



the

SIGNAL

raising the bar

2011

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**AUGUST
2011**

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House Bill Joins Senate Bill Calling for Technical Expertise in Commissioners' Offices

A substantial step toward the SBE objective of adding engineering expertise to the staffs of the FCC commissioners was realized when Rep. Cliff Stearns (R-FL) introduced House Bill 2102 on June 2. The bill is a companion to Senate Bill 611, introduced in March by Sen. Olympia Snow (R-ME).

With the introduction of the H.R.2102, the SBE President Vinny Lopez, CEV, CBNT said, "This is another positive step in the Society's quest to bring technical expertise to the FCC commissioner's offices." Lopez went on to say, "I encourage all members of the SBE to write their senators and representative and ask them to support S.611 and H.R.2102."

Representatives of the SBE national leadership met with Rep. Stearns' Washington staff in March requesting that the representative consider sponsoring the legislation in the House. Since the bill's introduction, the SBE has been contacting the SBE members who live or work in the districts of the subcommittee, asking them to write letters to their representatives urging them to co-sponsor the bill.



SBE General Counsel Chris Imlay and SBE Government Relations Committee Chairman Barry Thomas visit Washington D.C. on June 30. Imlay and Thomas met with staff from 10 house districts.

On June 30 a visit was made to Capitol Hill by SBE Government Relations Chairman Barry Thomas, CPBE, CBNT and General Counsel Chris Imlay, CBT, to urge co-sponsorship of the bill by members of the House Energy and Commerce Committee, Subcommittee on Communications and Technology. H.R.2102 is

See **BILL** on page **6**

SBE Recognizes National Awards Recipients

Recipients of the 2011 SBE National Awards will be recognized on September 28 in Columbus, Ohio at the SBE National Awards Dinner. The event is part of the annual SBE National Meeting, which is being held in conjunction with the Ohio Broadcast Engineering Conference.

The winner of the SBE Broadcast Engineer of the Year Award is Al Grossniklaus, CBNT, P.E., of Indianapolis, Ind. Grossniklaus became director of engineering for WTHR-Indianapolis, Ind. in 1995, a member of the SBE in 1984, and he is also a local NFL game day coordinator. Grossniklaus runs a high-caliber engineering department for the top rated station in the market. WTHR won the 2011 Edward R. Murrow Award for Overall Excellence. Grossniklaus is responsible for the overall technical performance, operations, engineering maintenance, information systems and services and physical plant of WTHR and associated stations. Grossniklaus is directly responsible for insuring the station's compliance with FCC and other federal and state technical regulations. As the director of engineering, he supervises the Technical Management Team and directly manages the execution of all capital projects

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Ralph Hogan, CPBE, DRB, CBNT Vice President
KJZZ-FM/KBAQ-FM • Tempe, Ariz. • rhogan@kjzz.org

Ted Hand, CPBE, 8-VSB, AMD, DRB Secretary
WSOC-TV • Charlotte, N.C. • ted.hand@coxtv.com

Andrea B. Cummis, CBT, CTO Treasurer
Roseland, N.J. • acummis@gmail.com

DIRECTORS

Timothy B. Anderson, CPBE, DRB, CBNT Harris Corporation
Mason, Ohio • tim.anderson@harris.com

Ralph Beaver, CBT Media Alert LLC
Tampa, Fla. • bevo@mediaalert.com

Mark Heller, CSRE, CTO
WTRW Inc/WGBW Radio Station • Two Rivers, Wis.
wgbw@sol.net

Gary Kline, CBT, CBNT Cumulus Media, Inc.
Atlanta, Ga. • gary.kline@cumulus.com

James E. Leifer, CPBE Clear Channel Communications
Boynton Beach, Fla. • jimleifer@hotmail.com

Gary Liebisch, CPBE Nautel, Ltd.
Milford, Ohio • gary.liebisch@nautel.com

Scott Mason, CPBE, CBNT CBS Radio
Los Angeles, CA • scmason@cbs.com

Jerry Massey, CPBE, 8-VSB, AMD, DRB, CBNT
Entercom Communications • Greenville, S.C.
jmassey@entercom.com

David Priestner, CPBE Ithaca College
Ithaca, N.Y. • dpriester@ithaca.edu

Christopher H. Scherer, CPBE, CBNT Radio magazine
Overland Park, Kans. • cscherer@sbe.org

Joe Snelson, CPBE, 8-VSB Meredith Broadcast Group
Henderson, Nev. • joe.snelson@meredith.com

Conrad Trautmann, CPBE Dial Global
South Setauket, N.Y. • ctrautmann@dial-global.com

Barry Thomas, CPBE, CBNT Lincoln Financial Media
Immediate Past President
Atlanta, Ga. • barryt@sbe.org

NATIONAL STAFF

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

Megan E. Clappe, Certification Director
mclappe@sbe.org

Debbie Hennessey, Executive Assistant
dhennessey@sbe.org

Scott Jones, Database Manager
kjones@sbe.org

Kimberly Kissel, Education Director
kkissel@sbe.org

Hannah Trowbridge, Communications Manager
htrowbridge@sbe.org

Carol S. Waite, Certification Assistant
cwaite@sbe.org

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

Cast Your Ballot For National Officers; Directors

All voting members of the SBE are urged to cast ballots in this year's election of national officers and directors. Ballots for the annual election of members to serve on the SBE national Board of Directors were mailed on July 25. The voting process will take place over a one-month period, ending August 25. On that evening, ballots will be counted and winners determined. The Board consists of 17 members, including four officers, 12 directors and the immediate past president. All four officer positions and six director seats are up for election each year.

There is one candidate running for each of the four officer positions of president, vice president, secretary and treasurer. There are seven candidates running for the six at-large director seats being contested this year. Members had until July 11 to be nominated and meet the candidacy requirements to run for office. A complete list of candidates with photographs is available online at www.sbe.org.

The Nominations Committee was chaired this year by Board Secretary, Ted Hand, CPBE, 8-VSB, AMD, DRB, director of engineering for Cox Media-Charlotte. Ted is a member of Chapter 45 in Charlotte. Other members of the committee included John Demshock, CBT, WFTV-TV, Chapter 42, Orlando, Fla.; Denise Mastrullo, WAVY-TV, Chapter 54, Virginia Beach, Va. and Otto Schellin, WPXI-TV, Chapter 20, Pittsburgh, Pa. Ted and his committee assembled a slate of candidates who have agreed to commit their time and expertise to serve on the Board, if elected.

The official ballot was sent via USPS First Class mail to all voting members of the SBE. That includes Regular, Senior and Fellow members and the voting member representative of each of the society's Sustaining Member companies. If you do not receive a ballot by August 6, please contact Hannah Trowbridge at the National Office at (317) 846-9000 or htrowbridge@sbe.org.

Information about each candidate and their responses to questions about the society will be included in the official ballot packet. You are encouraged to take time to review the descriptions and

opinions of the candidates contained in the ballot, make your selections, and return the ballot to the SBE National Office so that it arrives by Thursday, August 25. Use the special election return envelope provided. Allow at least five business days for your ballot to reach the National Office and two weeks if you are outside the United States. Each year a number of ballots are received at the National Office after the election is over and consequently cannot be included in the tabulation.

