Snelson elected to second term as SBE president

The membership of the SBE has elected Joseph Snelson, CPBE, 8-VSB to a second term as national president. He will begin his one-year term on October 8. As president, Snelson leads the organization and presides over its national board of directors that determines policy for the 5,000+ member professional society. Snelson is vice president of engineering at Meredith Corp., and resides in the Las Vegas, Nev. area. He is a member of SBE Chapter 128, in Las Vegas.

Elected vice president for a second term is Jerry Massey, CPBE, 8-VSB, AMD, DRB, CBNT of Greenville, S.C. Massey has chaired the SBE Sustaining Member Committee during the past year and is chairman of SBE Chapter 86, encompassing the Greenville and Spartanburg, S.C. and Ashville, N.C. areas. He is corporate regional engineer southeast and director of engineering for Entercom Greenville, LLC.

Elected to a fourth one-year term as secretary is Jim Leifer, CPBE, of Boynton Beach, Fla. Leifer is a member of Chapter 53, South Florida and has chaired the SBE By-laws Committee the past year. He is director of engineering and IT for iHeart Media South Florida.

Elected treasurer for a second term is Andrea Cummis, CBT, CTO of Roseland, N.J. Cummis is a member of Chapter 15 in New York City and this past year served as chair of the SBE Publications Committee. Cummis is a broadcast consultant and owner of AC Video Solutions.

Elected to two-year terms as directors on the board are:

- **Tim Anderson, CPBE, DRB, CBNE**, Chief Radio Product Architect, GatesAir, Mason, Ohio
- **Benjamin Brinitzer, CPBE, AMD**, Regional VP Engineering, iHeart Media & Entertainment, Charlotte, N.C.
- **Gary Kline, CBT, CBNT**, Senior VP Corporate Engineering & IT, Cumulus Media, Atlanta, Ga.

Wrapping Up the 50th

by Joe Snelson, CPBE, 8-VSB

By the time you are reading this the SBE National Meeting will either have just occurred, or just about to, in Verona, New York, held concurrently with the SBE Chapter 22 Broadcast & Technology Expo.

This particular meeting is special as it wraps up our year of celebrating the 50th anniversary of the SBE. Reflecting back, we kicked-off our celebration at the national meeting held a year ago in Indianapolis. As part of the kick-off, we announced the SBE Certification Jubilee program where we gave an opportunity for those who had let their SBE certification lapse to renew it without taking an exam, provided they met a few qualification requirements.

Our celebration continued in April of this year, during the NAB Show and Broadcast Engineering Conference. It was a great success with food, prizes, the signing of a timeline, the airing of a 50th anniversary video and a commemorative poker chip to remember the event by. Who knows, that poker chip could be a valuable item when the

IN THIS ISSUE

3 Three scholarships awarded
4 Looking back over 50 years
6 Tower Site Calendar
8 SBE chapter engineer of the year awards
12 TV repack scenarios
14 National Meeting
As the SBE now enters its 51st year, we look forward to further growth and advancement in the education of our members through various means, ranging from publications, workshops, live webinars and on-line training. While it is always interesting to look at the past and talk about things that have been accomplished, we now can use these accomplishments as a foundation for the future. The SBE looks forward to a rewarding future in serving our members and playing an integral part in their career development and advancement.

I want to take a moment and share with those of you who are unable to attend either the national meeting or awards dinner a few highlights from our 50th Anniversary in 2064. We had a few poker chips given away during our national meeting. As you know from previous articles, our certification program continues to grow by Joe Snelson, CPBE, 8-VSB
SBE President jsnelson@sbe.org

Our thanks to members of Chapter 25 in Indianapolis who served on the Board of Tellers for this year’s election.  (l-r) Dave Fort, Bill Cherry, Doug Garlinger, CPBE, 8-VSB, CBNT, Dale Smiley, CPBE Tom Weber, CPBE, CBNT and Al Grossniklaus, CBNT

As the SBE now enters its 51st year, we look forward to further growth and advancement in the education of our members through various means, ranging from publications, workshops, live webinars and on-line training. While it is always interesting to look at the past and talk about things that have been accomplished, we now can use these accomplishments as a foundation for the future. The SBE looks forward to a rewarding future in serving our members and playing an integral part in their career development and advancement.

I want to take a moment and share with those of you who are unable to attend either the national meeting or awards dinner a few highlights from our 50th Anniversary in 2064. We had a few poker chips given away during our national meeting. As you know from previous articles, our certification program continues to grow by Joe Snelson, CPBE, 8-VSB
SBE President jsnelson@sbe.org

Our thanks to members of Chapter 25 in Indianapolis who served on the Board of Tellers for this year’s election.  (l-r) Dave Fort, Bill Cherry, Doug Garlinger, CPBE, 8-VSB, CBNT, Dale Smiley, CPBE Tom Weber, CPBE, CBNT and Al Grossniklaus, CBNT
Three awarded Ennes Trust scholarships

The Ennes Educational Foundation Trust, the non-profit, charitable arm of the Society of Broadcast Engineers, has awarded three scholarships to broadcast engineering and technology students for 2014.

Clifford White, of Tyler, Texas, is receiving the Harold E. Ennes Scholarship. White was born and raised near Tyler, Texas. His family has operated a small TV downlink station as long as he can remember. When he was fourteen years old, he decided to become an amateur radio operator, testing all the way to the Extra Class license within two months. He is now in his second term as a board member of the Tyler Amateur Radio Club. Being naturally inclined toward engineering, he always knew he wanted to be an engineer of one flavor or another. The ample exposure from both amateur radio, his work with his family’s small station, and friends at other broadcast stations, he made the choice of electrical engineering an easy one. He is enrolled at LeTourneau University in Longview, Texas, to study just that.

Kate Stockslager is receiving the Youth Scholarship. Stockslager, of Camden, Del., earned her Technical Diploma in the field of Radio/TV Production and Broadcasting from Polytech High School in June. While at Polytech, she became an Adobe Certified Associate in Video Communication using Adobe Premiere Pro CS6, and her senior technical exhibition focused on the mobilization of media and included interviews recorded with National Public Radio, Verizon, and Best Buy. In addition to hobbies that include painting and photography, Katie spent many volunteer hours creating and editing videos for various school departments as well as outside businesses.

After placing first in the state championship earlier this year, Katie and her teammate moved on to the national Skills USA conference in Kansas City, competing in Audio/Radio Production. She is currently a freshman attending Salisbury University in Maryland, working toward her bachelor’s degree and ultimately a career in video or audio production or broadcasting.

The recipient of the John H. Battison SBE Founder’s Scholarship is Kevin White. White, from Lakewood, Wash., is a student of Bates Technical College in Tacoma. While there, he has become the vice-president of the student government, gained his CBT certification and FCC amateur radio general class license, and spends his spare time at the bench troubleshooting and repairing anything in sight. This past summer, White looked to gain more knowledge and real life, hands-on experiences at KBTC-TV.

