated demand for wireless microphones equipment and resulted in more wireless mics usage (both scheduled and unscheduled), it is curious (not to mention frustrating) that the FCC continues to mollycoddle the TVWS industry, which has a quantity of end-users that can be counted merely in the hundreds nationwide despite nearly 15 years of efforts by the government to foster their implementation, while hindering broadcaster use of wireless mics during newsgathering and other activities.

On January 25, 2022, the FCC adopted its latest TVWS order. In the FCC’s opinion – and it’s not at all clear that SBE would completely agree – the January 2022 order “will provide additional certainty to white space device users, manufacturers and database administrators to enable unlicensed white space devices to operate efficiently and protect other spectrum users, in particular wireless microphone users.”

Among the multiple issues addressed by the January 2022 order, probably the most important is the elimination of the previously-adopted-but-never-implemented requirement for databases to push channel availability notifications to fixed and personal/portable (Mode II) TVWS devices to help guard against interference with licensed wireless microphones. The FCC replaced the push notification requirement with a rule that requires TVWS devices to re-check the database more frequently, with the exception of narrowband and mobile white space devices. The FCC also rejected an NAB challenge to a particular database administrator.

Background. For almost 15 years now, the FCC has been progressively making TVWS available for unlicensed operations. Such unlicensed operations are conducted via white space devices, which provide or facilitate the deployment of wireless services such as broadband. Because unlicensed white space operations have the potential to cause harmful interference to existing, licensed broadcast and wireless microphone operations, the FCC has adopted rules both limiting the scope of permissible unlicensed operations and requiring white space devices to regularly check certain databases to ensure that their operations are taking (or will take) place on a viable, available channel and at a permissible power level.

The FCC’s rules provide for three classes of white space devices: fixed, mobile (within a defined geo-fenced area), and personal/portable (unspecified locations that may change). Personal/portable TVWS devices operate in either Mode I or Mode II. A Mode I device does not have internal geo-location and databases access capability, and must access the database from either a fixed TVWS device or a Mode II personal/portable device. A Mode II device uses internal geo-location and database access functionality.

Prior to the January 2022 order, the FCC required all TVWS devices to contact a white space database at least once per day, and if a device could not contact a database on a given day, it was required to cease operation after 11:59 p.m. the next day if it was still unable to contact a database. Because wireless microphone usage generally changes more frequently than once daily, the FCC adopted (but did not implement) rules that also would have required TVWS databases to push changes in channel availability to fixed and personal/portable (Mode II) TVWS devices when a licensed wireless microphone is registered on such TV channel(s).

Database Recheck Frequency for Fixed and Personal/Portable Devices. In the January 2022 order, the FCC acknowledged that the push notification requirement was problematic, including because there were insufficient technical assurances that TVWS devices would actually receive push notifications. Accordingly, the FCC eliminated the push requirement for certain TVWS devices and replaced it with a more-frequent database recheck requirement. Specifically, the January 2022 order requires that fixed and personal/portable (Mode II) white space devices (except for narrowband devices) (i) re-check the white space database at least once every hour when not in sleep mode, and (ii) cease operations after two failed scheduled checks. In adopting the new hourly re-check requirement the FCC rejected the NAB’s and Shure Incorporated’s request to require re-checks every 20 minutes.

As for narrowband (bandwidth of no greater than 100 kHz) and mobile devices, the daily re-check interval continues to apply for now (such devices were not subject to the now-eliminated push requirement). However, in the January 2022 order, the FCC is seeking comment on whether these devices should also be required to re-check the white space database more frequently.

**LINKS**

Incentive Auction Public Notice

FCC TVWS Order

Temporary BAS Receive Sites
usa.wavedb.com/temporarybas

White Spaces Devices Database
usa.wavedb.com/lownetworkauxilarystations

see CHANGES, p. 11
Getting To Know You (Continued)

In the last issue of The Signal, I talked about how I wanted to learn from our members what your needs are. As we approach refreshing our strategic plan, we can’t do that without knowing what our members’ needs are. In addition, we need to find those who might benefit from being members of the SBE and find out what their needs are. Over time, we have the capability of delivering new certifications that prove the expertise of our members and the knowledge to offer educational classes that strengthen our members.

As I mentioned in the last article, I believe that the strength of the SBE is in its chapters. You know the industry, the people working in the industry, and the changing technology that you develop and implement. Each month, I get excited when I receive chapter reports and see the technologies that you are learning about in your meetings. I would encourage you to meet as often as possible this summer. This is a time when you can have picnics and outdoor barbecues. I even saw a report of a fishing contest. The meeting options are so much greater in the warmer months. If your chapter is having difficulty getting together, consider having a joint meeting with another chapter. Also, if you need an educational program, check out the list of SBE Sustaining Member speakers at sbe.org/speakers.

I committed in that article to hosting an open Zoom monthly meeting reserved for the purpose of member communication with the National Office. I want that time to be without an established agenda, leaving time for chapter leaders and members to ask questions. If I don’t know the answer, I will commit to finding the answer and sharing it in the next Zoom monthly meeting. I want this meeting to be a time for respectful dialogue. I hope to learn more about what we as an organization can do to further the profession of broadcast engineering. I look forward to hearing from many of you during these meetings. If you are a chapter chair and haven’t received that Zoom link email, please send me a message at jragsdale@sbe.org.

