

THE signal

Bimonthly Publication of the
Society of Broadcast Engineers



August 2014
Volume 27, Issue 4
www.sbe.org

Dalke, Portillo win national SBE Awards

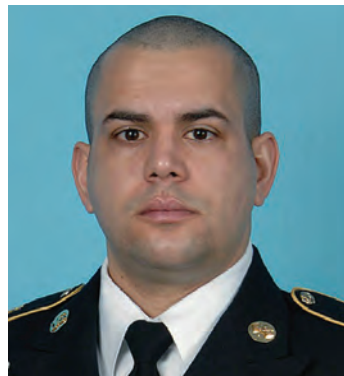
The SBE has announced the recipients of the 2014 SBE National Awards. The awards recognize excellence and achievement by individual members, SBE chapters and Sustaining Member companies. The two highest individual awards are the Robert W. Flanders SBE Engineer of the Year and the James C. Wulliman SBE Educator of the Year.

The Robert W. Flanders SBE Engineer of the Year award is presented to a member who has excelled in his career while furthering the mission of the SBE. Candidates are nominated by their peers. The winner of the award for 2014 is James A. Dalke, CPBE, 8-VSB, AMD, CBNT of Bellevue, Wash. Dalke is a past chapter chair of Chapter 16 in Seattle, Wash.

The recipient of the James C. Wulliman SBE Educator of the Year award is recognized for outstanding service and excellence in sharing knowledge through teaching other broadcast



Jim Dalke, winner of the the Robert W. Flanders SBE Engineer of the Year.



Norman Portillo, Winner of the the James C. Wulliman SBE Educator of the Year.

engineers. The winner of the 2014 James C. Wulliman SBE Educator of the Year award is Norman P. Portillo, CBT of Baltimore, Md. Portillo is a member and current chairman of Chapter 132 at Ft. Mead, Md.

Jim Dalke serves on the Washington State Emergency Communications Committee and SECC Technical Advisory Committee. He is

an Inspector for the Washington and Oregon State Association of Broadcasters Alternative Broadcast Inspection Program (ABIP) and he is an FCC Maritime Radio Inspector and Coast Guard licensed Maritime Radio Officer. Dalke is an Associate Member of the Association of Federal Communications Consulting Engineers.

Dalke holds an FCC General Radio-Telephone ticket, and is licensed for the Global Maritime Distress and Safety System. He holds a Commercial Radiotelegraph Operator License

- with Ship Radar Endorsement. He is a licensed Amateur Extra Class W7PB operator and has presented several papers and presentations at NAB Shows.

Norman Portillo has been instrumental in the continued educational development of broadcast engineers in the U.S. Army Visual Information

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Membership Meeting, Awards Program will be webcast live

The SBE Annual Membership Meeting will be webcast live from 3-4 pm ET, Wednesday, Oct. 8. For the first time, the program portion of the SBE National Awards Dinner will also be webcast live, beginning at 6:15 pm ET. The dinner program is also on Oct. 8. Both events are part of the 50th SBE National Meeting held at the Turning Stone Resort and Casino in Verona, N.Y. The SBE National Meeting is being held in conjunction with the 42nd Annual SBE Chapter 22 Broadcast & Technology Expo.

The webcast enables anyone who cannot attend the national meeting to take part remotely from their home or office. A link to the webcasts will be posted on the SBE website prior to the events. The Membership Meeting will include recognition of the SBE's 50th anniversary, comments from SBE national president, Joe Snelson, CPBE, 8-VSB, brief reports on issues

of interest to members and the induction of newly elected members and officers of the national board of directors.

The awards dinner program will include a presentation from a special key-note speaker, presentation of the SBE National Awards including the Robert W. Flanders SBE Engineer of the Year and James C. Wulliman SBE Educator of the Year awards. This year's SBE Fellow recipient, Gino Ricciardelli of Chapter 1 in Binghamton, N.Y., will be recognized. President Snelson will serve as emcee for both events.

The SBE Chapter 22 Broadcast & Technology Expo is the largest regional tradeshow in the northeast that features technical equipment, products and services for the broadcasting and media industry. The Expo lineup includes professional development opportunities with presentations and demonstrations covering

engineering, technology integration, workflow and production. At 10 am on Oct. 8, Chapter 22 will present its annual Student Career Seminar, webcast live to high school students across Central New York. The seminar features a panel

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LETTER FROM THE PRESIDENT

by Joe Snelson, CPBE, 8-VSB
SBE President
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A mid-summer update

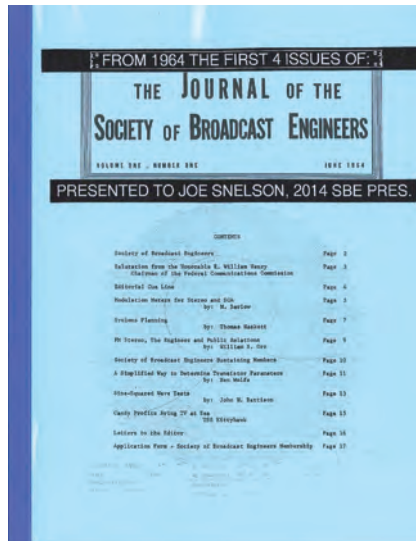
How fast this year is passing! It is now half over and with that we are already seeing more being released on the regulatory front. The FCC has released more details on the Broadband Incentive Auction with several items of concern to broadcasters. SBE general counsel, Chris Imlay, and the Government Relations Committee continue to follow these issues and analyze them to see what would be an appropriate course of action to take in terms of filing comments with the FCC. Chris will be providing updates on these issues in the columns he writes for The Signal.

We are also over half way through the celebration of the SBE's 50th anniversary. As you may recall, SBE's National Certification Committee initiated a Jubilee Project for those that had let their certification lapse between 1999 and the present. I am pleased that over 125 individuals participated in the program and are now recertified. I encourage those who either were not able to take advantage of the Jubilee Project or have never been SBE certified to seriously consider taking that step and adding certification to your professional experience. It could well make that difference when seeking a career opportunity or advancement. Be sure to visit the SBE website to learn more about our certification program.

In thinking about our 50th anniversary, I was pleasantly surprised to receive a package from SBE Charter Member, Ken Benner. Ken sent me copies of four Journals of the Society of Broadcast Engineers published in June, October and December of 1964 and March of 1966. Ken went through the trouble to even replicate the blue front cover page. In reading through these Journals I found some interesting tidbits I would like to share.

I noted that in Journal Volume One, Number One, there was a salutation from E. William Henry who was the Chairman of the Federal Communications Commission at the time the SBE was formed. Mr. Henry wrote a one-page article pertaining to the FCC and the development of technical standards and the role engineer's play in working together to resolve technical issues. He closed by saying, "I salute your new organization, and look forward to our close and fruitful association in the coming years."

Another article in this first issue delved into three "standard" meters used for measuring audio levels; VU, PPM and the FCC modulation meter. This quickly brought to my mind the



Set of the first four SBE Journals given to President Snelson by Ken Benner, SBE member #170

"fourth meter" many of us are now familiar with. I am referring to the method used for loudness measurement that those in television are very aware of.

In the second Journal there was an article titled "Eliminating the Mental Estimate in Simple Slide Rule Operations" by Ken Benner, who I mentioned earlier had sent me the Journals. That caused me to reflect back when I took the examination for the First Class Radio Operator License. I had to use my slide rule for doing the calculations on the exam. It was sometimes a challenge trying to remember where to put a decimal point on the answer derived from the slide rule. It would have been nice for me to have read Ken's article back then. At this year's NAB Show, I gave a talk to young engineers coming into the business under the NAB Educational Foundation Technical Apprentice Program. I took a slide rule with me, held it up and asked if anyone knew what it was. There were several that immediately knew what it was. I didn't, however, ask if they knew how to use one.

In the third issue there was an article titled, "Higher FCC and NAB Broadcast Engineering Standards versus FCC Commercial Operator Qualifications." This was written at a time when "license mills" for the First Class Radiotelephone Operator License (First Phone) were in full swing and the Third Class Radiotelephone Operator License with a broadcast endorsement was being implemented. Reflecting on license mills, I remember a friend of mine in college who

attended a license mill to get his First Phone. He didn't know a thing about electronics but could talk the lingo by the end of his six weeks when he obtained his license. In about three weeks he forgot everything he had ever learned about electronics. The bottom line of the Journal article was that there was a concern about the true qualifications someone might possess when assigned to perform technical adjustments on a transmission system. When the FCC decided to get out of the licensing requirements for broadcast operations, the SBE certification program provided an excellent replacement for station management to use in determining the true qualifications of those being hired to operate and maintain their facilities.

The overall take-away for me in reading the SBE Journals is we still face today many of the challenges and issues our fellow engineers faced when the SBE was formed. And, SBE continues meeting the challenges through the various educational opportunities we offer and our program of certification.