The Ennes Educational Trust was originally initiated by SBE Chapter 25 of Indianapolis, Ind., in 1980, in memory of Harold E. Ennes, author of many textbooks for broadcast and broadcast-related communications training and a member of the Indianapolis chapter. Ennes was a member of the SBE National Certification Committee and made many contributions to the early development of the certification Program.

Those wishing to make a contribution to the scholarship fund may send donations to: Ennes Educational Foundation Trust, 9102 N. Meridian Street, Suite 150, Indianapolis, Ind., 46260. Checks should be made payable to Ennes Educational Foundation Trust, with the specific scholarship name written on the memo line. The Ennes Educational Foundation Trust is a 501(c)3 charitable organization. Contributions by most individuals are tax deductible. More information on the Ennes Educational Foundation Trust can be found at the education section of the SBE website sbe.org.
Looking Back Over 50 Years
Former president recalls his days at the helm of the SBE
by Rick Farquhar, CPBE

I was pleased and honored when John Poray, during this 50th anniversary year, asked me to share my thoughts about the Society during my years of service.

When I was elected president, my wife Nancy asked me if I was sure I wanted to do this. Those were turbulent times in SBE, and there would be a lot of pressure on, not just me, but the other volunteers as well.

Many of you probably remember Nancy, as she accompanied me on all of our SBE activities. For 52 years she was by my side, giving her thoughts, listening and providing additional input and guiding me during my terms. Nancy was not a member of the Society but she gave her all to the SBE. I remember we had a meeting in Chicago and she had just had surgery. Wrapped in pillows, she made the trip and went about her activities and just kept smiling.

When I assumed the presidency, I quickly found there were some issues that had to be resolved; the SBE conventions, member services, certification, Ennes educational programs and financial issues and they all required immediate attention. I was very lucky during my term that I had several volunteers that had very definite ideas on how to resolve the issues. I will admit, that at times, these volunteers and I were at odds, but it has all worked out, and those same volunteers have gone on to serve the Society as officers and members of the board. It was a great training ground for all of us.

I also knew at this time we needed a professional manager on board, who should be located at the SBE headquarters in Indianapolis. In October 1992, I brought on John Poray as Executive Director. He had many of the qualifications I was looking for and, just as important, he was willing to work for what the SBE could pay. Of all the decisions I made while president, this would rank near the top. I remember when John and I first worked together. It was in San Antonio in the fall of 1992. Prior to this, Nancy used to keep my notes. I was great at making decisions but not so good at keeping track on paper. Well, John inherited that responsibility. I can still remember John taking his notebook and writing the entire time and when we had our meetings, he was right there with all the details. I have received a lot of credit for accomplishments during my term, but you can see that I had the best support team in the world. How could I fail?

During my term, I knew we had to increase our communications with our members. The “Ham Radio of the Air” had been around but was not very active. With Hal Hostetler and a couple of others, myself included, we reactivated the “Chapter of the Air.” It was a chance for members to talk with the president, as well as a couple of board members that were

Looking Back Over 50 Years
Former president recalls his days at the helm of the SBE
by Rick Farquhar, CPBE

I was pleased and honored when John Poray, during this 50th anniversary year, asked me to share my thoughts about the Society during my years of service.

When I was elected president, my wife Nancy asked me if I was sure I wanted to do this. Those were turbulent times in SBE, and there would be a lot of pressure on, not just me, but the other volunteers as well.

Many of you probably remember Nancy, as she accompanied me on all of our SBE activities. For 52 years she was by my side, giving her thoughts, listening and providing additional input and guiding me during my terms. Nancy was not a member of the Society but she gave her all to the SBE. I remember we had a meeting in Chicago and she had just had surgery. Wrapped in pillows, she made the trip and went about her activities and just kept smiling.

When I assumed the presidency, I quickly found there were some issues that had to be resolved; the SBE conventions, member services, certification, Ennes educational programs and financial issues and they all required immediate attention. I was very lucky during my term that I had several volunteers that had very definite ideas on how to resolve the issues. I will admit, that at times, these volunteers and I were at odds, but it has all worked out, and those same volunteers have gone on to serve the Society as officers and members of the board. It was a great training ground for all of us.

I also knew at this time we needed a professional manager on board, who should be located at the SBE headquarters in Indianapolis. In October 1992, I brought on John Poray as Executive Director. He had many of the qualifications I was looking for and, just as important, he was willing to work for what the SBE could pay. Of all the decisions I made while president, this would rank near the top. I remember when John and I first worked together. It was in San Antonio in the fall of 1992. Prior to this, Nancy used to keep my notes. I was great at making decisions but not so good at keeping track on paper. Well, John inherited that responsibility. I can still remember John taking his notebook and writing the entire time and when we had our meetings, he was right there with all the details. I have received a lot of credit for accomplishments during my term, but you can see that I had the best support team in the world. How could I fail?

During my term, I knew we had to increase our communications with our members. The “Ham Radio of the Air” had been around but was not very active. With Hal Hostetler and a couple of others, myself included, we reactivated the “Chapter of the Air.” It was a chance for members to talk with the president, as well as a couple of board members that were
**EDUCATION UPDATE**

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

---

**Have You Attended an Ennes Workshop?**

The Ennes Workshop is one of the premier events of the National Association of Broadcasters annual conference each year in Las Vegas. Produced by the Society of Broadcast Engineers in cooperation with NAB, this Saturday workshop offers a full day of timely technology tutorials and presentations to hundreds of broadcast engineers over the years.

But, what if you have been unable to attend the NAB Annual Conventions? Ennes Workshops are still available to you at regional locations across the US throughout the year. Since 2010 over eight hundred Broadcast Engineers have attended regional Ennes Workshops held in locations such as El Paso, San Diego, Dallas, Orlando, Miami, Sacramento, New York, Pittsburgh, Hartford, and Cleveland. These regional events bring the same full-day of technology focused tutorials and presentations to the broadcast engineer. Topics cover the gamut of technology found in the broadcast plant ranging from FCC Hot Topics, to Transport Stream Solutions and Advances, to IP Networking, to Lightning Protection, to Cellular Technology for ENG, to Real-World AoIP Problem-Solving, to Spurs: Your Fault or Not.

**What is An Ennes Workshop?**

The Ennes Workshops were created in 1991 through the Ennes Educational Foundation Trust in an effort to bring affordable education to members locally. The Ennes Educational Foundation Trust, through its Education Foundation Committee, offers periodic workshops and seminars around the United States. Programs are typically one day in length (app. 9 am - 5 pm) and are very affordable. These programs feature multiple topics and speakers that provide television and radio engineers with the latest information in broadcast and media technology.

The Harold Ennes Scholarship Fund Trust was initiated by Indianapolis Chapter 25 in 1980 in memory of Harold E. Ennes, author of many textbooks for broadcast and broadcast-related communications training and a member of the Indianapolis chapter. Ennes was a member of SBE’s national Certification Committee and made many contributions to the early development of the certification program.