We are in our final preparations for the NAB Show, and I am hopeful that I will see many of you there. This will be my first NAB Show and I know that it will be unlike any previous event. The SBE will have its usual booth, Certification and Education Committee meetings, our spring Board meeting, the spring Membership Meeting, and the SBE Member Reception. Any member is welcome to sit in on the board meeting, attend the membership meeting, and mingle at the reception. I’ve watched a few of the past membership meetings on YouTube. It’s great to see outstanding chapters and broadcast engineers celebrated for their accomplishments.

Future Events

This summer, I am looking forward to hosting almost 30 registrants for our Leadership Development Course in Atlanta, GA. This event happened annually until the pandemic interrupted our schedule in 2020. It is on again this year and it will be held Aug. 3-5, 2022. This three-day course is an intensive study of successful leadership and management, designed specifically for broadcast engineers. This course will give me the chance to hear from a mix of members and non-members about the demands of your career and how the SBE can equip you for growth. Get more info at sbe.org/lkc.

In the late summer, we will hold the SBE National Meeting (which includes the fall Board meeting and Membership Meeting) in conjunction with the SBE Chapter 22 Expo. The Board Meeting will be on Sept. 28 and the Membership Meeting will be on Sept. 29 at the Ramada by Wyndham in Liverpool, NY. If you are located nearby, and especially if you aren’t able to attend the NAB Show in the spring, it would be great to meet you at the SBE National Meeting. I think it’s great that we have two opportunities each year to get face-to-face and share what is going on in the broadcast engineering industry. I want to meet as many of you as possible at these events and hear your dreams for the future of the SBE.

As we return to familiar activities that we haven’t been able to enjoy for a couple of years, I hope that brings some anticipation and excitement for reconnecting with old and new friends. I’m certainly looking forward to getting acquainted with many of you and hearing from you. I need your input, the SBE needs your input, and your peers need your input. Thank you for being involved with us.
Create a Winning SBE Chapter Website
Telling the story of an organization on the internet.

You may have noticed that Twin Cities Chapter 17 website took top honors from the SBE in 2021 for Best Chapter Communication, which includes the chapter website. The truth is that web writing is not difficult. Anyone with a willingness and desire to learn can do it. It can even be fun.

I took on the volunteer job of writing sbe17.org after the chapter’s 2019 summer picnic. It started out with basic HTML code, which was difficult to write. The site looked fine on desktops but did not display well on smartphones and tablets.

This got me to looking at Wix, Weebly, Godaddy and even Wordpress. I settled on weebly.com. There are better tools, but I thought they were more difficult to learn and use.

With Weebly, there is no software on the webmaster’s computer. The writing is all cloud-based. Almost any non-technical person can make it work. Text boxes, photos, and other elements are drag-and-drop from a menu onto a page. That includes a search box, which is very convenient for web visitors. The Weebly theme I picked keeps menu choices at the top of the screen, regardless of how far a web visitor has scrolled down a page.

The Chapter 17 website has stories from past meetings for those who could not attend. Everyone loves a story. Think of the website as storytelling about the organization and what it does. Websites are information resources for members and the world.

One catch is that websites need to be updated frequently by a chapter member. It is a job just like chapter chairman and other chapter roles. A site with outdated information can be a black eye for an organization.

Seven Easy Steps to Maintain Your Website

1. **Choose the right website builder**
   Success starts with the right foundation.

2. **Update Regularly**
   Maintain the website so visitors know your chapter is up and running.

3. **Give it a Makeover**
   Visitors will quickly exit if the site is outdated or poorly formatted.

4. **Review your content**
   Don’t publish without editing and reviewing a couple of times.

5. **Optimize the Website for SEO**
   Search engine optimization will help deliver a consistent flow of traffic to your site.

6. **Create a Sense of Community**
   Commenting systems increase traffic. Chapter leaders should participate in the commenting.

7. **Use Social Media**
   Social media is a top traffic source for many websites.

Source and more detail: Lifehack.com tinyurl.com/website7steps

As an SBE mentor, I’ll be glad to help others wanting to do this for their chapter. If your chapter needs assistance with SBE logos or other media for the chapter website, contact SBE Member Communications Director Chriss Scherer, CPBE, CBNT.

Nominations Committee Seeks Board Candidates

By Roz Clark, CPBE, CBNT

The SBE Nominations Committee is beginning its work to assemble a slate of candidates for the upcoming SBE election. I have again been appointed to chair the Nominations Committee.

The SBE Nominations Committee seeks qualified candidates who are voting members (Member, Senior, Fellow or the designated representative of a SBE Sustaining Member) in good standing (dues paid). Candidates must hold an engineering level of SBE certification (CBT or higher, or CBNE) and maintain it the entire duration of service on the Board, if elected. Candidates should have a desire to serve and lead, not only as a member of the board, but through service as a national committee chair or member. Members of the Board are “at large,” meaning they represent all members, not any one specific region, state, city or chapter.