Before I sign-off for this issue, I also want to mention that the SBE National Meeting will be held at the Turning Stone Resort & Casino in Verona, N.Y. on October 7 and 8. SBE will be holding its Annual Membership Meeting at 3 pm ET on the 8th, followed by our annual SBE National Awards Dinner. This will be a special time for us as we will also be wrapping up our year of celebrating the 50th anniversary of SBE. As we have been able to do in the past, our annual membership meeting will be webcast for those of you unable to attend in person. We want to extend our thanks to our national meeting host, the Chapter 22, Broadcast & Technology Expo.

We are also excited about the Leadership Development Course that will be taking place from August 12 to 14 in Atlanta, led by Purdue University professor and leadership trainer, Rodney Vandever. This course, originally started by NAB in 1965, has now been offered by SBE for more than 17 years!

Lastly, a reminder that SBE elections run through August 21. We thank our candidates for their willingness to run and serve the SBE if elected. We stress the importance of all members to participate by casting their vote electronically or by mail for those that opted out earlier this year during the membership renewal cycle.

Until next time, have a safe and enjoyable summer. ☪

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The Signal is published bimonthly by the Society of Broadcast Engineers, Inc., 9102 North Meridian Street, Suite 150, Indianapolis, IN 46260. Questions or comments regarding editorial content or design should be referred to Dan Kissel at (317) 846-9000 or dkissel@sbe.org. For advertising, contact Debbie Hennessey at dhennessey@sbe.org. SBE is a registered trademark of the Society of Broadcast Engineers.

NATIONAL AWARDS from page 1

through his teachings. Staff Sergeant Portillo has implemented educational programs that teach broadcast technologies. Portillo also serves as chairman for Chapter 132 and has been a member of the SBE since 2012.

DVEO is awarded the 2014 SBE Technology Award for its UDP Packet Recover Technology – Dozerbox II IP IP, a compact end to end error correcting router for smoothing UDP traffic over the public internet, with built-in packet recovery algorithms for alleviation of packet loss, video freezes, jitter and noise.

Chapters are the lifeblood of the SBE and last year, the SBE Awards Committee introduced the Chapter Engineer of the Year Award to highlight the achievements of members within their chapters. In this second year of the award, 11 chapters selected their own award recipients. Each winner will be presented with a special certificate and be recognized nationally on the SBE website and in The Signal. The eleven chapter winners also were automatically nominated for the national Robert W. Flanders SBE Engineer of the Year Award. This year's national winner, James Dalke, represented Chapter 16 as its Chapter Engineer of the Year Award winner.

The winner of the Best Technical Article, Book or Program, for his article, We Ponder an All-Digital Future, in the May 2014 Radio magazine issue, is Jeremy Ruck of Canton, Ill. – Chapter 49.

Chapter 16 of Seattle, Wash., chaired by Arthur Willets, CTO, has won the award for Best Chapter Website.

Several SBE National Awards recognize

chapters for growth in membership, percentage of certified members and highest average attendance at chapter meetings. These awards are based on statistics kept at the national office, as submitted by chapters all across the US and Hong Kong. Two awards for each category are presented, based on chapter enrollment. Class A represents chapters whose membership is less than the national median. Class B includes chapters with a membership greater than the national median.

Greatest Growth in New Members Award

- A - Chapter 136, Rio Grande Valley
- B - Chapter 32, Tucson, Ariz.

Most Certified Chapter Award

- A - Chapter 118, Montgomery, Ala.
- B - Chapter 131, Inland Empire

Highest Average Member Attendance Award

- A - Chapter 134, Beaumont, Texas/Lake Charles, Calif.
- B - Chapter 66, Fresno, La.

All the awards will be presented during the SBE National Awards Dinner on October 8, at the SBE National Meeting in Verona, N.Y. The meeting is being held in conjunction with the Chapter 22 Broadcast & Technology Expo. Those wishing to attend may register at the Expo's website, <http://www.sbe22expo.org>



SBE members, radio station and association executives, and state representatives join Tennessee Governor, Bill Haslam (seated) as he signs the Tennessee First Responders Bill. SBE members from Chapter 103 in Nashville include Carl Campbell (6th from left), Gibson Prichard (4th from left), and David Wilson (3rd from left). Tennessee Association of Broadcasters president, Whit Adamson, a strong SBE supporter, is 7th from left. Photo provided by Carl Campbell.

Looking Back Over 50 Years

Recalling the Early days by member #170

by Ken Benner, CBRE

It was sometime in late 1963 or early '64 that many of us received a letter from a consulting engineer residing in Annapolis, Maryland suggesting the formation of something akin to the IEEE, but primarily with a focus on broadcast engineering. His name was John H. Battison.

A few days earlier, our station, KOPR-AM, was off the air for almost 36 hours as the manager angrily paced the floor. The announcers and sales staff enjoyed a break in the bar of the old, but ultra swank, Finlen Hotel in Butte, Montana, the mezzanine of which held our studios. Meanwhile as our competitor, KXLF across town joked happily about our demise, I was on my knees praying for the delivery of a small power transformer for the audio amp in our old BC-100 Gates transmitter.

Down the pike from us in Dillon, Montana, Bert Olifant had a similar transmitter and in his spare parts box was an identical transformer. Knowing that, I would have been back on the air at least thirty hours earlier. I got to thinking, if only the broadcast engineers of Montana had an opportunity to know each other better, we could share both parts and smarts.

Mr. Battison's idea now took on a whole new sense of purpose. I wrote to him and we soon communicated by telephone. I contacted as many Montana engineers as possible, one of whom was "Dutch" Meyer in Missoula, a broadcast engineer for the University of Montana. He had access to a mimeograph machine that was used to produce a newsletter for what was to become Chapter 6 of the SBE. The manager of KXLO over in Lewiston owned a substantial interest in the local Holiday Inn, conveniently located in the center of the state, and offered its meeting room for our group.

Now with a means to communicate and a place to meet, it wasn't long before the "original" Montana Chapter 6 of the SBE became a reality with election of officers to coordinate the efforts of all of us for articles to publish, speakers for our meetings, means of funding print costs, postage etc.

Reviewing the masthead of the second edition of Mr. Battison's Journal of the SBE, I find my name listed as Chairman of Chapter 6 and strangely, also as "Consulting Engineer" of which I most certainly was not. I had to really scratch the old think tank to recall from fifty years ago how I had become a "consulting engineer."

Finally, I recalled my employer, learning of the developing SBE activity, advised that in no uncertain terms, "This SBE outfit is nothing but a labor union and you will have no part of it if you're gonna work here." Thus, I became a "consulting engineer" to shield the identity of my wonderful employer. I learned later this implication of a union was not all that uncommon with other

employers.

One day it struck me that we should have some means of recognition for our developing membership. Contacting Mr. Battison, he asked me to design some sort of membership



Ken Benner speaking at the National Press Club.

certificate.


A local off-set print-shop manager hand-drawn a very nice item which Mr. Battison modified slightly, that became our original recognition of membership along with a wallet identification card for all SBE members.

Dues were ten dollars a year—no small amount back a half-century ago. Nevertheless, enough of us continued to support the SBE. Admittedly there were a few bumps along the way. In fact, for a time, the SBE became non-existent as the important records were lost in a fire at its headquarters. (*ed. note- a fire was reported in Vol. 1, Issue 2 of The Journal of the SBE, however SBE operations continued uninterrupted*)

The first issue of the SBE Journal was published in June of 1964 with the second issue four months later. In that issue, lo and behold there's an article by ol' Dad here, entitled, "Simplifying Slide Rule Operations" that contained the paragraph, "Practically every slide-rule manual advises one to approximate the problem in your mind to give the probable decimal place placement. This, combined with the inherent inaccuracy of the slide rule, has created considerable distrust in its use." Wow! I now finally realize I should have been a technical writer.

Seriously, one of the most memorable moments of my life was taking the bus down to Kansas City, Mo. to receive my SBE 25-year membership pin with a handshake from Mr. Battison. It was the first time I had met him in person, after which we had a wonderful conversation where he recalled every detail of the original Montana SBE chapter. What an incredible memory he had.

If ever there was the most extraordinary, professionally dedicated person willing to freely share all of his knowledge with even the least of us, it would be Mr. John H. Battison, founder of the Society of Broadcast Engineers, truly the Legend of American Broadcast Engineering.

Ken Benner is president of K.J. Benner & Associates, a consulting engineering firm based in Tucson, Ariz. He is a SBE Charter Member, #170 and holds SBE Life Certification in the SBE at the CBRE level. 

SBE Chapter Engineer of the Year Winners

The Society of Broadcast Engineers congratulates the members listed below for being recognized by their chapter with the SBE Chapter Engineer of the Year Award.

Chapter 9, Phoenix, Ariz.

Gary Smith

Chapter 16, Seattle, Wash.

James Dalke, CPBE, 8-VSB, AMD, CBNT

Chapter 17, Minneapolis, Minn.