To encourage greater growth, the scholarship trust was transferred by Chapter 25 to the SBE national organization to administer in 1981. Over the years, the purposes of the trust were expanded. In addition to granting scholarships, the trust now is involved with the funding and presentation of broadcast engineering-related educational programs, seminars and workshops. It also helps to underwrite costs associated with publishing technical books and manuals.

The name of the Trust was changed in 1995 to the “Harold Ennes Educational Foundation Trust” to fully embrace its expanded role.

**Who is Harold Ennes?**

Harold E. Ennes was likely the most prolific broadcast engineering author of all times. His numerous texts published in the 60’s and 70’s became the knowledge foundation for many an aspiring broadcast engineer as well as a trusted reference for the experienced engineer. Titles such as the Broadcast Engineering Notebook, Television Broadcasting Camera Chains, Workshop in Solid State, and AM-FM Broadcasting Equipment and Operations are just a few of the titles found on the shelves of many broadcast engineers.

---

**Certification Question**

Statistically, within how many dB of the average power at 99.9% of DTV peak power excursions?

1. 3.0 dB
2. 6.3 dB
3. 10.6 dB
4. 11.3 dB

---

SBE Leadership Workshop – Atlanta Recap

The 2014 SBE Leadership Development Course was again held in Atlanta this past summer. This highly interactive and unique professional development program focused upon preparing the broadcast engineer for leadership and management roles in the industry. Purdue University Professor, Rodney Vandeveer, inspired, motivated, and shared his people skills with 25 engineers from across the country. Brian Ollier, of WTOP-FM, Washington, D.C. had this to say; “Rodney is a great teacher, facilitator and discussion leader. He has a deep knowledge of the subject and is well-prepared. Truly an outstanding seminar.” The highly interactive course challenges you to refine your leadership skills as you better understand and improve how you interact with others. Subjects include understanding the dynamics of leadership, a leadership behavioral style assessment, communications, effective motivation techniques, building winning teams and much more. Consider adding the 2015 SBE Leadership Development Course to your future professional development plans.

**Bring an Ennes Workshop to Your Regional Broadcast Engineering Event**

Regional Ennes Workshops are often held in conjunction with a state broadcast engineering conference or simply sponsored by a local SBE chapter.

The schedule has at least one open date in 2014 and 2-3 openings for this regional event in 2015. Contact Kristin Owens at the National SBE office for further information and to schedule a regional Ennes Workshop at your next SBE event.

Learning is a continuous process for the technology professional and certainly the broadcast engineer. Remember, continuous learning is a key trait of the successful technology professional!

---

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 Kristin by phone at (317) 846-9000

---

October 2014
As the local certification chairman for Chapter 28, Milwaukee, Wis. and as a member of the National Certification Committee, I am often asked the same type of questions. ie: What is the passing score of a certification exam? How many books can I use on the test?

Below is a list of the most frequently asked questions and their answers. Hopefully by having the answers to these questions, you will be more comfortable about the exam process and submit your application to become certified.

Q. What is the passing score for the certification exams?
A. Certified Television Operator (CTO) - 90%
Certified Radio Operator (CRO) - 90%
Certified Broadcast Technologist (CBT) - 70%
Certified Broadcast Networking Technologist (CBNT) - 70%
Certified Video Engineer (CEV) - 70%
Certified Audio Engineer (CEA) - 70%
Certified Broadcast Television Engineer (CBTE) - 70%
Certified Broadcast Radio Engineer (CBRE) - 70%

The following certifications require a score of 84 points out of 120, which is a combination of the multiple choice questions and the essay. The essay portion must score at least 10 out of 20 points.
Certified Broadcast Networking Engineer (CBNE)
Certified Senior Television Engineer (CSTE)
Certified Senior Radio Engineer (CSRE)
8-VSB Specialist (8-VSB)

AM Directional Specialist (AMD)
Digital Radio Broadcast Specialist (DRB)

Q. What happens if I don’t pass?
A. You can retake the exam for a $25 fee as early as the next scheduled exam session. (Applicants are only notified whether they passed or failed an exam. Scores are not given out to anyone.)

Q. How long will it be once I’ve taken the test before I know the results?
A. That answer varies depending on the type of test you have taken. An exam that doesn’t include an essay question can be graded and the results sent back within a couple days of receiving it at the SBE National office. If there was an essay included with the exam, those grades may take longer. (The essays are sent to members of the National Certification Committee for grading.)

Q. Once I pass an exam, what then?
A. You will receive a card and certificate of certification in the mail. Your certification is valid for five years. SBE will also notify your employer, or anyone else you designate, of your certification if you request it at the time of application.

Q. How many books may I bring to the examination?
A. As many as you like, but remember they cannot be used during the essay portion of the senior, specialist or networking engineer exams. You may also take in any book that you think may be helpful for your exam, even if it does not appear on the Suggested Reference Lists.

Q. How about written notes?
A. You may not utilize notes during the examination process. This is done to insures the integrity of the question database.

Q. Are calculators and computers allowed during the test?
A. Calculators, yes -- computers, no. You may utilize your smart phone as a calculator but you will be required to put it in “airplane mode”. You will be on your honor not to use it for recording notes during the test.

Q. Why aren’t computers allowed?
A. Maintaining the integrity of the question database is critical to the success of our program. We want to be certain that the questions are not removed from the examination room, and by eliminating computers and restricting handwritten notes, we hope to accomplish that objective.

Q. Will success in a certification test guarantee a pay increase for me?
A. Sorry, no one can guarantee that. However, you will be joining a select group that proclaims to the world that they believe in investing in their future and improving their value to their employees.

Q. How current are the exam questions?
A. They are reviewed by the Certification Committee at least three times per year. We make a significant investment to keep the questions aligned with current technology.

Q. How do I list my certifications?
A. Check out the certification chart on the SBE website under “Certification” to better explain how to list your certifications.
New SBE Certification Achievements

CONGRATULATIONS

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.

Chapter 131
Ruben Calzadilla, Potomac, Md. –
Chapter 37
Fred Morton, Missouri City, Texas –
Chapter 105
John Boehm, Homewood, Ill. – Chapter 47
Robert Stroupe, Jr., Missouri City, Texas –
Chapter 26
Michael Hayden, DeKalb, Ill. – Chapter 26
Chapter 105
Michael Margrave, San Antonio, Texas –
Chapter 111
Michael Hendrickson, Lakeville, Minn. –
Chapter 15
William Morales, Van Nuys, Calif. –
Chapter 67
Alabama Broadcasters Association

Certified Broadcast Engineering Congress

2014 National Broadcast Engineering Conference (NBC2014)
October 13-16
Phoenix, Arizona

http://nbc2014.sbe.org/
SBE Chapters present their Engineers of the Year

Eleven members were selected to receive their chapter’s Engineer of the Year Award earlier this year. Each winner was presented with a certificate from the SBE National Office during a chapter meeting. The Society of Broadcast Engineers congratulates the members being recognized by their chapter. Eight of the recipients are pictured below.