The ballots are counted by the official Board of Tellers, consisting of members of Chapter 25 in Indianapolis and central Indiana. Candidates are notified the following day of the results. Those elected will take office during an induction ceremony held at the SBE National Meeting on September 28 in Columbus, Ohio. The National Meeting is being held in conjunction with the Ohio Broadcast Engineering Conference sponsored by the Ohio Association of Broadcasters, the five SBE chapters located in Ohio and the Ohio section of SMPTE.

Beginning in 2012, the SBE will implement an electronic voting system. Details will be announced later this year. Those who would prefer receiving the traditional mailed ballot will have the opportunity to opt out of the electronic ballot for the 2012 election.

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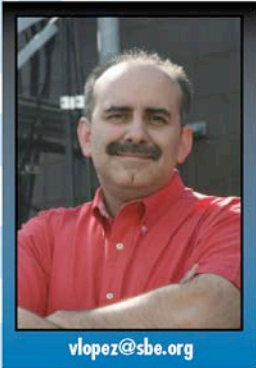
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What This Society Needs is A Good 2 Cent Cigar



vlopez@sbe.org

by **Vinny Lopez, CEV®, CBNT®**
SBE President

Has it been two years already? Where did the time go? We are down to my last Signal article as president, and I had originally

thought about this being my "Last SBE Will and Testament", but I am going to save that for the membership meeting in Columbus on September 28. You are going to be there if possible, right?

So let us take a look back on exactly what has been accomplished in the past two years, shall we? I can remember two years ago we had just started to build steam on our education program, with the addition of Kimberly as full time education director. Now, the investment is starting to pay off with a wide variety of educational offerings for our members. Live and on demand webinars, SBE University courses, Ennes workshops, all specifically targeted for our member's continuing education.

One of the bigger things on the agenda for the past two years has been the press by the SBE to get bills passed to allow each FCC commissioner to add an engineer to their staffs. We have been working with Sen. Olympia Snowe's office to get this important legislation enacted. We feel it is important to have sound technical advice at the policy making levels of the commission. We are currently making a strong push on the House side, and hope the fruits of our labors will be successful. Various officers of the society have made trips to the Capitol in the past two years to represent our members in front of the FCC and Congress.

Another new development in the past two years has been the introduction of the President's Netcasts. I like that they are a very effective way for me to communicate with the members on topics of interest and timely initiatives in the society. I hope my successor is able to continue with this moving forward.

We are also well on the way to rolling out a new certification level, Certified Broadcast Network Engineer (CBNE). I had hoped it would already be here, but it's just not quite ready for prime time, and as I don't like releasing things that aren't ready, we are

working hard to get it done for a fall launch this year. I always tried to keep these articles fun, Remember all the crazy titles and contests?

I also tried to build just enough information into them so that they weren't a bore. Many times I had no idea what to write about and scrambled at the last minute to get it out, that's the case with this last one too. Was I happy with my job as president over the last two years? Yes I was. Were there things I should have done differently? There probably were. Were there some people I should have just smacked upside the head? Definitely.

So what does the society need to do moving forward? We need to expand our membership base to include the latest emerging technologies and areas. Hey, streaming is broadcasting, just using the internet instead of a transmitter. When we broadcast we send information to a large number of recipients no matter what the method. Can anyone say The Society of Broadcast & Media Engineers?

I plan on being around as Immediate Past President of the society; usually that person is relied upon by the current president for advice and counsel, or to be the consigliere. With the change in leadership come new and different ideas. Hopefully we all can embrace them as we did two years ago.

What's that? You say you smell something? It certainly ain't a good 2 cent cigar.

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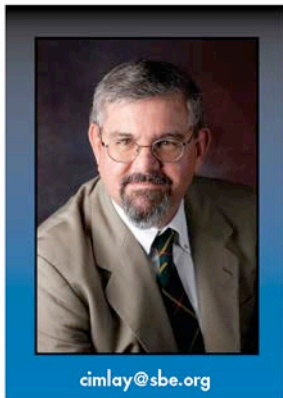


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Why FCC Needs Engineers In Commissioners' Offices: Reason #27



by **Chris Imlay, CBT**
SBE General Counsel

I have just come off of Capitol Hill after another long, grueling day of meetings with congressional staffers pushing for cosponsors for H.R.2102, the “FCC Commissioners’ Technical Resource Enhancement Act.” With me all day long was SBE Immediate Past President and current Government Relations Committee Chair Barry Thomas, who has an unlimited ability to endure the indignities of Washington

lobbying work. At almost every stop we made, we were asked for specific examples of why our legislation is necessary. We had a briefing paper with us that gave examples of FCC decision making on technical regulatory subjects that we believe might have been improved had the commissioners had first-hand engineering advice at the time policy decisions were made. We noted at each office that while we had ultimate respect for the engineering abilities and performance of the Commission’s Office of Engineering and Technology and the engineers in other bureaus, they are in fact typically consulted only after policy decisions are made, and are therefore often asked to do the impossible: justifying or implementing technically flawed policies.

It struck Barry and me as we were having a really bad, but expensive, lunch in the Longworth House Office Building Cafeteria that FCC had just recently delivered a classic example of what we had been arguing all morning to legislative directors. The “Wireless Backhaul” Docket (10-153), in which FCC wanted to make more efficient use of the 7 and 13 GHz BAS and CARS bands, was one of a line of dockets in which the FCC adopted the policy first and then left it to the technical staff to figure out how to make it work. Here is what happened:

More than a year ago, the FCC delivered the National Broadband Plan to Congress. Section 5.5 of the NBP included the following recommendation as one of the means of expanding broadband access in the United States: “Increase the flexibility, capacity and cost-effectiveness of spectrum for point-to-point wireless backhaul services, including the revision of Rule Parts 74, 78 and 101 to allow for increased spectrum sharing among compatible point-to-point microwave services.” Note that Parts 74 and 78 were specifically mentioned in this broad recommendation. It was obvious at the time that what was being eyed were BAS and CARS bands for Fixed Service expansion.

But it wasn’t until August of 2010 that the FCC actually proposed to allow Fixed Service stations into the 7 and 13 GHz bands. FCC said that it was simply looking for ways to make more efficient uses of these allocations, and proposed as a quid pro quo to allow BAS and CARS stations into the Fixed Service bands and to eliminate the Final Link Rule which prohibits using a Part 101 link as the last link in the chain of distribution of program material for broadcast. The comments were largely negative. NAB, MSTV and SBE each noted the difficulty in protecting Fixed Service stations from mobile BAS and CARS operation, and even the National Spectrum Management Association (NSMA) agreed that adding part 101 licenses to the 7 and 13 GHz BAS bands would add significant complexity to the time-sensitive coordination

that is necessary in these bands due to ongoing, real-time, short-term mobile and temporary fixed BAS and ITTS operation. SBE noted that the 7 GHz band is in constant use in the larger markets for mobile ENG and there is simply no room for Fixed Service stations in these bands. Numerous comments and reply comments were filed, and SBE made a large-scale ex parte presentation to Wireless and OET staff at FCC in the spring.

FCC digested this for a long while, and despite a full and complete record on which they could have made a decision, the Wireless Bureau issued a Public Notice in early June of this year, with a very short fuse for comments, trying to salvage something out of this proceeding. They proposed two alternatives for sharing of the 7 and 13 GHz bands:

- (1) the feasibility of allowing Fixed Service (FS) operations to have access to the bands 6875-7125 MHz and 12700-13200 MHz, in areas outside the licensed service areas of Broadcast Auxiliary Service (BAS) and Cable TV Relay Service (CARS); or
- (2) band segregation such that FS operators could have access to the bands 6875-7075 MHz and 12700-13150 MHz, and BAS and CARS would retain access to 7075-7125 MHz and 13150-13200 MHz without interference from fixed operations.