George Werl, Jr., CPBE

Chapter 38, El Paso, Texas

Jose Antonio Castro

Chapter 47, Los Angeles, Calif.

Scott Mason, CPBE, CBNT

Chapter 54, Tidewater, Va.

Ray Lenz

Chapter 67, Dallas, Texas

Johnny Stigler, CPBE

Chapter 70, Cleveland, Ohio

Blake Thompson, CBNT

Chapter 80, Fox Valley, Wis.

Tim Laes

Chapter 109, Des Moines, Iowa

Jon Strom, CBTE

Chapter 113, Knoxville, Tenn.

Ed Martin, CPBE

All SBE chapters are encouraged to select a Chapter Engineer of the Year for 2015. All chapter winners will be included among the nominations for the national Robert W. Flanders SBE Engineer of the Year. Details are available at the SBE website, www.sbe.org.



EDUCATION UPDATE

by Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE
SBE Education Committee Chairman
w-pecena@tamu.edu

Is CPD in your future?

Now that I have your attention, I am not referring to “Chronic Pulmonary Disease”. I am referring to “Continuing Professional Development”. CPD is a process that should be in your future if it is not already. CPD is a personal driven task, not an employer defined one. Your professional development is your responsibility and CPD is simply a process to help you reach your career goals by providing a systematic framework or structure to document your past experiences, education, and identify future formal and informal education needs.

CPD is a continuous process that begins with a self appraisal which produces a profile of current skills and knowledge as well as an assessment of needed skills and knowledge. The needed skills and knowledge list becomes your personal professional development action plan to engage in the appropriate education and development activities. As milestones are achieved and completed, the events are recorded and make up your personal transcript or journal as evidence of newly gained skills and knowledge. But, you are not finished as the process starts all over again with your self assessment once again as the industry technology has likely changed and rapidly progressed. Information technology is now an integral aspect of any modern broadcast technical plant. Moore’s Law and other similar predictors define a rapid acceleration of technology advancement that the technology professional must engage in an environment of continuous learning. As a result, you are never finished with the learning process.

Professional societies like the Society of Broadcast Engineers often require CPD as a basis for professional certification qualification or certification renewal. The personal transcript developed during the CPD process becomes the evidence that you have achieved a certain level of competence to qualify for a level of professional certification. This same transcript also serves to demonstrate that you have maintained a continuous learning lifestyle and achievements to qualify for certification renewals.

Professional development is more than attending a formal course of study. Professional development certainly includes formal learning

activities, but do not discount the informal learning aspects. Activities such as self-study, mentoring a new-comer to the industry, participation in industry events and conferences, and attending online webinars all qualify to enhance your skill and knowledge level. Your society of broadcast engineers strives to provide the membership with a wide range of continuing education events to enhance the skills and knowledge of the broadcast engineer.

School is never out for the technology professional and certainly not the Broadcast Engineer.

Remember, continuous learning is a key trait of the successful technology professional!

Are You Planning a State, Regional, or Local Chapter Sponsored Conference?

Forty members of the Los Angeles SBE Chapter 47 recently endured a full day of Advanced IP Networking & CBNE Study Topics Tutorial presented, by yours truly, with certification testing following the next morning. A special thank you to Mike Tosch, SBE Chapter 47 Chairman, for organizing this event.

Did you know that the SBE can bring quality professional development presentations to your local, regional or state event through the SBE Technical Presenters Program. This program provides quality content and professional presenters on a variety of topics from broadcast focused IP Networking to FCC station Inspections to your event.

In addition to the annual Ennes Workshop held during NAB each year, the SBE sponsors several regional Ennes Workshops throughout the country. The schedule has openings for 2-3 more of these regional events in 2014. Contact Kristin Owens at the National SBE office for further information and to schedule a regional Ennes Workshop or to schedule a member of the SBE Technical Presenters Group for your event.

Future Education Events:

SBE 2014 Leadership Development Course with Purdue Professor Rodney Vandaveer – August 12-14 – Atlanta, Ga.

Advanced IP Networking & CBNE Study Topics – SBE Chapter 53 – Miami, October 17, 2014

For more information on any SBE Education program, contact Kristin Owens, kowens@sbe.org, Education Director at the national SBE office. You may also reach Kristen by phone at (317) 846-9000



Certification Question

Correction from June Signal
Answer on page 15

The address for IPv6 contains:

- a. 4 bytes
- b. 8 bytes
- c. 16 bytes
- d. 32 bytes



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CERTIFICATION UPDATE

by David Priester, CPBE
SBE Certification Committee Member
dpriester@ithaca.edu

Special proctoring available for SBE Certifications

Does this scenario sound familiar? You have been thinking about taking a certification exam but you either don't have the time to work it into the existing schedule or don't have a chapter in the area through which to arrange an exam. If this is the case, then I've got some good news for you. The SBE certification process has considered these obstacles and offers special proctoring for those of you who fall into either of the two situations above. The certification program offers four regular certification sessions with the local chapters a year and one session in Las Vegas during the NAB show in April. We encourage you to take advantage of these sessions, however, we will work with you to set up a special time with an approved proctor if need be.

An approved proctor can be the local certification chairman or another chapter volunteer, as long as their schedules allow. If that most common option is not available to you, a librarian, clergyman or professor can proctor certification exams. The proctor would need to be able to set aside the allotted amount of time and certify the exam was taken under the specified conditions.

If you are interested in arranging special proctoring, contact the SBE national office and speak with Megan Clappe, the certification director. We will need to have the application filled out and the proctor's information. Upon approval, the exam will be mailed out to the proctor.

Please contact the proctor to set up a

date, time and place and let them know that the exam will be mailed to them. The rest of the exam procedure would be the same as a regular exam session. Once the exam is mailed back to the SBE office, the exam is graded and the pass/fail results are sent directly to the examinee.

With the hectic and unpredictable schedules that we broadcast engineers have, special proctoring allows you to still have the opportunity to take advantage of SBE certification, even though you may be far from an organized chapter or otherwise unable to arrange an exam through the usual avenues. The certification committee wants to do everything possible to help you attain and maintain your certification. ●

MEMBERSHIP MEETING from page 1

of industry professionals who will offer their views and opinions on how students can prepare for a career in broadcasting.

The Expo exhibit floor will be open from 9 am to 5 pm. Lunch will be available in the exhibit hall and there will be an exhibit floor reception from 3 to 5 pm. Companies wishing to exhibit at the Expo may visit the Chapter 22 Expo website, www.sbe22expo.org, to register. Sponsorship opportunities are also available.

The SBE National Meeting begins on Tuesday afternoon, Oct. 7 with the fall meeting of the national SBE Certification Committee from 2 to 4 pm. The fall meeting of the SBE Board of Directors will take place from 6 to 10 pm and is open to all members. On Wednesday, Oct. 8 activities begin with the annual SBE Fellows Breakfast, honoring all SBE Fellow members, sponsored by Kathrein, Scala Division. The membership

meeting webcast is being sponsored by AC Video Solutions, BlackMagic Design, DVEO and Orban. A contributing sponsor to the Expo Reception is Vislink Broadcast.

The Turning Stone Resort and Casino is located just off Exit 33 of the New York State Thruway (Interstate 90) in Central New York State. If planning to travel by air, visitors should use Syracuse Hancock International Airport, then ground transportation east via Interstate 90.

A limited block of rooms has been arranged at the Turning Stone Resort for guests and exhibitors to use should you desire overnight accommodations. Contact the Turning Stone Resort and Casino directly at (800) 771-7711 and request accommodations for the Society of Broadcast Engineers event. The room block is reserved for a limited time and available on a first come, first served basis.

To register for the free SBE Chapter 22 Broadcast & Technology Expo, visit the expo website, www.sbe22expo.org. Go to Attendee/Registration and complete the on-line form. Pre-registration is recommended. Your Expo registration also serves as your registration for the SBE National Meeting events, with the exception of the National Awards Dinner. Tickets for the dinner, sponsored by Telos Alliance, are available for the discounted price of \$15 each and can be purchased on-line at the SBE National website, www.sbe.org. Click on the SBE National Meeting box on the home page.