Blake Thompson (left) receives Chapter 70, Northeast Ohio, Engineer of the Year award from Chairman, John Hovanec.

Jim Dalke (right) receives the Chapter 16, Seattle, Engineer of the Year award.

Antonio Castro (left) receives the Engineer of the Year award from Chapter 38, El Paso.

Tim Laes (right) receives the Chapter of the Year Award from Chapter 80, Fox Valley, Wisc.

Ray Lenz, winner of Chapter 54, Hampton Roads, Va, Engineer of the Year award.

Jon Strom received the Engineer of the Year award from Chapter 109, in Des Moines, Iowa.

Ed Martin (right), Chapter 113 Knoxville, Tenn, receives the Engineer of the Year award from Vice Chairman Rodger Washington.

Johnny Stigler of Chapter 67 in North Texas received the Engineer of the Year award.

ELECTED from page 1

- **Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE**  Director of Engineering, Texas A&M University, College Station, Texas
- **Eric Schecter, CBRE**, Director of Engineering, CBS Radio/Phoenix, Scottsdale, Ariz.

The national board of directors is responsible for the development of policy and determines the programs and services the society provides to its members. Those just elected will join four other directors who have one year remaining in their two-year terms:

- **Ted Hand, CPBE, 8-VSB, AMD, DRB**, Director of Engineering/Operations, Cox Media Group-Charlotte, Charlotte, N.C.
- **Kirk Harnack, CBRE**, VP and Executive Director, Telos Systems, Nashville, Tenn.
- **Ched Keiler, CPBE, 8-VSB, CBNT**, Broadcasting Consultant, Ft. Lauderdale, Fla.

- **Dennis Wallace, CBTE**, Managing Partner, Meintel, Sgrignoli & Wallace, Waldorf, Md.

As Immediate Past President, Ralph Hogan, CPBE, DRB, CBNE, Director of Engineering at KJZZ-FM/KBAQ-FM, Tempe, Ariz., serves on the Board for the coming term. John Heimerl, CPBE has been appointed to fill the unexpired director term of Tom Ray, who resigned earlier this year, effective Oct. 8, 2014. Induction of the newly elected officers and directors will be conducted during the SBE Annual Membership Meeting, held as a part of the SBE 50th Anniversary National Meeting in Verona, N.Y. The membership meeting will be streamed live via the Internet from 3 to 4 pm ET, Wednesday, October 8. The SBE National Meeting is being held in conjunction with the SBE Chapter 22 Broadcast & Technology Expo.

The election was conducted from July 21 through August 21. Voting was available via the Internet and through the mail. A total of 1,148 ballots were cast with 1,046 of them cast electronically.
CONNECT SEAMLESSLY, ACCESS SECURELY AND MANAGE INTUITIVELY

THAT'S THE CRITICAL DIFFERENCE.

Emerson Network Power’s Avocent Broadcast Solutions are designed for ultra-reliable content creation, production and delivery.

As the broadcast market technology leader, our trusted products and solutions for content creation, production and delivery ensure high reliability and availability and are designed for ease of use. Backed by our global professional services and support, we make sure you have reliable, efficient access to high quality content every time.

WELCOME TO THE SBE

NEW MEMBERS

Cherish A. Dollar - Las Vegas, NV
Myron D. Fanton - Atchison, KS
Aronica Glover - Spencerville, MD
Vanessa Sabatier - Long Island City, NY
Nancy Trembley - Hampton, GA
Thomas N. Kurzy - Houston, TX
James A. Almon - Severn, MD
Sandra W. Christian - Tyrone, GA
Chase K. Cook - Pratville, AL
William T. Godfrey - Gainesville, FL
Gina G. Keel - Houston, TX
Duval T. McLean - New York, NY
Austin R. Moore - Lebanon, MO
Shane R. Scott - Hartsville, AL
Martin R. Bates - Barberton, OH
Arwa Elbashbishi - Queens, NY
Bill R. Hieatt - Colleyville, TX
Michael A. Maxwell - San Diego, CA
Randall McCune - Seattle, WA
William S. Murphy - Tuscon, AZ
Joel North - St. John’s, Newfoundland, Canada
Thomas A. Sielicki - Fairbanks, AK
John E. Shiba - New York, NY
Maxwell D. Da Silva - Brooklyn, NY
Jesse Truong - New York, NY
David O. Gonzalez - Astoria, NY
Marlo A. Crow - Bedford, TX
James T. Gott - Paducah, KY
Kevin L. Reilly - Huntley, IL
Shadi Sabra - Phoenix, AZ
Richard R. Seiler - Weatherford, TX
Elizabeth A. Tuura - Orlando, FL
Darrell Gordon - Raleigh, NC
Kevin Berlen - Clay City, IN
Charles M. Abell - Woodbridge, VA
Gene Coughlin - Orangevale, CA
Luz Diaz - Long Island City, NY
Shaun M. Dolan - Champaign, IL
Thomas A. Fisher - Henrico, VA
Walter E. Streeter - Mishawaka, IN
Surrie T. Berkowitz - Kew Gardens Hills, NY
Jason Quinn - Albuquerque, NM
Javier Aguerrevere - Parker, CO

NEW STUDENT MEMBERS

William R. Sanders - Trinity, FL
Kevin S. Howard - Tacoma, WA
Kyle L. Paul - Tacoma, WA
Marvin D. Polite - Tacoma, WA
Avery L. Westmark - Tacoma, WA
Kevin A. White - Lakewood, WA
Ryder R. Christ - Sunland, CA
Matthew J. Codertholm - Mitchell, SD
Wai Shan Chan - Hong Kong, China
Hieu Kwaong - Hong Kong, China
Jeffrey T. Hodapp - Springfield, MO

NEW ASSOCIATE MEMBERS

Theodore J. Ortega - New York, NY
Benjamin N. Jaffe - Fairfax, VA
Jo’el Roth - Lakewood, CO

RETURNING MEMBERS

Philip W. Beckman - Manitowoc, WI
Robert M. Amoroso - Petaluma, CA
Thomas T. Hormuth, Jr. - Baltimore, MD
David Paff - Dover, FL
Scott Fuscell - Macen, GA
Richard W. Horner - John Day, OR
John A. Stefanick - Denville, NJ
Kurt Schroeder - Greenfield, WI
Clint W. Ash - Wichita, KS
Jeremy S. Wilkinson - Bowling Green, KY
Joshua Arenberg - Brooklyn, NY
Philip E. Schoene - Alexandria, VA
Samuel N. Smith - Trevor, WI
Rosanne M. Rowen - Ankeny, IA
Luis V. Romero - Tampa, FL
Christopher F. Cormier - Raleigh, NC
Trenton J. Mengel - Alexandria, VA

SBE at the AES Convention

Oct. 10-12, Los Angeles Convention Center

SBE Certification Exams session
Sunday, Oct. 12 from 2 – 5 pm

SBE Exhibit Booth

SBE co-produced Broadcast Engineer-oriented Educational Session – accessible with any badge

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

SBE at the AES Convention

Oct. 10-12, Los Angeles Convention Center

SBE Certification Exams session
Sunday, Oct. 12 from 2 – 5 pm

SBE Exhibit Booth

SBE co-produced Broadcast Engineer-oriented Educational Session – accessible with any badge

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

Learn More at EmersonNetworkPower.com/Broadcast.
A Model City: Testing for Spectrum Compatibility?