SBE filed further comments pointing out the obvious reasons why neither of these proposals will work. Most obviously as to Option 1, because the coverage areas on BAS and CARS licenses do not accurately reflect the areas in which TV Pickup stations will use the 7 and 13 GHz bands for ENG. Licensees often operate well outside licensed coverage areas pursuant to Section 74.24 of the Commission’s Rules. Some BAS and ITTS licenses specify nationwide operation, and the location of operations in a given area is determined on short notice. As to Option 2, band segmentation, that would seriously undercut mobile ENG use of the 7 and 13 GHz bands in the large markets. SBE did “tell it like it is” though, because the prejudgment of this matter was so obvious by this time. SBE’s further comments included the following:

It is no secret that the Commission has already conceptually adopted the addition of wireless backhaul to the BAS and CARS 7 and 13 GHz bands to facilitate expanded broadband. The concept appears as a fait accompli in the National Broadband Plan. The issuance of this Public Notice, despite a full and complete record from the comments filed in the proceeding to date (which clearly identify the obstacles to effectuating FS sharing with mobile BAS and CARS operation), indicates that the Commission has already decided what the outcome of this proceeding is going to be. The only issue now is how to justify the policy decisions that it has already made. It is suggested that the process utilized in this case (as in so many others in recent Commission jurisprudence) has been conducted exactly backward. Policy decisions should not be determined in advance of technical spectrum planning. The prejudgment that is manifest in this proceeding is unsettling.

Would the matter have been handled differently had each of the commissioners considering the original Notice of Proposed Rule Making, or considering Section 5.5 of the National Broadband Plan, had the advice of a staff engineer in their offices? We can’t say for sure. But we do genuinely believe that the chances of noticing the technical flaws in the concept of the proposal in this case would have been substantially better with that advice, and it might have allowed the Commission to proceed down a more productive road a year ago.



Because IT Matters: Certified Broadcast Networking Engineer

by **Chris Scherer, CPBE®, CBNT®**
SBE Certification Committee Member

The SBE Program of Certification continues to evolve to stay

on top of the latest technology and ensure a broadcast engineer's skill is evaluated to these modern standards. In the past few years a series of Specialist Certifications were developed to focus on specific areas of expertise within the core four certifications (technologist, broadcast engineer, senior broadcast engineer, professional broadcast engineer). This ongoing development of the Program of Certification has been the foundation of the program since its origin.

In 2000, skills in IT were recognized as an integral part of broadcast engineering. The Certified Broadcast Networking Technologist (CBNT) was created. Now it's difficult to separate the classic broadcast engineering skills from IT skills. Nearly every piece of equipment has an IP address today, and while serial control is still used, Ethernet is becoming the preferred way to communicate with broadcast equipment.

In the 11 years since, the CBNT has been updated, but it has always been designed to address the technologist level of IT skill. As the SBE Certification Committee enhanced and updated the CBNT, we realized the skill set it addressed was developing beyond its original scope.

The CBNT covers many entry-level aspects of IT in broadcast engineering. That focus is still valid today, but the Certification Committee realized that an engineering level of IT certification was needed to delve into the deeper aspects of computer networking and technology. This was the impetus of creating the Certified Broadcast Networking Engineer (CBNE) certification.

The Certification Committee decided the CBNE would be a stand-alone certification, like the core four. It's not necessary to hold another level of the SBE Certification to take the CBNE exam, although there is a natural progression from CBNT to CBNE. Because of the broadcast engineering focus, there is a requirement to have at least five years of broadcast engineering experience to take the exam.

The work begins

The most challenging aspect for the Certification Committee of creating and

maintaining the Program of Certification is developing and updating the question pool to accurately assess the current state of the art and the expected level of understanding by the intended examinees. A significant portion of this work was completed by Terry Baun, CPBE, AMP, CBNT, who developed and delivered classes on computer networking and IT fundamentals. These classes were often followed by an SBE exam session to take the CBNT exam.

Terry's interaction with class attendees provided a baseline to determine the appropriate skills for the CBNE. From there, the Certification Committee worked with Terry to develop a baseline of skills and questions to evaluate the understanding of the principles.

The major changes between the CBNT and CBNE is a focus not so much on the hardware, but on the configuration, adaptation and application of IT principles and techniques of

digital telecom to broadcasting in many areas including the gradual evolution of master control installations into IT-centric facilities. There is a particular emphasis on metadata, IP addressing schemes, fiber-optic systems and overall integration of IT into all areas of the broadcast operation. Also, VLANs, blade architecture, SAN, NAS and VPN concepts are covered.

As you continue to develop your professional skills, SBE Certification develops with you. Following the necessary beta testing and development of the CertPreview element for this new certification, the SBE expects to provide exams by the end of the year.

Once it's available, apply to take the CBNE exam. Show your peers and your employer that you have the necessary advanced IT skills for the future.



What's your Certification Quotient?
Answer on Page 11

Question: Where should the station license be kept?
A. At the transmitter
B. In the public file
C. At the control point
D. In the studio

2011 SBE Certification Exam Schedule		
Dates	Location	Application Deadline
Oct. 23	AES Convention	pre-registration, on-site registration
Nov. 4-14	Local Chapters	Sept. 16

BILL from page 1

Energy and Commerce Subcommittee on Communications and Technology. H.R.2102 is currently cosponsored by Rep. Jerry McNerney (D-CA) and Rep. Tom Petri (R-WI).

If passed, both the Senate and House bills would authorize each of the five FCC commissioners to appoint a fourth staff assistant who is an engineer or computer scientist. This will provide competent input to each of the commissioners tasked with making often highly technical decisions in docket proceedings and adjudicatory matters, and a mechanism for bringing the competency of the commission's staff engineers directly to the commissioners.

The SBE members who wish to write a letter to their representative can find a sample letter at www.sbe.org. Click on the Legislative/Advocacy tab on the red menu bar and select Legislative Issues/Positions and scroll to FCC Technical Resource Act. The sample letter to members of the House Energy and Commerce Subcommittee on Communications and Technology members is suitable to send to any member of the House after personalizing the letter where indicated.

Accredited SBE Frequency Coordinators

The SBE began the Accreditation program to provide volunteer SBE coordinators the opportunity to be recognized as part of a standards-based, nationally recognized program of local voluntary broadcast-auxiliary frequency coordinators. The program also makes it possible for SBE to demonstrate to the broadcasting industry the widespread acceptance of a voluntary set of standards guiding local coordination.