We hope to see many of you in Verona as the SBE completes its celebration of its 50th anniversary! ●

THE TELOS ALLIANCE™



New SBE Certification Achievements

CONGRATULATIONS

LIFE CERTIFICATION

Certified Professional Broadcast Engineers® and certified senior broadcast engineers who have maintained SBE certification continuously for 20 years, are at least 59 ½ years old and are current members of SBE may be granted Life Certification if so requested. All certified who have retired from regular full-time employment and are at least 59 ½ 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®) Gary Coullard, Harahan, La. – Chapter 72 Ronald Vincent, Sr., Parker, Colo. – Chapter 48
 Alan Colwell, Toledo, Ohio – Chapter 104 Donald Kolbert, Stewartville, Minn. – Chapter 112 Timothy Wright, Maywood, Ill. – Chapter 26

NEWLY CERTIFIED CPBE®

Applicant must have had 20 years of professional broadcast engineering or related technologies experience in radio and/or television. The candidate must be currently certified on the Certified Senior Broadcast Engineer® level

Certified Professional Broadcast Engineer™ (CPBE®) Steve Paugh, Madison, Wis. – Chapter 24 Charles Stutsman, Norfolk, Va. – Chapter 54
 William Harris, Albuquerque, N.M. – Chapter 34 Marshall Rice, Troy, Ill. – Chapter 55

JUNE EXAMS

Certified Broadcast Television Engineer™ (CBTE®) David Williams, Santa Barbara, Calif. – Chapter 47
Certified Audio Engineer® (CEA®) Gregory Friedman, Park City, Utah – Chapter 62
 Kira Parker, Boise, Idaho – Chapter 115

Certified Broadcast Networking Technologist® (CBNT®) Thomas Arnhold, Beaumont, Calif. – Chapter 131
 Aaron Ishmael, Fanwood, N.J. – Chapter 15
 Brian Latsha, York, Pa. – Chapter 41

Certified Broadcast Technologist® (CBT™) Keith Blaisdell, Mechanicsburg, Pa. – Chapter 41
Certified Radio Operator® (CRO®) Eric Wolf, Lakewood, Ohio – Chapter 70

Certified Television Operator® (CTO®) Andrew Cleveland, Escondido, Calif. – Chapter 36
 Jeffery Hitchcock, Oklahoma City, Okla. – Chapter 85

SBE CERTIFIED SCHOOL COURSE COMPLETION

Certified Broadcast Technologist® (CBT®)

Milwaukee Area Technical College
 Rachel Johnson, Milwaukee, Wis. – Chapter 28

Southern Alberta Institute of Technology
 Shawn Alford, Airdrie, Alberta Canada
 Stephen Andrichuk, Calgary Alberta, Canada
 Mericar Armecon, Calgary Alberta, Canada
 Jesse Blain, Calgary Alberta, Canada
 Nathan Brost, Calgary Alberta, Canada

Aaron Dias, Calgary Alberta, Canada
 Marc Drebit, Calgary Alberta, Canada
 Stuart Howell-Fellows, Calgary Alberta, Canada
 Junho Hwang, Calgary Alberta, Canada
 Jeffery Keddy, Calgary Alberta, Canada
 Alexnader McPhail, Calgary Alberta, Canada
 Kenneth Sanchez, Calgary Alberta, Canada
 Michael Van Ingen, Langley, British Columbia, Canada

Alicia Parozzen, Calgary Alberta, Canada
 Yvonne Thien, Calgary Alberta, Canada
 Payne Toy, Calgary Alberta, Canada

DINFOS
 Gary Abidin, Ft. Meade, Md. Chapter 132
 Wyatt Bloom, Laurel, Md. – Chapter 132
 Kevan Calhoun, Odenton, Md. – Chapter 132
 Steven Cope, Ft. Meade, Md. Chapter 132

Lauren Dominick, Fort Meade, Md. – Chapter 132
 Mario Licon, FPO, AE – Chapter 38
 Stephen Mirambeau, Laurel, Md. – Chapter 132
 Brandon Staples, Severn, Md. – Chapter 132
 David Walker, Ft. Meade, Md. Chapter 132

CERTIFIED BY LICENSE

Certified Broadcast Technologist® (CBT®) John Cameron, Milford, Mass. – Chapter 11
 Curtis Blount, Lucedale, Miss. – Chapter 125 Scott Manthe, Kokomo, Ind. – Chapter 25

CERTIFIED RADIO OPERATOR® (CRO®)

Albion College Radio
 Ivan McDonald, Evansville, Ind.
 Miranda Materazzo, West Hills, Calif.
 Josh Saylor, West Hills, Calif.

CERTIFIED TELEVISION OPERATOR® (CTO®)

Keith Blaisdell, Mechanicsburg, Pa. – Chapter 41
 Erik Boone, Whiteville, N.C.
 John Lee Perry, Plano, Texas
 Laura Reisman, Boulder, Colo.
 Alejandra Rodriguez, El Paso, Texas
 Jason Rohrer, Sioux Falls, S. D.

JUBILEE PROJECT

Certified Professional Broadcast Engineer® (CPBE®) Tom Foy, Chandler, Ariz. – Chapter 9
 Kenneth MacKinnon, Miami, Fla. – Chapter 53
 Rick Owen, Pacifica, Calif. – Chapter 40
 Luis Romero, Tampa, Fla. – Chapter 39
 Michael Tosch, Thousand Oaks, Calif. – Chapter 47
 Curtis Trull, San Marcos, Texas
 Richard Wright, Trinity, Fla. – Chapter 39

Certified Senior Radio Engineer™ (CSRE®) AM Directional Specialist™ (AMD™) Philip Alexander, Indianapolis, Ind. – Chapter 25
 Alan Alsobrook, St. Augustine, Fla. – Chapter 7
Certified Senior Radio Television Engineer™ (CSRTE™) Nolan Stephany, Webster, N.Y. – Chapter 57
Certified Broadcast Radio Television Engineer™ (CBRT™) Carl Cutforth, Mountain Lakes, N.J. – Chapter 15
 Thomas Gray, Jonesboro, La. – Chapter 105
 Andrew Kiska, Albuquerque, N.M. – Chapter 34

Certified Broadcast Television Engineer™ (CBTE®) Ken Brown, Edgewood, N.M. – Chapter 34
 Nicholas Cap, Coraopolis, Pa. – Chapter 20
 Dennis Dutra, Jr., Eliot, Maine – Chapter 11
 Lance Feder, Loveland, Ohio – Chapter 33
 Michele Fry, Vancouver, Wash. – Chapter 124
 Mark Jacobson, Streamwood, Ill. – Chapter 26
 James Lien, Gilbertville, Pa. – Chapter 18
 William McKee, Houston, Texas – Chapter 105

Raymond Pashley, San Jose, Calif. – Chapter 40
 Christopher Peterson, Smyrna, Ga. – Chapter 5
 Robert Vaillancourt, San Diego, Calif. – Chapter 36
 Michael Winsky, Morrice, Mich. – Chapter 91
Certified Broadcast Radio Engineer™ (CBRE®) Raymond Baca, Modesto, Calif. – Chapter 40
 Rodney Belizaire, New York, N.Y. – Chapter 15
 Richard Bigler, Champaign, Ill. – Chapter 49
 Ronald Huckleby, Butte, Mont. – Chapter 6
 Michael Johnson, Portland, Ore. – Chapter 124
 Charles Osgood, Wenatchee, Wash. – Chapter 16
Certified Video Engineer® (CEV®) William Dyess, Clifton, Va. – Chapter 37
 Daniel Koepke, Concord, Calif. – Chapter 40
Certified Broadcast Networking Technologist® (CBNT®) Alan Alsobrook, St. Augustine, Fla. – Chapter 7
 Steven Crum, Newport, Mich. – Chapter 104
 Clifford Erickson, Carrollton, Texas – Chapter 67
 Michele Fry, Vancouver, Wash. – Chapter 124
 David Klimkowski, Lebanon, Tenn. – Chapter 103
 Matthew Klimkowski, Lebanon, Tenn. – Chapter 103
 Daniel Koepke, Concord, Calif. – Chapter 40
 Kurt Lundblad, Soda Springs, Calif. – Chapter 40
 Holly Misslin, Lebanon, Tenn. – Chapter 103

Brian Olinger, Dulles, Va. – Chapter 37
 Raymond Pashley, San Jose, Calif. – Chapter 40
 Ted Randall, Lebanon, Tenn. – Chapter 103
 Charles Sell, Toledo, Ohio – Chapter 104
 Wayne Smith, Sand Springs, Okla. – Chapter 56
 Perry Talley, Nashville, Tenn. – Chapter 103
 Curtis Trull, San Marcos, Texas
 Patrick Wahl, Chippewa Falls, Wis. – Chapter 112
 Gerald Weaver, Broken Arrow, Okla. – Chapter 56
Certified Broadcast Technologist® (CBT®) Robert Bartholomew, Jim Thorpe, Pa. – Chapter 2
 John Bimrose, Raleigh, N. C. – Chapter 93
 Duncan Brode, Los Angeles, Calif. – Chapter 47
 Arron Brown, Freedom, Wyo. – Chapter 43
 David Cote, Springfield, Mass. – Chapter 14
 Daniel Herrmann, Yucaipa, Calif. – Chapter 47
 Doreen Kelley, Menifee, Calif. – Chapter 131
 Kurt Miller, Lake Barrington, Ill. – Chapter 26
 Joseph Patris, Newington, Conn. – Chapter 14
 Gary Reed, Oklahoma City, Okla. – Chapter 56
 Steven Tadzynski, Voorhees, N.J. – Chapter 18
 Gerald Weaver, Broken Arrow, Okla. – Chapter 56