Broadcasters have really taken it on the chin over the last few years in terms of spectrum allocations. To consider just a few things that we have talked about in this column lately: TV white spaces devices; sharing with fixed broadband backhaul in the 7 GHz BAS Band; TV Band repacking; sharing with the Department of Defense at 2 GHz; wireless microphone spectrum reductions and upcoming shortages at UHF; and the list goes on. But it used to be worse, you know. What is common to all of the above spectrum allocations decisions that affect broadcasters and BAS spectrum is that they are all, in effect, sharing proposals. We may not like them because they make it hard for us to arrange real time news feeds, or add levels of noise to bands that make a shot “iffy”. But putting other users in spectrum that we have had on, in some cases, an exclusive or almost exclusive basis is better than losing access to the spectrum entirely, which is the way those allocation decisions used to be made.

In the 1980s and much of the 1990s, the order of the day was not spectrum sharing, spectrum overlays, or testing receivers for “interference temperature” to determine sharing compatibility when new services are added to already fully deployed spectrum. Instead, the issue was whether or not to reallocate spectrum: whether to take the incumbent service out of a band entirely, and relocate incumbent licensees to some other band. It was a swapout: replacement of the incumbent service’s allocation in the subject band. It was a swapout: replacement of the incumbent service entirely, which is the way those days are long over, and probably the right focus. The FCC and NTIA are to be congratulated for bringing to the table a method of objective, technical analysis and real-world, real time testing of sharing concepts so that the incumbent radio services have a chance to see what sharing with newcomers is really going to be like. Bravo, FCC. Bring it on.

FCC and NTIA jointly issued a public notice on July 11, 2014 discussing the “Model City” concept. FCC said that such an urban testing environment could “facilitate large-scale sustainable facilities for systems level testing in real-world environments across multiple frequency bands, potentially including selected federal and non-federal frequency bands.” FCC asked for comment on ways to establish, fund, and conduct the Model City program. What, they ask, are the “next steps” that NTIA and the FCC could take to develop specific approaches for effectively demonstrating and evaluating sharing technologies in real-world environments? What are the recommended spectrum bands for sharing, and what are the appropriate operational requirements? They also ask about public and private partnerships that would be useful in the Model City for encouraging spectrum sharing.

While it is easy to support the concept of spectrum sharing, it is difficult to develop sharing strategies that work. And failure is not an option and there is only one chance to get it right: an allocation plan that denies operators in one or more radio services the effective use of that allocation does not constitute sharing at all. The Model City concept is a reasonable and overdue effort to develop proof of new sharing concepts and compatibility before widespread deployment of them. This minimizes the possibility that a proposed sharing technique will be found inadequate or incompatible after deployment. The Model City concept should be a final step in the development of sharing techniques. The goal of joint, public-private development and analysis of sharing technologies, followed by joint, public-private testing of these technologies in a controlled environment, culminating, if warranted, by live, rigorous, proof of concept testing in an appropriate Model City is a good idea.

SBE’s model for spectrum efficiency in Broadcast Auxiliary spectrum fits very neatly into this concept. SBE’s informal frequency coordination program allows compatible sharing within the BAS, CARS and LTTS licensee communities, and in recent years it has supported interservice sharing among, for example, the Department of Defense, the Air Force, NASA and the standard BAS/CARS/LTTS licensees. The SBE coordinator in the Model City should be involved in the process.

What city in the United States could serve as a Model City for testing and rollout of new spectrum use concepts and sharing proposals? From the BAS perspective, it makes sense to consider the most crowded markets: probably Los Angeles or New York. But when you think about it, no broadcast market is identical and what could work in New York might not work in Los Angeles. The choice of markets is not, however, the right focus. The FCC and NTIA are to be congratulated for bringing to the table a method of objective, technical analysis and real-world, real time testing of sharing concepts so that the incumbent radio services have a chance to see what sharing with newcomers is really going to be like. Bravo, FCC. Bring it on.
Is your chapter meeting the minimum standard?

When it comes to meeting the needs and expectations of our members, there is nothing more important for many of them than to have a functioning, quality chapter in which to participate. Good chapters provide local SBE members with educational opportunities, recognition of knowledge and achievement, a chance to flex leadership muscles and opportunities to interact with peers.

Each year, a significant number of SBE chapters are recognized for meeting a minimum standard of performance. The recognition is in the form of a monetary rebate of a portion of the membership dues individuals pay each year to be a member of the SBE. Chapters use the rebates to help fund their activities. The minimum standard is that at least five meetings are held each calendar year and are reported to the SBE national office. The reports include a list of attendees and a brief description of the meeting program. Most chapters meet more than five times a year; in fact, the majority meet once each month. We are pleased to recognize the chapters that met the minimum standard in 2013.