Brian Belcher	Hendersonville, Tenn.	Vanderbilt University
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Richard Van Zandt, Edgewater, Fla. – Chapter 49

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JUNE EXAMS

"Thank You" Chapter Certification Chairpeople for your assistance

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Steven Barousse, Washington, D.C. – Chapter 37

CERTIFIED BROADCAST RADIO ENGINEER™ (CBRE®)

John Lewis, Panorama City, Calif. – Chapter 47

CERTIFIED BROADCAST TELEVISION ENGINEER™ (CBTE®)

Shane Fortin, San Diego, Calif. – Chapter 36
Horace Murray, Glen Burnie, Md. – Chapter 132

CERTIFIED VIDEO ENGINEER® (CEV®)

Dwayne Jones, Houston, Texas – Chapter 105

8-VSB SPECIALIST™ (8-VSB™)

Peter Bankwitz, Detroit, Mich. – Chapter 82

AM DIRECTIONAL SPECIALIST™ (AMD™)

Jeffery Glass, Sycamore Ill. – Chapter 96

CERTIFIED BROADCAST NETWORKING TECHNOLOGIST® (CBNT®)

Mohammed Abdelrahim, Denver, Colo. – Chapter 48

Steven Barousse, Washington, D.C. – Chapter 37

Margo Kelly, Washington, D.C. – Chapter 37

Michael Lemmond, Franklin, Tenn. – Chapter 103

Joseph Pietrzyk, Phoenix, Ariz. – Chapter 9

Kenneth Sell, Phoenix, Ariz. – Chapter 9

Michael Strey, Temecula, Calif. – Chapter 36

John Justin Tucker, Charleston, S.C. – Chapter 107

CERTIFIED BROADCAST TECHNOLOGIST® (CBT™)

Anthony Granata, El Mirage, Ariz. – Chapter 9

CERTIFIED RADIO OPERATOR® (CRO®)

Seth Bearden, Pittsburgh, Pa. – Chapter 20

Lewis Tenzer, Boca Raton, Fla. – Chapter 88

CERTIFIED TELEVISION OPERATOR® (CTO®)

Edwin Escobar, San Antonio, Texas – Chapter 69

Brian O'Hern, Ashburnham, Mass. – Chapter 11

Nicholas Strauss, South Boston, Mass. – Chapter 11

CERTIFIED BY LICENSE

CERTIFIED BROADCAST TECHNOLOGIST® (CBT®)

Cody Blount, Belton, Texas – Chapter 29

Matthew Chambers, Macon, Mo. – Chapter 143

John Demshock, Altamonte Springs, Fla. – Chapter 42

Seth Harrison, San Jacinto, Calif. – Chapter 131

Dean Maluski, New Britain, Conn. – Chapter 14

Terry Spring, Carnation, Wash. – Chapter 16

CERTIFIED RADIO OPERATOR® (CRO®)

Ariel Baar, Norwalk, Calif.

Christopher Bagnall, Monroe, Mich.

John Broaddus, Richmond, Ky.
Keith Esparza, Lake Balboa, Calif.
Madeline Niggel, Ithaca, N.Y.
Mark Schildknecht, Sequim, Wash.

PASADENA CITY COLLEGE

Yin Pang Chow
Edwin Garcia
Rafael Manchuca
Michael Angelo Macias
Christopher Martinez
Nester Maderos
Maximilian Navarro
Carlos Nieto
Dario Romero
John Samuel
Will Wilkerson

CERTIFIED TELEVISION OPERATOR® (CTO®)

Stephen Belt, Brunswick, Ga.
Gale Clay, New Bern, N.C.
Orville Cole, Shady Spring, W.Va.
Drew Kawell, Corvallis, Ore.
Paula Koonce, New Bern, N.C.
Michael Johnson, Chester, Pa.
Daniel Leonardo, Bend, Ore.
James McAllister, Columbus, Ind.
Joshua Smalley, Burbank, Calif.

KPHO TV – PHOENIX, ARIZ

Carolyn Austill
Thomas Bohmaker
Tim Hearnesebereer
Joe Mora
Mark Nutini
Philip Sanchez
Alan Saulters
Charles Smith
Sandra Spencer
Stanley Yarnall, III

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®)

Don Bartie, Moreno Valley, Calif. – Chapter 131
Rick Benson, Jacksonville, Fla. – Chapter 7
Kenneth Sell, Phoenix, Ariz. – Chapter 9

CERTIFIED PROFESSIONAL BROADCAST ENGINEER® (CPBE®) 8-VSB SPECIALIST™ (8-VSB™) AM DIRECTIONAL SPECIALIST™ (AMD™)

John Collinson, New Port Richey, Fla. – Chapter 39

CERTIFIED PROFESSIONAL BROADCAST ENGINEER® (CPBE®) AM DIRECTIONAL SPECIALIST™ (AMD™) DIGITAL RADIO BROADCAST SPECIALIST™ (DRB™)

John Arndt, Jr., Philadelphia, Pa. – Chapter 18

CERTIFIED SENIOR TELEVISION ENGINEER™ (CSTE®)

William Jackson, Decatur, Ga. – Chapter 5

CERTIFIED BROADCAST RADIO ENGINEER™ (CBRE®)

Jack Conners, Interlochen, Mich. – Chapter 91
Richard Hardy, Tulsa, Okla. – Chapter 56
Vernon, Jackson, Wentzville, Mo. – Chapter 55
Robert Kruppenbacher, Doylestown, Ohio - Chapter 70

CERTIFIED BROADCAST TELEVISION ENGINEER™ (CBTE®)

Richard Bach, Kenner, La. – Chapter 72
Jose Boveda, Miami, Fla. – Chapter 53
James Cox, California City, Calif. – Chapter 103
Humberto Irizarry, Ashburn, Va. – Chapter 37
Omar Pineda, El Paso, Texas – Chapter 38
David Raymond, Nashua, N.H. – Chapter 110

CERTIFIED BROADCAST NETWORKING TECHNOLOGIST® (CBNT®)

John Arndt, Jr., Philadelphia, Pa. – Chapter 18
Don Bartie, Moreno Valley, Calif. – Chapter 131
Jose Boveda, Miami, Fla. – Chapter 53
David Boyd, Portland, Ore. – Chapter 67
John Collinson, New Port Richey, Fla. – Chapter 39
Jack Conners, Interlochen, Mich. – Chapter 91
Bruce Harvey, Littleton, Colo. – Chapter 48
Gary Kline, Atlanta, Ga. – Chapter 5
Jason Knapp, Columbus, Ohio – Chapter 52
Marshall Nute, Virginia Beach, Va. – Chapter 54
Gary Pettet, Wakefield, KS – Chapter 3
Paul Spinelli, Middle River, Md. – Chapter 46
Brian Truong, Perry Hall, Md. – Chapter 132
Rex Woodruff, Moreno Valley, Calif. – Chapter 131

CERTIFIED BROADCAST TECHNOLOGIST® (CBT®)

Percy Amos, Stockton, Calif. – Chapter 40
Victor Boggess, Glen Allen, Va. – Chapter 60
Stephen Brown, Virginia Beach, Va. – Chapter 54
William Carpenter, Waynesboro, Pa. – Chapter 41
Gregory Carter, Fairport, N.Y. – Chapter 57
Jerry Erwin, II, Maineville, Ohio – Chapter 33
Benjamin Manierre, Jr., Thousand Palms, Calif. – Chapter 47
Marshall Nute, Virginia Beach, Va. – Chapter 54
Robert Reite, Exeter, Pa. – Chapter 2
Rex Woodruff, Moreno Valley, Calif. – Chapter 131

CERTIFIED TELEVISION OPERATOR® (CTO®)

Raquel Allison, N. Richland Hills, Texas
Bryan Durr, Brooklyn, N.Y. – Chapter 15
James Fogarty, Allentown, Pa.
Franklin Gemind, Cuyahoga Falls, Ohio
Michael Mascorro, San Antonio, Texas
Mike Portz, Blue Springs, Mo.
Becky VanBuskirk, Broomfield, Colo.