RECERTIFICATION

The following 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®) Ralph Brancato, Jr., St. Louis, Mo. – Chapter 55
 Jessie Balos, Moreno Valley, Calif. – Chapter 131
 Stephen Bauder, Boyceville, Wis. – Chapter 112
 Steven Hess, Valrico, Fla. – Chapter 39

Certified Professional Broadcast Engineer® (CPBE®) 8-VSB Specialist™ (8-VSB™) Jose Punsalan, Homeland, Calif. – Chapter 131

Certified Senior Radio Engineer™ (CSRE®) George Corso, Pembroke Pines, Fla. – Chapter 53
 Timothy McGuire, Archer, Fla. – Chapter 7

Certified Senior Television Engineer™ (CSTE®) Stuart Jagoda, Silver Spring, Md. – Chapter 37
 Richard VanGendern, Meridian, Idaho – Chapter 115

Certified Senior Radio Engineer™ (CSRE®) AM Directional Specialist™ (AMD™) Kevin Kidd, Lawrenceburg, Tenn. – Chapter 111

Certified Broadcast Radio Engineer™ (CBRE®) Digital Radio Broadcast Specialist™ (DRB™) David Desrochers, Rochester, Mass. – Chapter 11
 David Gomez, Raymondville, Texas – Chapter 136
 Gary Malick, Bellingham, Wash. – Chapter 16
 Patrick Tobin, Big Rapids, Mich. – Chapter 102
 Dana Tyler, Webster, N.Y. – Chapter 57

Certified Audio Engineer® (CEA®) Chris Connelly, Clovis, Calif. – Chapter 66
 William Taylor, Gainesville, Fla. – Chapter 7

Certified Video Engineer® (CEV®) Crystal Livingston, Mansfield, Texas – Chapter 67
 Steven Pingelski, Cohoes, N.Y. – Chapter 58
 William Taylor, Gainesville, Fla. – Chapter 7
 John Vavroch, Beaver Creek, Ohio – Chapter 33

Certified Broadcast Networking Technologist® (CBNT®) Eamon Coyne, St. Paul, Minn. – Chapter 17
 Brian Cunningham, Buffalo, N.Y. – Chapter 133
 Robert Hailey, Tampa, Fla. – Chapter 39
 John Marcon, Little Rock, Ark.
 John White, Portland, Ore. – Chapter 124

Yvonne Ewry, Ontario, Calif. – Chapter 131
 Robert Henry, Albuquerque, N. M. – Chapter 34
 Thomas Nelson, St. Paul, Minn. – Chapter 17
 Timothy McGuire, Archer, Fla. – Chapter 7
 Michael Ostlund, Bloomington, Minn. – Chapter 17
 Jose Punsalan, Homeland, Calif. – Chapter 131

Certified Broadcast Technologist® (CBT®) Craig Clark, Raymond, Maine – Chapter 110
 Joann Colameco, Wilmington, Del. – Chapter 18
 Chris Connelly, Clovis, Calif. – Chapter 66
 William Dean, Williamsport, Md. – Chapter 46
 Stan Dragic, Largo, Fla. – Chapter 39
 Clifford Erickson, Carrollton, Texas – Chapter 67
 Jeff Kerata, Sterling, Va. – Chapter 37
 Mark MacKinnon, Varnville, S.C. – Chapter 107
 Mike Modney, Edmonton Alberta, Canada
 Steven Pingelski, Cohoes, N.Y. – Chapter 58
 Robert Romonosky, Harrisburg, Ill. – Chapter 121
 Joshua Smith, East Longmeadow, Mass. – Chapter 11
 Neal Spellman, Encino, Calif. – Chapter 47
 Timothy Trendt, Platteville, Wis. – Chapter 24
 Dana Tyler, Webster, N.Y. – Chapter 57
 Robert Weiss, Philadelphia, Pa. – Chapter 18

Certified Television Operator® (CTO®) Joel Curtin, Buffalo, N.Y. – Chapter 133
 Lawrence Enroth, Joshual Tree, Calif. – Chapter 131
 Mark Flynn, Topeka, Kan.
 Robin Heslop, Davie, Fla. – Chapter 53
 David Jackson, Conroe, Texas – Chapter 105
 Dennis Lamb, Lima, Ohio
 Jean Leishman, Littleton, Colo.
 Stephen Wade, Moreno Valley, Calif. – Chapter 131
 Mark Watson, Fallbrook, Calif. – Chapter 69
 Caitlin Weston, Washington, D.C.

Certified Radio Operator® (CRO®) Donald Connelly, Cullowhee, N.C.
 John Dutton, Marshall, Mo.
 Mark Watson, Fallbrook, Calif. – Chapter 69

SBE members recruit 48 new members

Forty eight new members were sponsored through the 2014 SBE Membership Drive, Together, Shaping Our Future for Half a Century. Two Sustaining Members were also a part of the forty eight that were sponsored.

Each member who recruited a new member was entered into a drawing to win prizes donated by some of the SBE Sustaining Members, bookstore publishers and the SBE. The Grand Prize winner, who will receive an expense-paid trip to the SBE National Meeting in Verona, N.Y. this October, is Chuck Kelly, of Boutilier's Point, Nova Scotia, Canada. Other Prizes include:

Optimod-PC Card 1101 courtesy of Orban
Mike Tosch, Chapter 47

Tascam DR-05 Handheld recorder courtesy of Broadcast Supply Worldwide (2 donated)
James Corbin, Chapter 79
Mark Heller, Chapter 80

Callaway Hex Warbird golfballs and Rohn ball cap courtesy of Rohn (2 sets donated)
Terry Johnson, Chapter 45
R.J. Russell, Chapter 32

Leather portfolios with Rohn logo embossed courtesy of Rohn (2 donated)
Daniel Rasmussen, Chapter 112
Jeffrey Yeagley, Chapter 128

Networking for Dummies, 10th edition courtesy of Wiley (2 donated)
Mark Heller, Chapter 80
Norman Portillo, Chapter 132

Communications Systems and Networks, 3rd edition courtesy of Wiley (2 donated)
Christopher Baycura, Chapter 22
Michael Margrave, Chapter 69

Directional Antennas Made Simple, 2nd edition courtesy of Layton Technical Services
Nolan Stephany, Chapter 57

Tool bag with sweat shirt, multi-tool, rack ruler and logo hat courtesy of Middle Atlantic Products
Chuck Kelly, Chapter 49

Denim shirt and baseball hat with logo courtesy of Middle Atlantic Products
Gary Sgrignoli, Chapter 26

Zipped sweatshirt with logo courtesy of Middle Atlantic Products
William Kennedy, Chapter 70

Grey logo t-shirt courtesy of Middle Atlantic Products
William Epperson, Chapter 88

Multi-tool courtesy of Middle Atlantic Products (11 donated)
Daniel Bissett, Chapter 47
David Brantley, Chapter 68
Brad Butzbach, Chapter 113
Kenneth Cardosa, Chapter 46
Rick Carrara, Chapter 141
Mark Heller, Chapter 80
Benjamin Koffman, Chapter 57
Klyde Layon, Chapter 47
Dennis Martin, Chapter 47
Norman Portillo, Chapter 132
Dennis Wallace, Chapter 37

Rack ruler courtesy of Middle Atlantic Products (4 donated)
Cris Alexander, Chapter 48
Juan Gonzalez, Chapter 53
Mark Heller, Chapter 80
Michael McNamara, Chapter 68

SBE 50th anniversary membership pin courtesy of SBE
Larry Will, Chapter 18

SBE University course courtesy of SBE
Paul Johnson, Chapter 88

SBE CertPreview download courtesy of SBE
Jeffrey Halapin, Chapter 46

SBE logo tumbler courtesy of SBE
Doug Garlinger, Chapter 25

SBE co-produces sessions for Radio Show

The Society of Broadcast Engineers is co-producing a beefed up technical track of educational sessions at the 2014 RAB/NAB Radio Show. The Radio Show will be Sept. 10-12 at the Indiana Convention Center in Indianapolis, Ind.



Photo courtesy of visitindy.com.

The technical sessions are geared to radio station, consulting and contract engineers. More technical sessions are planned than have been held at the Radio Show in recent years.

The SBE will also offer a certification exam session during the show. It will be Thursday, Sept. 11, from 2 – 5 pm. Deadline to register for an exam is August 22. Applications are available at the SBE website, www.sbe.org.

The SBE will also participate in the Radio Show exhibit floor with a booth open during all exhibit hours. SBE staff and volunteers will man the booth.

The SBE-produced sessions include:

Wednesday, Sept. 10

IT for Radio Engineers: Understanding IP Networking Routing & Switching Tutorial; presented by Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE, Director of Engineering at Texas A&M University.

The core technology underlying an IP network is the proper implementation of Ethernet Switching and IP Routing. This half-day tutorial reviews the basics of IP Networking and focuses upon the implementation of Ethernet Switching and IP Routing, answering the question of "When to Route & When to Switch?" Theoretical concepts will be presented with considerations for network performance, security and management, utilizing practical implementation examples in a broadcast plant IP network.