Members of the Board are expected to attend two meetings each year; in the spring, held during the annual NAB Show, and in the fall, at the annual SBE National Meeting. Other meetings may be called via conference call during the year.

The national SBE board includes 12 directors, four officers and the immediate past president. Directors serve two-year terms, and officers serve one-year terms. Six director seats will be contested in 2022 as will all four officer positions. The SBE By-laws limits the number of terms of elected members of the Board. Directors may serve three consecutive terms, the secretary and treasurer may serve up to four consecutive terms, and the president and vice president may serve up to two consecutive terms. The maximum time anyone may serve on the board is ten consecutive years.

Members interested in offering their candidacy and serving on the national Board if elected are encouraged to contact the SBE Nominations Committee Chair Roz Clark, at roz.clark@cmg.com or via the SBE National Office at 317-846-9000. A slate of nominees will be assembled by the committee by April 19. Other qualified members may be nominated by members in good standing no later than July 8.

The election takes place from July 15 through Aug. 17. Those elected will be installed into office during the SBE National Meeting, planned to be held in Syracuse in September.
I started work at a radio station when I was 14, and the engineer was kind enough to answer all my questions. Being a ham operator, I knew a little about RF, so it just seemed to naturally happen.

Who do you admire in the industry?

I admire Larry Wilkins a great deal.

What's your favorite Gadget?

My Yaesu 817 QRP radio and my Icom 718 HF rig.

What's something people don't know about you?

I'm out walking or hiking, or I'm doing Bible study.

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

The educational opportunities, networking, and resources.

What got you started in broadcast engineering?

I started work at a radio station when I was 14, and the engineer was kind enough to answer all my questions. Being a ham operator, I knew a little about RF, so it just seemed to naturally happen.

What do you like most about your job?

Helping small mama/papa stations and Christian stations with technical and regulatory issues.

What do you do when you’re not working?

..am on the ham bands as W5AWX, or I’m out walking or hiking, or I’m doing Bible study.

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

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2021 Financial Year in Review

The Society of Broadcast Engineers, Inc. completed 2021 with net revenue from all operations of $317,144. Gross income from all sources was $1,344,854, while expenses were $1,027,710. The value of SBE savings and investments as of Dec. 31, 2021 was $1,733,329, an increase of $322,742. Long-term investment gain totaled $96,859.

A percentage breakdown of SBE income from program operations and expenses is depicted in the accompanying charts. A financial statement will be published in the June issue of The Signal, following the completion of the Society’s annual financial audit.

Income

- Frequency Coordination
- Publications/Advertising (non-Cert)
- Membership Dues
- Sustaining Member Dues
- National Meeting
- Certification
- Education
- Other Income

Expenses

- Frequency Coordination
- Communications w/ Members
- Chapter Rebates
- Member Services
- National Meeting
- Certification
- Education
- Depreciation
- Administration

State Broadcast Associations Sponsor SBE TPT Program Enrollees

At the beginning of 2021, the SBE launched the Technical Professional Training Program (TPT), a response to the ongoing concern about new technical talent choosing broadcasting as a career. Drawing on existing SBE programs, the society assembled a valuable service to the broadcast industry.

Since its launch, 33 people have participated in the SBE TPT. Several state broadcast associations have expressed interest in enrolling new technical talent. The Missouri Broadcasters Association (MBA) and Nebraska Broadcasters Association (NBA) have launched efforts to cover the cost of TPT enrollment by reimbursing the cost for individuals to join the SBE Technical Professional Training Program. Missouri launched its program in 2021, and Nebraska launched its program in January 2022.

The MBA provides the subsidy as a member service. While the association has budgeted for a fixed number of applicants per year, that line has not been met.

The MBA has limited enrollment to one enrollee per dues-paying station employment unit (SEU). Up to 12 enrollees will be accepted on a first-come, first-serve basis for calendar year 2022.

Terry Beth Harper, director of member services for the MBA, says, “The MBA recognizes that many of our member station engineers have retired, or are threatening retirement, and managers are finding it difficult to replace them. The SBE Technical Professional Training Program is a great solution to prepare someone already at the station who might be able to slip into that role.”

“Our industry has been fortunate to have such tremendous service from countless broadcast engineers. These talented men and women are retiring faster than we can replace them,” notes Jim Timm, president and executive director of the NBA. “Recognizing that many stations have a person or two on staff with some technical aptitude, we feel the SBE’s TPT is an ideal way to help them expand their capabilities and potentially, groom some future engineers for NBA member stations. Kudos to Mark Gordon and the Missouri Broadcasters Association for sharing this scholarship concept.”
Members on the Move

Robert Cram is chief engineer of KAYU-TV, Spokane, WA.

Robin Cole, CSTE is the assistant engineer of KAYU-TV, Spokane, WA.

Tony Peterle, CPBE, has transitioned to a consulting role with Worldcast Systems and is relocating to Ohio.

Brian Zittlau is director of engineering at Nebraska Public Media, Lincoln, NE.

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

Mark Your Calendar

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<td>2022 NAB Show</td>
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