CERTIFIED RADIO OPERATOR® (CRO®)

Hector Lara, Los Angeles, Calif.
Michele Mayzes, Berkeley, Calif.
Robert Taylor, Secaucus, N.J. – Chapter 15

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SBE Welcomes 202 New Members



Grand Prize Winner Eddie Durham will receive an expense-paid trip to the SBE National Meeting. Durham is a member of Chapter 78.

The SBE annual Membership Drive concluded May 31 with a total of 202 new members. This is an increase of 34 percent compared to the 2010 Membership Drive.

Fifty-five members were directly responsible for recruiting 72 new members during the three-month period. Of the 72 new members, three were Sustaining Members; companies that provide products and services to the broadcasting industry. An additional 130 members joined the SBE during the Membership Drive without indicating a sponsor's name.

Each member who recruited a new member was entered into a drawing to win prizes donated by the SBE Sustaining Members and the SBE. The Grand Prize winner, who will receive an expense-paid trip to the SBE National Meeting in Columbus, Ohio this September, was Eddie Durham of Chapter 78, the Blue Ridge Chapter, in southwestern Virginia.

Other Prize Winners include:

Logo Polo Shirt courtesy of Broadcast Electronics

Robert Dickinson, CBTE, Chapter 146, U.S. Virgin Islands
Roger Lundeen, CSRE, Chapter 49, Central Ill.

Kathrein AON 65 UHF-TV Antenna courtesy of Kathrein Inc., Scala Division

Mark Heller, CSRE, CTO, Chapter 80, Fox Valley, Wis.
Ronald Sweatte, Chapter 21, Spokane, Wash.

Trifold Meter courtesy of Middle Atlantic Products

Michael Keller, Chapter 11, Boston, Mass.

Logo Polo Shirt courtesy of Middle Atlantic Products

Richard Pogson, CPBE, Chapter 130, Fairview, Pa.
Mark Heller, CSRE, CTO, Chapter 80, Fox Valley, Wis.

"Small Antennas" courtesy of McGraw-Hill

Ronald Henderson, Chapter 40, San Francisco, Calif.

"Transmission Techniques for Emergent Multicast and Broadcast Systems" courtesy of CRC Press Taylor and Francis Group

Michael Keller, Chapter 11, Boston, Mass.

Sheaffer Set Roller Ball courtesy of Harris

Thomas McGinley, CPBE, Chapter 16, Seattle, Wash.

Gerber Multi-tool courtesy of Harris

Ralph Hogan, CPBE, DRB, CBNT, Chapter 9, Phoenix, Ariz.

SBE Tumbler courtesy of SBE

Walter Williams, CSTE, Chapter 118, Montgomery, Ala.

CamAlign Front-lit Charts courtesy of DSC Laboratories

David Siegler, CPBE, Chapter 45, Charlotte, N.C.

SBE Golden Recruiter Award

This award recognizes a chapter in each size division with the highest percentage of current SBE members participating in the Member Drive.

Class A: Chapter 118 in Montgomery, Ala.

Class B: Chapter 7 in Jacksonville, Fla.

AWARDS from page 1

at the station.

Recipients of the SBE Broadcast Engineer of the Year Award are recognized for making significant contributions to the field of broadcast engineering or for furthering the goals and objectives of the SBE. They must be members of the SBE and are nominated by their peers.

The 2011 SBE Educator of the Year is Steve Lampen, CBRE. Lampen utilizes his travels promoting the Beldon product line, as an opportunity to understand what broadcast engineers need. Lampen educates industry members about his expertise in dozens of topics at Ennes sessions, NAB and SBE chapter meetings while traveling an average of 300 days per year. Steve strives to make his presentations, which have been an anchor for Ennes workshops for 10 years, educational, entertaining, accurate and useful. As a successful author Lampen wrote "The Audio-Video Cable Installer's Pocket Guide" published by McGraw-Hill and his regular column "Wired for Sound" appears in Radio World magazine.

Nautel will be awarded the SBE Technology Award for its Advanced User Interface (AUI) and associated productivity technologies. Nautel has long recognized the demands being placed on SBE

members who often are called upon to maintain increasing numbers of facilities and transmitters. Nautel's goal is to place more control, monitoring and troubleshooting at the engineers' fingertips than had ever been possible before, whether the engineer was local to the transmitter or remote. The awarded technologies are accessible via Nautel's Advanced User Interface.

John Davis, CBNT, will be presented with the Best Technical Article Award for "Choosing a Network Switch for Audio-over-IP". The article was published in the April 2011 edition of Radio magazine. It can be found online at http://radiomagonline.com/IT_technology/computers/network-switch-audio-ip-1026.

Chapter 24, Madison, Wisc. is being recognized for their achievements with three awards including Best Chapter Website, Best Regional Convention and Best Chapter Newsletter.

Statistical awards recognize two chapters, based on chapter enrollment. Class A represents chapters whose membership is less than the national median. Class B includes chapters with

membership greater than the national median.

The award for Most Certified Chapter goes to Chapter 118, Montgomery, Ala. in Class A and Chapter 131, Inland Empire in Class B.

The Chapter with Greatest Percentage Growth of New Members Award is being presented to Chapter 44, Shreveport, La. in Class A and Chapter 25, Indianapolis, Ind. in Class B.

The Chapter with Highest Percentage Of Member Attendance at Meetings Award goes to Chapter 136, Rio Grande Valley in Class A and Chapter 76, Eugene, Ore.

The National Awards Committee includes Chairman Tim Anderson, CPBE, DRB, CBNT, Jim Leifer, CPBE and Frank Maynard, CPBE.

VISLINK
News & Entertainment

SBE University – Continuing Education When It's Convenient For You

by **David Priester, CPBE®**

SBE Education Committee Chair



dpriester@ithaca.edu

Wouldn't it be nice to have access to a continuing education course that you could take when it's convenient for you? That's what SBE University offers – Internet-based online, on-demand courses.

The courses on SBE University are divided into chapters, with quizzes at the end of each chapter and a final exam at the end. You can request a certificate of completion once you take and pass the final exam. In addition, all the courses on SBE University qualify for recertification credit from the SBE. Once you register for a course on SBE University, you have access to it as long as it is available, including any updates that are made to the course. Here is a listing of current and upcoming courses:

“8-VSB” – The purpose of the SBE 8-VSB course is to give the student an overview of the 8-VSB system from end to end, providing all the basic information he or she will need to understand the nature of 8-VSB modulation and to recognize deficiencies in the transmitted signal. This information will be invaluable in installing, maintaining and operating a digital television transmitter facility. Cost: SBE Members: \$99; Non-Members: \$139

“AM Antenna Computer Modeling” – This course will take the student through the modeling and measurement process specifically for AM broadcast antennas, providing a general understanding of the process and procedures as well as operation of the recommended software. Cost: SBE Members – \$99; Non-Members – \$139.

“AM Antenna Systems” – This course takes the student through every facet of AM antenna systems in all their forms, dealing with each element or variation separately and pulling the elements together to show how they are used in concert. Cost: SBE Members – \$65; Non-Members – \$85.

“Broadcast Audio Processing” – This course,

intended for the intermediate-to-experienced broadcast engineer, takes a practical, real-world approach to audio processing. Topics include loudness and the human ear, gain control, limiting and clipping, adjusting a wideband processor for voice and multi-band processing. Cost: SBE Members – \$80; Non-Members – \$105.