Tutorial Outline:

- IP Networking Technology Review
- Ethernet Switching Fundamentals
- IP Routing Fundamentals
- Building, Addressing and Configuring a Segmented IP Network
- Best Practices Review & Closing Thoughts

Friday, Sept. 12

15 Tech Ideas That Help the Bottom Line - A Radio Technology Panel of Experts, moderated by Chriss Scherer, CPBE, CBNT

A panel consisting of Jeremy Ruck,

PE of Jeremy Ruck & Associates; Jacob Robinson, Director of Engineering & IT, Emmis Communications and Paul Shulins, CBRE, Director of Technical Operations for Greater Media Boston, will provide a hands-on view of ideas that improve and update radio facilities with the latest technology; not just for the technical updates, but with a view on the bottom line. Topics will cover studios and audio, RF and transmission, IT/IP and data and more. Moderating the panel is radio industry veteran, Chriss Scherer, CPBE, CBNT, former editor of Radio magazine.

Designing, Maintaining and Monitoring Reliable IP Audio Broadcast Facilities presented by Jacob Robinson.

Jacob Robinson will share how to successfully implement IP audio in radio broadcast facilities. Segments will include design, installation best practices, budget considerations and implementing network and equipment monitoring to assure healthy, trouble-free operations. Robinson is Director of Engineering and IT at Emmis Communications.

Members of the SBE can register for the Radio Show at the NAB member rate. To register and for detailed information about the conference sessions, special events, Indianapolis, hotels and more, visit the NAB website, www.nab.org. Click on Event/Radio Show.

SBE election underway

Balloting began July 21 for the annual election of national officers and directors of the SBE. Web-based candidate information, board member voting record and the ballot are accessed by voting members through a link received via email. The balloting period lasts through August 21 at 4:30 pm EDT. Members who opted out of electronic voting at renewal time and those who have not provided a current email address to the SBE were mailed ballots on July 21.

Voting members of the SBE, which include the membership categories of Member, Senior Member, Fellow, Life, Honorary and the official representatives of Sustaining Members, are eligible to vote. The national SBE Board of Directors consists of 17 members, including four officers, 12 directors and the immediate past president. All four officers and half of the the director seats are up for election each year.

Candidates for officers include:

President - Joe Snelson, CPBE, 8-VSB
Vice President - Jerry Massey, CPBE, 8-VSB, AMD, DRB, CBNT
Secretary - James Leifer, CPBE
Treasurer - Andrea Cummis, CBT, CTO

Director Candidates include (top six vote-getters will be elected)

Tim Anderson, CPBE, DRB, CBNE
Benjamin Brintzer, CPBE, AMD
John Heimerl, CPBE
Mike Hendrickson, CPBE
Gary Kline, CBT, CBNT
Robert Russell, CPBE
Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE
Kimberly Sacks, CBT
Eric Schecter, CBRE

Complete information about each candidate is available on the dedicated SBE election page.

Those who plan to vote via Internet who did not receive the election announcement on July 21, or those voting by mail that have not received a ballot by August 1, are asked to contact Dan Kissel at the SBE National Office at (317) 846-9000 or dkissel@sbe.org. All ballots, via Internet or by mail, must be cast by 4:30 pm EDT on Thursday, August 21. Those mailing their ballots should allow at least five days for delivery to the SBE so that they arrive no later than August 21. 📍

SBE participates in AES Convention

Oct. 10-12. Los Angeles Convention Center

SBE Certification Exams session
Sunday, Oct. 12 from 2 – 5 pm
Exam application deadline is Sept. 19

SBE Exhibit Booth

SBE co-produced Broadcast Engineer-oriented Educational Session

Register at www.AES.org
SBE members can register at a discounted AES non-member rate
Free Exhibits-Plus registration is also available during advance registration

WELCOME TO THE SBE

NEW MEMBERS

Paul Lambert - West Blocton, AL	Harrill Hamrick - Mooresville, NC
Alfred Ocampo - Rancho Cucamonga, CA	Jerry A. Johnson - Rapid City, SD
John H. Cameron - Milford, MA	Scott A. Manthe - Kokomo, IN
Gary Knight - Harrisonburg, VA	James M. Ellett, Jr. - Savannah, GA
Ryan McDonald - San Pedro, CA	Ye Gaung - San Jose, CA
Merrick McQuilling - Garden City, NY	Scott Hollingsworth - Mooresville, NC
Bill Rinker - San Francisco, CA	Jesse Jaurrette - Sunrise, FL
Harvey N. VanMeter - Kenosha, WI	Josh A. Krohn - Omaha, NE
Daniel I. Cadavieco - Caracas, Venezuela	Philip J. Rohrman - Golden, CO
Edward Hernandez - Tucson, AZ	Paul Ledgard - Thousand Oaks, CA
Chung G. Choi - Pasadena, CA	Eb Tesfalidet - Bronx, NY
Dan J. Siewers - San Jose, CA	Brandon J. Baker - FPO, AE
Mario Licon - FPO, AE	Wyatt L. Bloom - Laurel, MD
David Light - Poquoson, VA	Kevan H. Calhoun - Odenton, MD
Patrick Thorpe - Gaithersburg, MD	Lauren M. Dominick - Fort Meade, MD
Alan Prescod - Rochester, NY	Jeffrey R. Franck - Wichita, KS
Walter T. Loughney - West Palm Beach, FL	Troy C. Majeska - La Mirada, CA
James C. Pirtle - Colorado Springs, CO	Stephan G. Mirambeau - Laurel, MD
Joshua J. Wood - Moreno Valley, CA	Nathan A. Sides - Jackson, MO
Jay L. Gill - Florissant, MO	Brandon D. Staples - Severn, MD
Tyler J. Matsumoto - Gainesville, VA	Bob Farahi - Knoxville, TN
Steve Cantrell - Frankfort, KY	Robert Levy - New York, NY
Paul W. Delmiche - Fairfield, CT	Brandon R. McKinney - Saint Peters, MO
Chris Drovdal - Duluth, MN	Kurt Oberloh - Yakima, WA
Jamal Gumbs - Universal City, CA	
Alexander S. Reynolds - Atlanta, GA	

NEW STUDENT MEMBERS

Shawn P. Alford - Airdrie, Alberta, Canada	Alicia E. Parczen - Calgary, Alberta, Canada
Maricar Armezin - Calgary, Alberta, Canada	Kenneth Sanchez - Calgary, Alberta, Canada
Jesse K. Blain - Calgary, Alberta, Canada	Yvonne Thien - Calgary, Alberta, Canada
Nathan J. Brost - Calgary, Alberta, Canada	Payne A. Toy - Calgary, Alberta, Canada
Aaron Dias - Calgary, Alberta, Canada	Michael S. Van Ingen - Langley, British Columbia, Canada
Marc B. Drebitt - Calgary, Alberta, Canada	Sze Chun Wu - Tsuen Wan, Hong Kong
Stuart J. Howell-Fellows - Calgary, Alberta, Canada	Mitchell J. Worby - Tacoma, WA
Junho Hwang - Calgary, Alberta, Canada	Jack C. Williamson - Tampa, FL
Jeffery S. Keddy - Edson, Alberta, Canada	Stephen E. Andrichuk - Calgary, Alberta, Canada
Wai Hon Kwan - Shatin, Hong Kong	Matt R. Hibbard - Denton, TX
Chun Chiu Lau - , Hong Kong	David Cong - Alhambra, CA
Alexander M. McPhail - Calgary, Alberta, Canada	

NEW ASSOCIATE MEMBERS

Michael J. Perkey - Nashville, TN

RETURNING MEMBERS

Thomas Held - Chicago, IL	David M. Klimkowski - Lebanon, TN
Robert J. Bartholomew - Jim Thorpe, PA	Nathaniel Cantu - Weslaco, TX
Steven L. Dirksmeier - Marshfield, MA	Ben Blevins - Winston-Salem, NC
Oscar Chavez - Arcadia, CA	Michael N. Johnson - Oklahoma City, OK
Gary M. Reed - Oklahoma City, OK	Philip B. Alexander - Indianapolis, IN
Todd V. Leninger - Portland, OR	Carl T. Cutforth - Mountain Lakes, NJ
Andrew K. Laird - Milwaukee, WI	Matthew H. Schiller - Valley Center, CA
Bill J. Agresta - Costa Mesa, CA	Ron Davis - Nephi, UT
William D. Dyess - Clifton, VA	Todd W. Tanner - Sacramento, CA
Mark A. MacKinnon - Varnville, SC	Richard Kemp - Renton, WA
Deno Thomatos - Denver, CO	Adam R. Wheeler - Southbridge, MA
Matthew A. Klimkowski - Lebanon, TN	John D. Freberg - Homewood, IL

RETURNING ASSOCIATE MEMBERS

Jon Powell - Rochester, IN



LEGAL PERSPECTIVE

by Chris Imlay, CBT
SBE General Counsel
cimlay@sbe.org

Aereo: Did the Technology Outpace Regulation?