Chapter Number, Location, Current Chairman

<table>
<thead>
<tr>
<th>Chapter Number</th>
<th>Location, Current Chairman</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Binghamton, Eric Adler</td>
</tr>
<tr>
<td>2</td>
<td>Northeastern Pennsylvania, Joseph Glynn, CPBE</td>
</tr>
<tr>
<td>3</td>
<td>Kansas, Jessica Rye</td>
</tr>
<tr>
<td>5</td>
<td>Atlanta, Robert Butler, CPBE</td>
</tr>
<tr>
<td>7</td>
<td>Jacksonville, Duane Smith</td>
</tr>
<tr>
<td>9</td>
<td>Phoenix, Robert Raymond, CPBE</td>
</tr>
<tr>
<td>11</td>
<td>Boston, Robert Yankowitz, CPBE</td>
</tr>
<tr>
<td>14</td>
<td>Connecticut Valley, Frederick Krampits, CPBE, CBNT</td>
</tr>
<tr>
<td>16</td>
<td>Seattle, Martin Hadfield, CPBE</td>
</tr>
<tr>
<td>17</td>
<td>Minneapolis, Joseph Conlon, CSTE, CBNT</td>
</tr>
<tr>
<td>18</td>
<td>Philadelphia, William Gellhaus, P.E., CPBE, CBNT</td>
</tr>
<tr>
<td>21</td>
<td>Spokane, Jerry Olson, CSRE</td>
</tr>
<tr>
<td>22</td>
<td>Central New York, Christopher Baycura, CEV</td>
</tr>
<tr>
<td>24</td>
<td>Madison, Kevin Trueblood, CBNT</td>
</tr>
<tr>
<td>26</td>
<td>Chicago, Gordon Carter, CPBE, CBNT, DRB</td>
</tr>
<tr>
<td>28</td>
<td>Milwaukee, Todd Boettcher, CPBE</td>
</tr>
<tr>
<td>30</td>
<td>South Bend, Timothy Chapman, CBT, CBNT</td>
</tr>
<tr>
<td>32</td>
<td>Tucson, Mark Simpson, CPBE, CBNE, DBR, AMD</td>
</tr>
<tr>
<td>33</td>
<td>Southwestern Ohio, George Hopstetter</td>
</tr>
<tr>
<td>35</td>
<td>Kentucky, Terry May, CPBE</td>
</tr>
<tr>
<td>36</td>
<td>San Diego, Andrew Lombard, CBTE</td>
</tr>
<tr>
<td>38</td>
<td>El Paso, Jose Castro</td>
</tr>
<tr>
<td>39</td>
<td>Tampa Bay Area, Steven, Hess, CPBE, CBNT</td>
</tr>
<tr>
<td>40</td>
<td>San Francisco, Arthur Lebermann, CPBE</td>
</tr>
<tr>
<td>41</td>
<td>Central Pennsylvania, Randall Miller, Jr., CBT, CBNT</td>
</tr>
<tr>
<td>42</td>
<td>Central Florida, Michael Flynn, CBTE</td>
</tr>
<tr>
<td>43</td>
<td>Sacramento, Robert Hass, CPBE</td>
</tr>
<tr>
<td>44</td>
<td>Shreveport, Rudolph Johnson, CBRE</td>
</tr>
<tr>
<td>46</td>
<td>Baltimore, Robert Lenio, CSRE</td>
</tr>
<tr>
<td>47</td>
<td>Los Angeles, Michael Tosch, CSRE, CSTE, CBNE, AMD</td>
</tr>
<tr>
<td>48</td>
<td>Denver, Shane Toven, CBRE, CBNT</td>
</tr>
<tr>
<td>49</td>
<td>Central Illinois, Gary Glaenzer</td>
</tr>
<tr>
<td>51</td>
<td>Tri-Cities, Jack Blum</td>
</tr>
<tr>
<td>52</td>
<td>Central Ohio, John Owen</td>
</tr>
<tr>
<td>53</td>
<td>South Florida, Carlos Sanchez, CPBE</td>
</tr>
<tr>
<td>54</td>
<td>Hampton Roads, Raymond Lenz</td>
</tr>
<tr>
<td>55</td>
<td>St. Louis, Terrence Dupuis, CBRE, CBNT</td>
</tr>
<tr>
<td>56</td>
<td>Tulsa, Roger Newton, CSTE, CBNT</td>
</tr>
<tr>
<td>58</td>
<td>Northeast (N.Y.), Charles Zariello, CBTE</td>
</tr>
<tr>
<td>59</td>
<td>Kansas City, Michael Rogers</td>
</tr>
<tr>
<td>66</td>
<td>Fresno, Ken Holden, CPBE</td>
</tr>
<tr>
<td>67</td>
<td>North Texas, Thomas Schuessler, CSTE</td>
</tr>
<tr>
<td>68</td>
<td>Birmingham, Tim Costley</td>
</tr>
<tr>
<td>69</td>
<td>South Texas, Lewis Miller</td>
</tr>
<tr>
<td>70</td>
<td>Northeast Ohio, John Hovanec, CSRE, CBNT, AMD, DRB</td>
</tr>
<tr>
<td>72</td>
<td>New Orleans, Ernest Kain</td>
</tr>
<tr>
<td>74</td>
<td>Midland, Edward Bok</td>
</tr>
<tr>
<td>76</td>
<td>Eugene, Dennis Hunt</td>
</tr>
<tr>
<td>78</td>
<td>Blue Ridge, J. Paxton Durham</td>
</tr>
<tr>
<td>79</td>
<td>Austin, Edward Rupp, CBTE, CBNT</td>
</tr>
<tr>
<td>80</td>
<td>Fox Valley, Stephen Konopka, CBRE</td>
</tr>
<tr>
<td>81</td>
<td>Grand Junction, Alfred Ladage</td>
</tr>
<tr>
<td>85</td>
<td>Central Western, Brian Ryef, CBTE</td>
</tr>
<tr>
<td>88</td>
<td>West Palm Beach, Steve Billing</td>
</tr>
<tr>
<td>96</td>
<td>Rockford, Ben Pfleiderer</td>
</tr>
<tr>
<td>103</td>
<td>Nashville, James Campbell III, CPBE</td>
</tr>
<tr>
<td>105</td>
<td>Houston, Frederick Morton, CSRE</td>
</tr>
<tr>
<td>109</td>
<td>Des Moines, Kevin Schrader, CBTE</td>
</tr>
<tr>
<td>111</td>
<td>Huntsville, Joseph Korab</td>
</tr>
<tr>
<td>112</td>
<td>Western Wisconsin, Mark Burg</td>
</tr>
<tr>
<td>113</td>
<td>Knoxville, Glen Wright, CBTE</td>
</tr>
<tr>
<td>115</td>
<td>Southern Idaho, Thomas Kettwig, CBT</td>
</tr>
<tr>
<td>117</td>
<td>Palouse Clearwater, Christopher Bailey CBT, CBNT, CTO, CRO</td>
</tr>
<tr>
<td>118</td>
<td>Montgomery, Wiely Boswell, CBRE, CBNE</td>
</tr>
<tr>
<td>122</td>
<td>Youngstown, Melissa Limpose</td>
</tr>
<tr>
<td>124</td>
<td>North Oregon, Everett Heim, CPBE</td>
</tr>
<tr>
<td>131</td>
<td>Island Empire, Don Bartie, CPBE, CBNT</td>
</tr>
<tr>
<td>133</td>
<td>Buffalo, Raymond Felkowski</td>
</tr>
<tr>
<td>134</td>
<td>Beaumont/Lake Charles, Wayne Ozo</td>
</tr>
<tr>
<td>136</td>
<td>Rio Grande Valley, Peter Hoekzem</td>
</tr>
<tr>
<td>141</td>
<td>Medford, Keane Laguatan, CBT</td>
</tr>
<tr>
<td>145</td>
<td>Magic Valley, Thomas Lowther, CSRTE, CBNT</td>
</tr>
<tr>
<td>1776 E. 17th, Cleveland, OH 44114           Registration Certificate 70-11-0002H</td>
<td></td>
</tr>
</tbody>
</table>

Members of Chapter 59, Kansas City discuss a topic at one of their meetings.

Will your chapter meet the minimum quality standard for 2014? There are still a few months to qualify. We hope your chapter will be counted among them.