“Computer Networking for Broadcast Engineers” – The purpose of this course is to give the student an introduction to the fundamental concepts of computer networking. This course will assist the broadcaster in taking the SBE Certified Broadcast Networking Technologist exam. Cost: SBE Members – \$99; Non-Members – \$139.

“ENG Truck Operations” – coming soon – This course, designed for non-technical personnel, covers the basics necessary to produce a safe, good quality field-produced shot from both a microwave based vehicle as well as one utilizing satellite uplinks. Topics include safety, the basics of microwave principles and operation, audio, video, various IFB techniques, lighting basics, use of wireless microphones and other advanced applications. Cost: SBE Members – \$65; Non-Members – \$85

“FM Transmission Systems” – This course will help the student understand the proper design, installation and maintenance of an FM transmission system and how its components

and variables impact the performance of an FM station. Cost: SBE Members – \$80; Non-Members – \$105.

“Matching Networks and Phasing” – The purpose of this course is to give the student a good overall understanding of the various types of networks used in an AM transmission system, the situations in which each might be used and calculating the leg values thereof. It also discusses the phase budget for a phasing and coupling system and the use of power divider and phasing networks therein. Cost: SBE Members – \$80; Non-Members – \$105.

“Modulation Techniques in Broadcasting” – coming soon – All of the most current modulation methods are derived from three basic forms of altering the base signal or ‘carrier’. This course addresses how each of them is accomplished, how they are measured and troubleshooting techniques when problems occur. Cost: SBE Members – \$99; Non-Members – \$139.

“Voice Telco Networks & Studio Interface Systems” – The course provides the student with a working understanding of how a signal gets from end to end, how to troubleshoot telco problems and how to properly interface broadcast equipment to the telco world. This course will benefit individuals in either television or radio station facilities. Cost: SBE Members – \$65; Non-Members – \$85

MARK YOUR CALENDAR

August 18 - Networking Technology for the Broadcast Engineer - The Next Level: Routing and Switching - 2-3:30 p.m. Eastern

Instructor: Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNT

Cost: SBE Members · \$59; Non-Members · \$79

November 5 - NYC Ennes Workshop

Visit the Ennes Workshops page in the Education section on www.sbe.org for a complete list of instructors

Cost: SBE Members · \$60; Non-Members · \$75

For more information or to register for programs brought to you by the SBE, visit the Education page on the SBE website at www.sbe.org.

Updates Made to AM Antenna Computer Modeling Course

A new article, “A Step By Step Modeling Example” (ACS Model), has been added

The article “A Loop Sampling Example” has been amended to include ACSModel steps

EAS Webinars

To help our members implement the changes in the Emergency Alert System (EAS), the SBE is working with two organizations that are providing regular educational webinars on the subject. The Federal Emergency Management Agency/Integrated Public Alert and Warning System (FEMA/IPAWS) is currently producing webinars about the national EAS Test, to be held November 9, 2011, while the National Alliance of State Broadcasters Associations/National Association of Broadcasters (NASBA/NAB) are working together to provide webinars on the transition to the Common Alerting Protocol (CAP).

The SBE will provide news of these webinars as well as updates on the EAS/CAP compliance, rules and procedures. Watch future issues of the Signal, the SBE-news and SBE Alerts and SBE Updates for more information.

2011 Election Ballots In Mail

Ballots have been mailed to all voting members for the 2011 election of national officers and directors. Complete yours and mail it to the National Office by August 25. We appreciate the commitment of time and resources by these candidates to run and serve if elected. I hope you will show them your support by casting your votes.

Inviting New Members, It's Everyone's Responsibility

by **John L. Poray, CAE**
SBE Executive Director

As the Society of Broadcast Engineers has done for many years, a drive for new members was held this year from March 1 through May 31. Members were encouraged to recruit a new member and help them get started by acquainting them with the benefits and services of the SBE and, if near-by, getting them to their first chapter meeting. A number of the SBE Sustaining Members and publishers contributed prizes to add some incentive and every member who recruited a member will get \$5 off their membership renewal in 2012, up to a maximum of \$25 off the membership fee.

This year's drive experienced an impressive increase from 2010; not only in the number of new members recruited by other members, but in the number of new members over-all that joined during the three month period. There were 72 new members recruited by 55 current members of the SBE during this year's drive. That's right, quite a few recruited more than one. This compares to 52 new members recruited by 44 current members during the drive held in 2010. The number of new members over-all that joined the SBE this year from March 1 through May 31 totaled 202. That's up from 159 in 2010; a 27%

increase.

Of the 202 members that joined in March, April and May this year, 72 of them were recruited specifically by a current member. It's safe to say that most of the rest of those new members, 130 of them, didn't join the SBE without some encouragement, an invitation or were influenced by at least one current member.

The important idea to take away here is that most people are much more likely to join and get involved in the SBE, or any organization, if they are invited by someone they know and respect. Ensuring the vitality of the SBE membership is important and frankly, is every member's responsibility. There is someone you know who should be a member. It might be another engineer where you work, or maybe the IT person that joined the station recently. It could be the technician that has been attending chapter meetings but hasn't yet joined. Why not invite him or her at the next opportunity?

And don't overlook the newer, younger techs out there. It may be surprising to you, but that's where many of our new members are coming from; those in their 30's or younger.

It's easier than ever to apply for membership by using the on-line application located on the SBE website at www.sbe.org.

Even though we spotlight member recruitment each spring, new members are welcome year-round, so identify your prospect and invite him or her to join you, as a member of the SBE.



"The number of new members over-all that joined the SBE this year from March 1 through May 31 totaled 202."

ENNES

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The Ennes Educational Foundation Trust offers scholarship, presents educational programming and provides grants for educational projects that benefits broadcast engineering and the broadcast engineer. To make a tax-deductible donation, make your check payable to the Ennes Educational Foundation Trust and mail it in care of the Society of Broadcast Engineers, 9102 North Meridian Street, Suite 150, Indianapolis, IN 46260.



**Answer: (C) At the control point.
See FCC rule 73.1230**

Question on page 6

SBE National Meeting; Ohio Engineering Conf. Sept. 27-28

When the SBE National Meeting opens on September 27 in Columbus, Ohio, it will mark the first time the event has ever been held in the Buckeye State. The Ohio Association of Broadcasters (OAB) and the five SBE Chapters in Ohio are the joint hosts for this year's SBE National Meeting. The meeting is being held in conjunction with the ninth annual Ohio Broadcast Engineering Conference, which is presented by the OAB, the Ohio SBE chapters and the Ohio section of SMPTE.

The Conference, which includes technical and regulatory sessions and a trade show on Wednesday, September 28, will be held in the Greater Columbus Convention Center in downtown Columbus. All of the SBE National Meeting events, except for the Annual Membership Meeting, will be held at the Crowne Plaza Hotel, located across the street from the convention center. The Membership Meeting will be held in the convention center in a room adjacent to the conference. The Membership Meeting will be streamed live, from 4 to 5 p.m. EDT. Those wishing to view the meeting should go to the SBE website and click on the Annual Membership Meeting icon that will be posted in early September.

The SBE National Meeting begins on Tuesday, September 27 (all times EDT) with a meeting of the SBE Certification Committee from 2 to 4:00 p.m. The regular fall meeting of the SBE National Board of Directors will be from 6 to 10 p.m.