Quite a few broadcast engineers on the television side of things were watching the Supreme Court very intently prior to the Court's decision in *American Broadcasting Companies, Inc., et al. v. Aereo, Inc., f/k/a Bamboom Labs, Inc.* The fear was that if the decision went against the broadcast networks, the damage that would be done to the revenue stream would be substantial. I had a bit more faith in the Court in this case than did many of the engineers that I spoke with about this case and I never thought that Aereo had much of a chance to win the court battle. As it turned out of course, the efforts that Aereo made to configure its technology to work around the copyright laws came to nothing. However, even now the case provides an interesting study in technology development versus regulation. Let's take a look at it in context.

The Copyright Act of 1976, which was of course enacted well before the development of streaming video, gives a copyright owner the "exclusive right" to "perform the copyrighted work publicly." The so-called "Transmit Clause" of that Act says that the exclusive right includes the right to "transmit or otherwise communicate a performance ... of the [copyrighted] work ... to the public, by means of any device or process, whether the members of the public capable of receiving the performance...receive it in the same place or in separate places and at the same time or at different times." That is pretty broad protection for the copyright holder, which in this case is the TV station or network.

Aereo's technology is intricate. It works something like this: it offers broadcast television programming (i.e. copyrighted material) over the Internet for a fee. The programming is virtually the same as it is broadcast over the air. A subscriber can watch a show that is currently being broadcast by selecting it from a list of local programming on Aereo's website. One of Aereo's servers selects one of thousands of dime-sized antennas, all of which are housed in a central warehouse. The antenna is dedicated to that customer for the duration of the chosen television program and the server tunes the antenna to the over-the-air television broadcast channel carrying the show. The antenna receives the broadcast and Aereo's transcoder translates the show into data that is transmitted over the Internet. But it is not sent directly to the

subscriber. Rather, the server saves the data in a subscriber-specific folder on Aereo's hard drive. It therefore created a copy of that program that is unique to that one subscriber. Once a few seconds of the program are saved, the server starts streaming the saved copy of the show to the subscriber over the Internet. The subscriber can time-delay the viewing of the programming by instruction to the server, or he or she can watch the streamed program on any of a number of devices.

What Aereo relied on to avoid the copyright obligation that they would otherwise have is the "personalized" feature of the technology. They claimed that each subscriber had a personal copy of the program made from a particular antenna allotted to that one subscriber. No data from the one subscriber's program is available to any other subscriber. Each program is saved uniquely for the one subscriber who requests it, no matter how many subscribers request the same show at the same time. Each stream of the show is done by separate transmissions. This configuration of Aereo's system was convincing to the Second Circuit U.S. Court of Appeals, which held that Aereo did not "perform publicly" the copyrighted work within the meaning of the Transmit Clause of the Copyright Act because it did not "transmit to the public". Instead, it sends a "private" transmission that is available only to the subscriber.

The Supreme Court reversed the Second Circuit. It held first that Aereo did in fact "perform" the works, and second that it performed them publicly. To "perform" an audiovisual work under the Copyright Act means "to show its images in any sequence or to make the sounds accompanying it audible." They said that performing "publicly" under the Transmit Clause is when an entity "transmits...a performance...to the public." The Court noted that Congress had enacted the 1976 Copyright Act in part to reverse two Supreme Court cases that held that CATV systems were essentially like broadcasters and were exempt from the Copyright Act. The purposes that Congress had in 1976 essentially doomed Aereo. The Court held that Aereo is not simply an equipment provider, as it had argued. It, and not just its subscribers, performs (or "transmits"). Aereo sells a service that allows subscribers to watch television programs, many of which are copyrighted, almost as they are being broadcast. In

providing this service, Aereo uses its own equipment in a centralized warehouse, outside of user's homes. Its technology received programs that have been released to the public and carries them by private channels to additional viewers. These factors make the Aereo system the same as the CATV systems that, in 1976, Congress deliberately intended to include in the Copyright Act's scope.

The minority in the Supreme Court who dissented argued that because Aereo's subscribers, rather than Aereo, selected the copyrighted programming that was performed, this was a big difference and so it was the viewer, not Aereo, that transmitted the performance. Furthermore, the CATV systems transmit constantly; Aereo responds only when interrogated. The majority of the Justices said that didn't make any difference: the effect was the same from the perspective of the broadcaster and the viewer. In effect, the Supreme Court said that the technological differences between Aereo's system and a cable system didn't matter; the effect was the same, and the technology was invisible to both the broadcaster who owns the copyright to the programs and the viewer who acquires the programming.

Interestingly, however, the Court attempted to narrowly limit its decision in the Aereo case, saying that the decision was limited to a finding that Aereo's system violated the 1976 Copyright Act. But it reached the decision by saying that the technology employed wasn't really the issue because it was invisible conceptually. Due to that bit of irony, it is difficult to see how the decision is as limited as perhaps the Court would ideally like it to be.



FOCUS ON SBE

by John L. Poray, CAE
SBE Executive Director
jporay@sbe.org

Two SBE books underway will add to your resource library

The SBE has two new publications in the works and both should prove to be valuable resources to any broadcast engineer. You'll want to get them when they're released.

The SBE is partnering with publisher McGraw-Hill and noted broadcast technical author, Jerry Whitaker to produce the SBE Broadcast Engineering Handbook. The book will cover a broad range of topics important to both radio and television engineers at stations, as well as contractors and consultants.

An editorial advisory board (EAB), co-chaired by Whitaker and SBE Publications Chair, Andrea Cummis has been working to identify topics important to you and the experts who can write about them. Their work is progressing and the release of the book, projected to be approximately 1,000 pages, is targeted for April 2015.

Serving with Whitaker and Cummis on the EAB are, Tim Carroll, Rich Chernock, Doug Garlinger, Ralph Hogan, John Luff, Wayne Pecena, John Poray and Gary Sgrignoli. This group met enthusiastically via conference call numerous times since 2013. The topic sections of the book tentatively include audio, video, compression, production and master control, DTV transport, RF systems, facilities, IT, regulatory and management. We anticipate that at least several dozen topical experts will be contributing to the book.

Another book that we are eagerly awaiting is, TV Operations: A handbook of technical operations for TV on-air, cable, mobile and Internet, being written by Fred Baumgartner and Nicholas Grbac. This book will be a comprehensive look at television master control, covering the basics of operation, including the concepts, practices and regulations inherent in the master control operator's job. Unlike other texts, the book is specifically designed for

those with a minimum to moderate amount of Master Control exposure. The authors expect that even experienced operators will also benefit from this text.

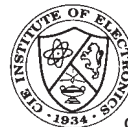
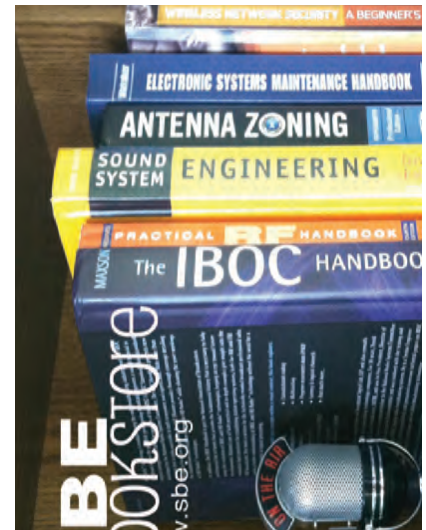
The book is expected to be released later this year. We anticipate that in addition to becoming an important resource for broadcast engineers and operations staff, this publication will become a staple for classroom use as well.

Baumgartner has an extensive 40-year background in broadcasting, cable, product development, mobile and satellite TV. He is currently with KMGH-TV in Denver. Grbac has over thirty years experience in television, specializing in on-air operations in both small and large-market facilities. He is with KRON-TV in San Francisco.

In addition to books that the SBE has published on its own or with major publishers, we have long been a third-party reseller of technical books of interest to our members. We're able to pass on a portion of the savings we receive from ordering at wholesale prices to you. We generally don't carry inventory, but take your orders and have the books shipped to you right from the publisher.

We work with a number of popular publishers including CRC Press, Wiley and Sons, Elsevier, McGraw-Hill, Pearson Education and ARRL. In all, the SBE Bookstore has more than 75 titles available. You can find the SBE Bookstore on our website and orders can be made on-line or by calling the SBE office during normal business hours. Books are categorized by topic, including Television/Video, Radio/Audio, and Computers/Networking.