Earn Your Diploma at Home!

**Cleveland Institute of Electronics**

**Distance learning** programs in electronics and computer technology!

**Programs offered:**
- Broadcast Engineering
- Electronics Tech with FCC
- Electronics Communications
- Industrial Electronics PLC
- Wireless
- Robotics and more!

**www.cie-wc.edu**
Course descriptions & tuition prices. Request a FREE Course Catalog!

**www.ciebookstore.com**
Learn iPhone Repair, Video Production, PC Repair & more! DVDs, labs & tools. Or call 1-800-243-6446

Registration Certificate 70-11-0002H
A look at TV repack scenarios – part 1

With the release of the first set of rules on the proposed incentive auction of part of the UHF-TV spectrum, TV broadcasters still have many unanswered questions concerning the effects of repacking of the UHF band. On June 2, the FCC released a series of spreadsheets (http://data.fcc.gov/download/incentive-auctions/Simulation_Results/) that give a possible look at various scenarios for the repacking of the UHF band after the auction.

To get some idea of the possible effect on stations and the loss of viewing choices for the public, I looked at some of the data to see what the FCC is considering. I looked at Chicago and the surrounding markets. This provided a good look at how markets of varying sizes would be affected by a large market. I also looked at five large markets in the populated east coast and five large west coast markets with a large number of stations in each of these markets.

The databases include only UHF full power and eligible low-power TV stations. Stations in the VHF bands will only be affected by the auction if they decide to give up their channel. That vacated channel could then become a replacement channel for a UHF station wishing to move to one of the VHF bands. An explanation of the process can be found in the public notice (http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0602/DA-14-677A1.pdf) announcing the release of the databases and the now closed comment period.

The FCC released a large amount of data. Three different databases gave a total of 100 different outcomes of the repacking of the UHF band. Databases one and two, from computer runs 1-50 and 51-75 respectfully, show possible population losses and channel assignments or channel losses. The third database is for computer runs 76-100 and was broken down by Designated Marketing Areas (DMA) or individual TV markets in addition to the information presented in the first two databases.

There were a total of 166,900 rows of data in the three databases. Each computer run shows the number of channels available to the remaining stations after the repacking, the number of stations needing to move to the VHF band, share a channel or cease operation and the possible loss of coverage to part of the population that stations are now serving. The databases also show possible new channel allocations after the repacking. I used the data broken down by DMA because it was the easiest to break out information that would show the impact of repacking to the viewer and to each market from the loss of the stations when a channel is given up, along with the possible difficulties for the auction to proceed.

The first two databases show the effect on population loss to stations due to repacking, broken down to the location of stations by city. Most data on TV, such as viewing, coverage or revenue, is based on each market, not the individual cities within the market. To convert the data into DMA’s in the first two databases would be a lengthy task. It would require combining all of the cities in a market together. Because some large markets have numerous suburban cities with stations licensed to them, it is difficult to find and combine them into one group from databases as large as these.

To see the effect of the different possible repacking scenarios, I looked at each market and counted the number of stations which were listed as not having a UHF channel after repacking in each computer run. I then broke down the computer runs into two groups, one being computer runs 76-88 and the other being computer runs 89-100. The 76-88 computer run were limited to allotments based on using channel 30 and below. The 89-100 computer runs were limited to allotments based on using channel 36 and below.

From each group of computer runs, I noted the highest number of stations not having a UHF channel available, the lowest number not having a UHF channel available and the average of stations not having a UHF channel available after the auction in each market. The number of existing full power and Class “A” LPTV stations in each market are listed in the chart above, so the number of stations affected in order to meet the FCC’s goals can be compared to the number of stations in the market. The channel 30 and below group would give the FCC 120 MHz to auction and the channel 36 and below group would give the FCC 84 MHz to auction. These are the two targeted amounts of spectrum the FCC wishes to free up. (Channel 37 is not involved in the auction as it is assigned to space research and medical telemetry.)

The first group I looked at was the Chicago market and its surrounding markets, which includes Madison and Milwaukee, Wis., Rockford, Ill., South Bend, Ind. and Grand Rapids, Mich. KFXB-TV in Dubuque, Iowa is listed as part of the Madison DMA and is 77 miles to the west of Madison. The chart below is the data for Chicago and surrounding markets:

Looking at the data, it would seem that Milwaukee, Rockford and South Bend would have to have the majority of the stations participate in the auction to meet the FCC’s targets. Chicago would need more than half the stations participate to meet the FCC’s target of freeing 120 MHz by limiting stations to use of channel 30 and below. Madison and Grand Rapids may not need anyone to participate.

I did look at the rest of the Wisconsin markets to see what the ripple effect between the Chicago and Milwaukee markets and the Minneapolis-St. Paul market would be. I found Green Bay able to have all the stations given a new channel. The Wausau and La Crosse/Cass Claire markets would only need one or two UHF channels to participate in the auction, because there were only a few instances in the channel 30 and under group where a station was listed as not having a channel available. The Twin Cities would be able to repack all of their UHF stations under both the 30 and under or the channel 36 and under scenarios, but the adjacent Rochester, Minn., market did not fare as well with three to four stations out of five not having assignments when limited to
Ken Sell got his first broadcasting job in 1978 as a television and radio engineer at KMTC-TV 27 and KTXR-FM in Springfield, Mo. His career has included stops at two Kansas State Network stations and WRIC-TV in Richmond, Va. He is currently chief engineer for ION Media network’s KPPX-TV51 in Phoenix, Az.

Ken says, “At every station and location, I was presented with multiple construction and learning opportunities, which I enjoyed the most. These included building and facility construction, rebuilding and wiring, new equipment installations, circuit building and construction, and of course, trouble shooting and testing at all levels.” He had missed the old and earlier days when television upgraded from black and white to NTSC color but says he’s fortunate to have participated in the advancement of digital, high definition, and the demise of the old NTSC format. Ken went on to say, “Although the newer state of the art CPU and plug and play does make life somewhat easier these days, I do miss the old days of being able to troubleshoot to component level on most equipment.”

Ken has been a member of the SBE since 1981 and holds the CPBE, 8-VSB and CBNT certifications from the SBE. He’s a member of Chapter 9 in Phoenix. What he enjoys most about his SBE membership is its multiple levels of participation. “I mostly enjoy and participate in local chapter meetings. The comradeship, technical programs and local area information is gratifying,” says, Ken. “SBE’s various certification and education levels helps me try to stay ahead and on top of current and future Broadcast technology.”

Someone who influenced Ken towards a career in broadcasting was John Overstreet, an instructor of radio communications theory at Salina Area Technical School where Ken studied electronics. Overstreet was a long-time radio broadcast and communications engineer as well as a Ham operator, which helped fuel Ken’s interest in Amateur Radio. He holds license K20X.

Ken enjoys collecting antique tube radios and equipment, old engineering books, and learning and tinkering with computers and new technology. He also enjoys spending time with his three adopted children; pedigree Maine Coons.