National Meeting activities continue on Wednesday, September 28, with the annual SBE Fellows Breakfast from 8 to 9 a.m. All SBE Fellows are invited to attend and will be guests of the SBE. The SBE National officers and the chairpersons of our host chapters are also invited. A special invitation will go to this group in August. Reservations are required. We are pleased to welcome back our long-time sponsor for the Fellows Breakfast, Kathrein Inc. – Scala Division, which has sponsored the breakfast since the inaugural event in 1997.

The SBE Annual Membership Meeting will be held from 4 to 5 p.m. in the convention center. The meeting will include reports and updates on the SBE membership, finances and programs. The meeting will also include the



Left SBE President Vinny Lopez, CEV, CBNT addresses attendees at the 2010 SBE National Awards Dinner. The 2011 National Awards will be presented during the dinner in Columbus, Ohio.

Below Attendees listen to a presentation during the 2010 SBE National Meeting held in Madison, Wisc. The 2011 SBE National Meeting is scheduled for September 28 in Columbus, Ohio.

induction of newly elected members of the board and officers. We will also recognize the winner of this year's Membership Drive drawing, Eddie Durham of Callaway, Va., a member of Chapter 78, the Blue Ridge Chapter and the two chapters that will receive this year's Golden Recruiter Awards, Chapter 7 in Jacksonville, Fla. and Chapter 118 in Montgomery, Ala.

At 5:15 p.m. the SBE National Awards Reception, sponsored by Vislink News & Entertainment, will be held in the Crowne Plaza Hotel and will include cocktails, hors d'oeuvres and live music. The reception will be followed by the SBE National Awards Dinner from 6 to 8:45 p.m. We are pleased to have as our keynote speaker, Manny Centeno, Program Manager with FEMA, which is responsible for implementing the new EAS using CAP.

A highlight of the program will be the presentation of the SBE National Awards, including the SBE Broadcast Engineer of the Year to Al Grossniklaus, CBNT, P.E. and the SBE Educator of the Year Award to Steve Lampen, CBRE. Three members will be recognized with the highest membership rank awarded by the organization, the SBE Fellow: Charles W. Kelly, Jr., Arthur Lebermann, CPBE and Barry Thomas, CPBE, CBNT.

Chapters and individual members will also be recognized during the dinner for the following awards: Best Technical Article, Best Chapter Newsletter, Best Chapter Website, Best Regional Conference, Most Certified Chapter and Chapters With the Greatest Percentage Growth and Highest Average Member Attendance at Chapter Meetings. A presentation of the SBE Technology Award will be made to



Nautel, recognizing their innovative Enhanced Transmitter Control via Nautel Advanced User Interface and Orban Inside.

We are pleased to welcome the Telos Alliance as our sponsor for the SBE National Awards Dinner. Their support makes possible the low cost of the dinner to all attendees.

Registration is available on-line through the SBE and the OAB. To make hotel reservations, call the Crowne Plaza Hotel direct at (614) 461-4100 and ask for the special OAB rate. The OAB deadline is August 27. After that date, rooms will be available on a space and rate-available basis. The special rate for attendees of the SBE National Meeting and Ohio Engineering Conference is \$99 plus tax per night.

Tickets for the SBE National Awards Reception and Dinner only, are \$15 and may be ordered on-line at the SBE or OAB website. Tickets may also be ordered by calling the SBE National Office at (317) 846-9000.

We hope to see many of you in Columbus for the 2011 SBE National Meeting and the Ohio Broadcast Engineering Conference.

Watch 2011 Member Meeting Live On SBE Website

A live streaming of the 2011 SBE Member Meeting will be available on the SBE website September 28 from 4 to 5 p.m. EDT. To view the meeting click on the Annual Membership Meeting icon on the SBE website, which will be posted in early September.

In the Circle ... *a snapshot of an SBE Member*



Peter Boyce, CPBE, CBNT, president, chief engineer for Midamerica Electronics Service, Inc. New Albany, Indiana and owner of New Albany Broadcasting Co., WNDA Kool 1570, WKYI-TV Ch 24 Louisville and Indiana 9-TV. Joined SBE in 1969, Chapter 35 - Kentucky.

Focal Point: I enjoy the personal and professional association with other engineers and the educational opportunities.

Getting Started: I worked at a local station while finishing Electronics School. Then I went to Speed Engineering School at University of Louisville. I spent 16 years with Armed Forces Radio and Television Service, Army reserve unit, and worked on stations in Germany, Korea and Alaska.

Sphere of Influence: Clarence Henson owned Louisville Radio School and did field engineering work.

When I'm not working I... snow ski, water ski, flying, world travel and collect some unusual cars.

Job Satisfaction: I enjoy the ability to assist stations with antenna problems, FM, TV, and directional AM.

You may not know... I installed AM Stereo systems on over 300 stations in every state, plus Canada.

Favorite Gadget: I have a Tangley Air Calliope that I use for parades with local Shriners.

Pictured Here: Photo of Pete standing by one of three service vans the company has owned. I have worn out seven Jeep Wagoneer 4-wheel drive vehicles over the past 40 years. I started doing "contract engineering" before most of our industry knew what that was.



Chapter 22
Central New York
www.sbe22.org

Broadcast
& Technology



Expo Among Many Achievements of Chapter 22

The SBE Chapter 22 Central New York, Inc. is based in Syracuse, NY and serves the central region of the state including the markets of Utica and Watertown. The chapter formed in 1969 when Paul Barron and a group of two dozen or so engineers first met at the studios of WCNY-TV (PBS) Syracuse. From these humble beginnings the chapter has grown dramatically over the years. The chapter produced three SBE Fellows and two SBE presidents, including current President Vincent Lopez, CEV, CBNT.

For the past two decades Chapter 22 has supported education and provided scholarships to students attending four local colleges, each school affiliated with the State University of New York. To date nearly \$60,000 dollars has been donated by SBE Chapter 22 to support qualified students in pursuit of higher education.

Chapter 22 boasts the longest running and highest attended SBE regional convention. First held in 1972 at Owego, NY in conjunction with Chapter 1; the father of the show, Larry Taylor called it a "Mini-vention". The event was an immediate success and quickly outgrew the Binghamton area venue and was moved to

Syracuse in 1973. The name was changed to the SBE 22 Regional Convention and eventually to the SBE 22 Broadcast and Technology Expo in 2004 to reflect changes in the industry. In 38 years the Expo has hosted four National Meetings and was named the SBE Convention of the Year ten times. The expo features the largest collection of broadcast and media technology in the Northeastern U.S. with 100+ exhibitors. The one-day event draws nearly 1,000 visitors annually spanning a range of professions including broadcast, production,

media integration and education. This year marks the 39th year of the expo, which will be held on October 6, 2011, at the Turning Stone Resort in Verona, New York. The event is free and open to the public. Registration on-line at www.sbe22expo.org or in person is required. The event is organized by an outstanding committee chaired by Thomas McNicholl, CBTE, chief engineer, WKTV-TV Utica.