Plan to take a few minutes to visit the website and review the books that are available. Some of these are also listed on the SBE Certification suggested reference list to prepare for certification exams. I think you're likely to see several that you will find to be of interest and helpful to you in your work. ●



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Engineering Perspective

by John M Lyons, Assistant Vice President and Director of Broadcast Communications
The Durst Organization
jlyons@durst.org

One World Trade Center...Then and Now

In the 1980s and 1990s, the World Trade Center was the pivotal broadcasting facility in New York City. The majority of the market's television and FM stations broadcasted from atop Tower 1. Today, One World Trade Center is positioned to, once again, be the center of TV and FM broadcasting in New York City.

The Durst Organization, is the joint venture partner of The Port Authority of New York and New Jersey, and the operator and manager of One World Trade Center. In addition Durst Broadcasting LLC operates the Broadcast facility and all rooftop communications operations.

The Durst Organization is in active conversation with several broadcasters who are considering relocating to One WTC or adding it as an alternate site. The spire is fully constructed and ready for antenna mounts



John Lyons stands beside the lighting rod that sits atop One WTC.

to be installed. Transmission line routes have been designed as has the broadcast facility floor, cooling system, electrical distribution system with emergency generator, and access and security services. Currently, the uncertainty of the Spectrum Repack and Channel Auction make it impossible to make antenna purchases as the channel assignments will dictate how much power will be needed to be fed into each antenna. This will



The massive tower sections layed down in the field yard.



The different tower sections during construction

determine the antenna characteristics that are required and possibly the exact antenna locations on the spire. Although it is unlikely that there will be much movement in the Number 1 DMA, it is too early to make

that assumption. From the 67-ton bottom section of the spire to the lightning rod on top, the 781-ton, 408' spire stands out on the New York City skyline. The accompanying photos demonstrate how massive each spire section is.

With the project still under development, this article is focusing on the spire and the early installation work. A future article will focus on the broadcast facility as it begins to take shape.

The spire was built by a joint venture of ADF Group of Canada and DCM Erectors of New York. From Canada, the lower sections were then shipped by barge to MRP LLC of Plainfield, New Jersey, where the sections were assembled and some of the electrical feeders were pre-installed prior to being transported to the



The new spire is erected added to the top of One WTC.

WTC site. Once on-site, the lower sections were hoisted to the top of the building and stacked on the roof. The upper sections were shipped via truck and sections were 'married' together on the ground before being hoisted to the top. The final section with navigation beacon and FAA light were lifted to the top of the building on May 2, 2013 and set atop the rest of the spire sections on May 10, 2013.

We are working with New York City broadcasters to develop a test of the power

and reach of the One WTC broadcast facility. UHF and VHF antenna testing is planned for the near future with the test procedures, test points and other criteria already set to evaluate the signal and coverage from the building.



Lyons standing beneath the erected spire and lighting rod atop One WTC.

The broadcast floor would be able to accommodate all New York City licensed FM & TV stations as well as the required combining systems with workspace and storage for broadcast supplies also available. The facility also has three communications rings that can accommodate the smaller antennas for such services as microwave point-to-point, ENG, RPU, satellite downlinks and cameras, both fixed and steerable.

The mechanical plant is capable of supplying both condenser and chilled water for air conditioning and to service heat exchangers for the broadcast transmitters. Loading docks have



The American flag is displayed from the top of the spire to be seen by nearly all of New York City

hydraulic lift gates to accommodate heavy loads, 24/7 building engineers on duty, full fiber and copper communications line facility to compliment the

wireless services on the communications rings as well as all broadcast operations.

In addition to owning and managing One WTC, The Durst Organization also owns and operates 4 Times Square, which houses the



While in high school, it had always been in the back of Randy Greenly's mind that he wanted to be in radio. He took the plunge in 1977 when he enrolled at Brown Institute (now Brown College) in Minneapolis to become a DJ. Upon graduating, he took his first job at KOLL-FM in Gillette, Wyo. That lasted just over a year and then it was on to WITY-AM in Danville, Ill, KABG-FM in Cambridge, Minn. and finally WMFG-AM/FM in Hibbing, Minn., where he worked on the air, originally evenings, then morning drive for close to five years.

While there, Greenly decided he could probably make more money working behind the microphone instead of in front of it, so he took some electronics classes at the local vocational-technical school and gained some experience while assisting in the rebuild of the studios after a fire.

That beginning eventually led Greenly to Minnesota Public Radio (MPR) in St. Paul where he is a Radio Network Engineer. Greenly has been a member of the SBE since 2008 and

holds the CBNT certification from the SBE. He participates in activities of Minnesota's Chapter 17. Asked what he likes most about his chapter, Greenly says, "...gathering with other engineers from in and around the Twin Cities where we offer helpful suggestions to each other's problems and also hearing all the 'war stories' about this market."

When asked who he most admires in the industry, Greenly says, "That would be the man who hired me almost 30 years ago in the Spring of 1985....then MPR Director of Engineering, Ralph Hornberger. He took a bit of a flyer hiring me as my technical experience at that time was somewhat limited. This was when I really learned the ins and outs of radio engineering with "hands on" training on transmitters, microwave systems, studio design, circuit design, satellite delivery gear and all the other associated equipment."

Greenly says what he likes most about his job is the travel. "Currently I oversee contract engineers for stations in central and northeast Minn. as well as Houghton, Mich. and Sun Valley, ID. (Yes, Minnesota Public Radio has a station in Idaho.) I get to travel to these sites periodically and also whenever there is a major overhaul, i.e., new transmitter installation or other equipment replacement," he said.


We asked Greenly what's one thing he likes to do when he's not working. He said, "There are really two.....backpacking and Scouting. I have hiked a large section of the Border Route Trail through the Boundary Waters Canoe Area Wilderness in northern Minn., most of the Superior Hiking Trail along the north shore of Lake Superior and in 2009, I did the southern half of the Appalachian Trail from Springer Mountain, Ga. to Duncannon, Pa. (over 1100 miles). I will be combining

both of these hobbies this summer for 12 days backpacking with some of our Scouts at the Philmont Boy Scout Reservation in New Mexico." In 2015 Greenly, who has a backpacking nickname of RadioFreq, plans to go back to Duncannon to continue his hike north and complete the Appalachian Trail.



Randy Greenly in 2009 at Springer Mtn. Ga., the southern terminus of the Appalachian Trail.

Something most people don't know about Greenly is while working at WITY, he had the opportunity to drive a souped-up Mustang in a stock car race just across the border in Indiana. It was on a half-mile, banked asphalt track. In a field of eight he wound up second.

Another is that in 2013, he participated in the Double Dog Dare, a fundraiser for the local Boy Scout Council that involved rappelling 23 stories down the outside of a building in downtown, St. Paul. He said, "That was far more intense than driving the stock car." 

A snapshot in time



SBE members of the 2001 NAB Broadcasting Engineering Conference Committee are recognized by committee chair, Jerry Whitaker (at podium) during the SBE Membership Meeting on April 24, 2001, held in Las Vegas during that year's NAB convention. (l-r) Bob Hess, Dane Ericksen, Barry Thomas, Rick Farquhar and Andy Butler. All were, or had been, members of the national SBE Board of Directors and three, Thomas, Farquhar and Butler, served the SBE as national president.

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Oct. 8, 3 pm ET

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Answer from page 5

C. 16 bytes

MEMBERS ON THE MOVE

Tom Atkins is now Director of Engineering at Saga Communications.

John Humphrey, CPBE is now Principal Consultant at Digital Television Solutions.

Don Perkins, CBT is now a Computer Support Associate at Tompkins Community College

Don Rooney is now Vice President, Systems Engineering at Burst Communications.

Mark Simpson, CPBE, AMD, DRB, CBNE, MCP is now Regional Engineering Manager at Cumulus Media in Tuscon, Ariz.

Joe Stack, PE, CSRE, 8-VSB, CBNT is now Engineering Supervisor at CBS Radio, New York City.

Tom Weems, CPBE is now a Consulting Television Engineer at Weems & Associates.

Have you recently made an employment change or received a promotion? Let your fellow SBE members know about it. Send your news to Dan Kissel at dkissel@sbe.org.

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SPIRES from page 12

primary and backups for several TV and many FM radio stations. In addition to broadcast, 4 Times Square contains many ancillary services available at One WTC and serves as a hub for many of the common carrier services. The building was the first to install a fully operational First Responders Communications System in the entire 13 million square foot Durst Organization portfolio. The Durst Organization is one of the first developers to have cell service throughout the portfolio with one or more carriers servicing each property.

John Lyons has been active in commercial Broadcast Communications since 1966, having worked at Bonneville, Sonderling,

RKO General, Viacom, Chancellor Media, Clear Channel stations before joining The Durst Organization in 2002. He is an active member of SBE, a CPBE (#10) and Fellow (1977), former NYC Chapter 15 chairman and former SBE national board member; a Certified Master Engineer in both RF and non-RF disciplines from iNarte; an associate member of AFCCE, serves on the board of directors of The Brooklyn Tech Alumni Foundation and Gatewave, a radio reading service for the visually impaired. He was also President of the Veterans Hospital Radio and Television Guild and served on that board for many years. ●

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