Ken with Margarita, his Silver Maine Coon, along with a few of his antique radios.

### Membership Meeting, Awards program will be webcast live

The 50th SBE Annual Meeting will be held about the time you are receiving this issue of The Signal. The SBE Chapter 22 Broadcast & Technology Expo is the host event and Turning Stone Resort and Casino in Verona, N.Y. is the location.

This is an important event each year, but especially so this year as the society takes a final look at the past 50 years and ahead to the coming years. During the SBE Annual Membership Meeting, which is held from 3-4 pm ET, on Oct. 8 and streamed over the Internet, we’ll take a look at our history with a couple of special features. SBE President, Joe Snelson, CPBE, 8-VSB, will share with members the vision of where the SBE is heading in the future. This is based on work that began with a strategic planning day in June 2012, followed by recommendations developed by member task groups which were then approved for implementation by the national board of directors.

The annual membership meeting will include reports on issues of interest to members and the induction of newly elected members and officers of the national board. A link to the webcast will be posted on the SBE website prior to the events. The membership meeting webcast is sponsored by AC Video Solutions, Black Magic Design, DVEO and Orban.

The program portion of the SBE National Awards Dinner will also be streamed live, beginning at 6:15 pm ET on Oct. 8. The dinner includes presentations of the society’s most important awards; the James W. Flanders SBE Engineer of the Year Award to James A. Dalke, CPBE, 8-VSB, AMD, CBNT; the James C. Wullman SBE Educator of the Year Award to Norman P. Portillo, CBET; and the SBE Technology Award to DVEO. The evening concludes with the presentation of the SBE Fellow honor to Gino Ricciardelli, CPBE of Chapter 1 in Binghamton, N.Y.

Keynote speaker for the evening is Sam Matheny, EVP and CTO of the NAB, who will offer his vision of where technology is taking the broadcast industry in the future. The SBE will recognize a number of chapters for achievements this past year related to member growth, certification levels and communication with members. Our sponsor for this year’s dinner is The Telos Alliance.

The SBE Chapter 22 Broadcast & Technology Expo is the largest regional broadcast tradeshow in the northeast and features more than 60 exhibit booths displaying products and services for the broadcast and media industry. The Expo lineup includes presentations on engineering, technology integration, workflow and production. Lunch will be available and there is a reception from 3 to 5 pm. Contributing sponsor for the reception is Vislink Broadcast.

The SBE National Meeting begins on Oct. 7 with a meeting of the national SBE Certification Committee from 2 to 4 pm, the fall meeting of the SBE Board of Directors from 6 to 10 pm, and on Oct. 8 the annual SBE Fellows Breakfast, honoring all SBE Fellow members, sponsored by Kathrein, Scala Division.

Turning Stone Resort and Casino is located off Exit 33 of the New York State Thruway in Central New York State. Registration for the SBE Chapter 22 Broadcast & Technology Expo is free and can be done on-site. 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 are available for $15 each and can be purchased at the SBE National website, www.sbe.org. A limited number of tickets may be available on site.
A snapshot in time

Leaders of the SBE and RTNDA open the 1993 convention and trade show held jointly in Miami Beach. Included are (l-r) Hong Ryan Kim, President KOBETA, SBE VP Chuck Kelly, SBE President, Richard Farquhar, RTNDA President David Bartlett and RTNDA chairman, Gary Hanson.

MEMBERS ON THE MOVE

Sheila Cowley, CRO is now adjunct instructor at St. Petersburg College, School for Music Industry and Recording Arts in St. Petersburg, Fla.

Bill Hamilton is now Chief Engineer at WBUW TV., Madison Wisc.

John Kemps, CBT, Napa, CAif., is now MU Engineer at NEP Broadcasting.

David Layer, Washington, D.C., has been awarded the Consumer Electronic Association’s annual Technology & Standards Leadership Award. Layer is senior director, advanced engineering at the National Association of Broadcasters.

Chuck Maines, Richmond, Ind., is now a sales representative to the SCMS midwest sales team.

Lamar Smith, Beasley Broadcasting Regional Engineering Manager in Las Vegas, Nev., has been named the company’s 2014 Engineer of the Year.

Merrill Weiss, CPBE, Metuchen, N.J., has been named chairman of the ATSC TG3, Technology Group; the new “Ecosystem” Specialist Group to model and evaluate the environment in which ATSC 3.0 systems will be deployed.

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.

Mark Your Calendar

SBE Chapter 22 Broadcast & Technology Expo
October 8, 2014
Verona, N.Y.
Turning Stone Resort and Casino

SBE National Meeting
October 7-8, 2014
Verona, N.Y.
Turning Stone Resort and Casino

AES Convention
October 9-12, 2014
Los Angeles, Calif.
SBE Certification Exams Oct. 12

Advanced IP Networking & CBNE Study Topics
October 17, 2014
iHeart Media Bldg. Miramar, Fla.
South Florida, SBE Chapter 53

SBE Certification Exams - Local Chapters
November 7-17, 2014
Deadline for applications is October 8, 2014
Stream live, low-latency SD/HD video and AAC audio from nearly anywhere on planet Earth with LiveShot IP Video Codec utilizing 3G, 4G, WiFi, Ethernet or satellite data services. LiveShot puts you in the middle of the action with full-duplex audio and video plus a built-in independent audio cue channel.

Ground-breaking CrossLock™ VPN Technology provides you with reliable connectivity even on challenging IP networks. LiveShot is tough, light, fast, feature-rich and cost-effective. Please contact us today to learn more.

© 2014 Comrex Corporation. All rights reserved.

www.comrex.com
info@comrex.com
1 800 237 1776
1 978 784 1776

CQ B. 6.3 dB

Answer from page 5

The peak envelope power of the 8-VSB signal is the result of the combined ringing of the various combinations of symbol values. Data level transitions occurring over a period of plus and minus 35 symbol periods contribute to the peak envelope power. Peak excursions as high as 9 dB (8X) above average have been reported. Despite these extremely high peaks, there have been no reports of damage to antennas, transmission lines, or transmitter components. The duration of these peaks could be measured in nanoseconds, and occur very rarely. The peaks appear to have no capacity to sustain an arc, and 99.9% of the 8-VSB signal peaks are typically within 6.3 dB (4.25x) of the 8-VSB average power.

REPACK from page 12

channel 30 and under. Rochester did not lose any assignments in the Channel 36 and under group.

In the December issue, I’ll look at some of the largest markets on both the crowded east coast and the large west coast markets with numerous TV stations.

Thomas Smith retired in 2011 after 35 years with WHA-TV, Wisconsin Public TV, in Madison. He continues to do contract work for radio and video production facilities. He’s been a member of the SBE since 1970 and holds life certification as a Certified Professional Broadcast Engineer. He’s an active member of SBE Chapter 24 in Madison and has served as its chairman and in other leadership roles.