— Christopher Baycura, CEV, Chapter 22 Chairman



Members on the Move

Ted Hand, CPBE, 8-VSB, AMD, DRB, chief engineer, WSOC/WAXN, Charlotte named director of engineering, COX Media Group – Charlotte

Support these companies who support the industry and the Society of Broadcast Engineers

ADC Telecommunications Inc. • 1998
Anne-Marie Gunderson (952) 917-3072
Fiber and Copper Interconnect

Advanced Broadcast Solutions • 2008
Mark Siegel (206) 870-0244
Systems Integrator

American Tower Corporation • 2000
Peter A. Starke (781) 461-6780
Broadcast Tower Development/
Construction/Management

Anton/Bauer Inc. • 2004
Sol Comerchero (203) 929-1100
Manufacturer Portable Power Systems

Audemat-Worldcast Systems Inc. • 2000
Christophe Poulain (305) 249-3110
Control Manufacturer

AVCOM of Virginia, Inc. • 2010
Warren "Buck" McElfresh
(804) 794-2500 ext. 312
Spectrum Analyzers

AXCERA • 1983
Mike Rosso (724) 873-8100
Broadcast Television Transmitter Manufacturer

Belden Electronic Division • 1991
Kip Coates (765) 983-5200
Cable and Connectivity

Beveridge Consulting, Inc. • 2006
Gregory J. Beveridge (720) 810-3464
Broadcast Engineering Technical Consulting

Bexel • 2009
Garrick Lewis (818) 565-4314; Calrec
Broadcast and Audio Consoles

Broadcast Electronics, Inc. • 1978
Ray Miklius - Studio Products
Tim Bealar - RF (217) 224-9600
Radio Equipment Manufacturer

Broadcast Engineering Magazine • 1984
Bradley L. Dick (913) 341-1300
Journal of the Broadcast Industry

Broadcast Microwave Services, Inc. • 1997
Jim Kubit (805) 581-4566
Manufacturer, Transmitters, Receivers, Antenna
Systems

Broadcast Supply Worldwide • 1986
Shannon Nichols (800) 426-8434
Audio Broadcast Equipment Supplier

Broadcasters General Store • 2004
Buck Waters (352) 622-7700
Broadcast Audio Video Distributor

Canon USA, Inc. • 1985
Larry Thorpe (201) 807-3300,
(800) 321-4388
Broadcast Lenses & Transmission Equipment

Communications Laboratories • 2008
Jared Maynard (321) 409-9898
Emergency Management Network

Comrex Corporation • 1997
Chris Crump (978) 784-1776
Audio codecs & Telephone Interface Products

Comsearch • 2004
Tim Hardy (703) 726-5651
Frequency Coordination Services

Content & Communications World (CCW) • 2006
Michael Driscoll (203) 371-6322
HD World, 3D World and SATCON

Continental Electronics Corporation • 1976
Michael Troje (800) 733-5011
AM & FM IBOC Transmitters

Dejero Labs • 2009
Bogdan Frusina, CTO (519) 886-8070
Complete Cellular ENG Platform

Dialight Corporation • 2006
US Headquarters (732) 919-3119
FAA Obstruction Lighting, L.E.D. Based

Dielectric Communications • 1995
John George (803) 951-7443
or Matt Leland (207) 655-8139
TV & FM Broadcast Products

Digital Alert Systems, LLC • 2005
Jim Heminway (585) 765-1155
Emergency Alert Systems

DSI RF Systems, Inc. • 2010
Judy Mueller (732) 563-1144
RF Service/Installation/Products

du Treil, Lundin & Rackley, Inc. • 1985
Jeff Reynolds (941) 329-6000
Consulting Engineers

DVEO - Division of Computer Modules, Inc. • 2011
Laszlo Zoltan (858) 613-1818
Everything About Transport Streams

e2v • 1997
Mark Strohecker (914) 593-6831
Electronic Components, SATCom Amplifiers

Econco • 1980
Debbie Storz (800) 532-6626 or
(530) 662-7553
New & Rebuilt Transmitting Tubes

Elektronika America Inc. • 2010
Maria Quintero (305) 592-4506
Television Transmitter & Exciters

ENCO Systems Inc. • 2003
Don Backus (800) 362-6797
Digital Audio Automation & Delivery

ERI - Electronics Research • 1990
David White (812) 925-6000
FM & TV Antennas, Transmission Line, Filters,
Combiners and Towers

Floral Systems • 2008
Jim Berry (352) 372-8326
Television Broadcast Automation

Frontline Communications Corp. • 2000
Stephen Williamson (727) 573-0400, ext. 160
Manufacturer Broadcast Vehicles

Fujinon, Inc. • 1986
Thom Calabro (973) 633-5600
Broadcast & Communications Products

Geppo International • 1995
Dave Chapa (847) 795-9555
Audio, Video Cable Products

Grass Valley • 2000
Andy Jackson (404) 929-5000
TV/Film Production & Broadcast Professionals

Harris Corporation, Broadcast Communications Division • 1977
Dave Hopson (TV) (513) 445-5243
Mark Goins (Radio) (513) 899-9124
Broadcast Equipment Manufacturer

Heartland Video Systems, Inc. • 2011
Dennis Klas (920) 893-4204
Systems Integrator

Image Video • 1997
Zach Wilkie (416) 750-8872 ext. 228
Under Monitor Tally Display Systems, Monitor
Design and Manufacture Broadcast
Equipment

Jay S. Gerber, CBT • 1999
(205) 491-6904

Kathrein Inc., Scala Division • 1985
Michael W. Bach (541) 779-6500
Antennas for Broadcasting &
Communications

Kintronic Labs, Inc. • 2010
Eric Miramontes (423) 878-3141
AM HD Antenna Systems

KPFF Consulting Engineers • 2004
Madison Batt (206) 926-0508
Tower Engineering, Inspections Design

L-3 Communications Electron Devices • 2003
Steve Bliet (570) 326-3561, ext. 229
Tubes, Power

Latakoo, Inc. • 2011
Rod Taylor (512) 825-8709
Internet Video Distribution

LBA Technology, Inc. • 2002
Jerry Brown (252) 757-0279
AM/MW Antenna Equipment & Systems

Lincoln Financial Media • 2007
Barry Thomas (404) 261-2970
Media Group Owner

LYNX Technik • 2007
Steve Russel (661) 251-8600
Broadcast Terminal Equipment Manufacturer

Markertek Video Supply • 2002
Andrew Barth (845) 246-3036
Audio, Video, A/V Broadcast Supply

Maxell Corporation of America • 1991
Patricia Byrne (201) 794-5900
Data/Broadcast Video Media

MAYAH Communications • 2010
Daniel Loeffler (360) 618-1474
Audio CODECS: Mobile/ 1/21 RUrack

Micronet Communications, Inc. • 2005
Jerry Armes (972) 422-7200
Coordination Services / Frequency Planning

Middle Atlantic Products • 2005
David Amoscatto (973) 839-1011
Equipment, Mounting, Solutions

MoreCom, Inc. • 2009
Kyle Moorehead (763) 533-5535
Networking & AV Construction

Moseley Associates, Inc. • 1977
Dave Chancey (805) 968-9621
Digital STLs AM/FM/TV

National Association of Broadcasters • 1981
(202) 429-5340
Industry Trade Association

National Football League • 1999
Ralph Beaver
Game Day Coordination Operations

Nautel, Inc. • 2002
Jeff Welton (877) 662-8835
Radio Broadcast Transmitter Manufacturer

NSOEM • 2010
Robert Sorbet (281) 500-8940
Electrical Equipment Sales

NuComm/RF Central • 2009
Don Hoeler (908) 852-3700 ext. 3110
Digital and Analog Video Microwave Systems

Orban • 2011
David Rusch (480) 403-8300
Audio Processing AM/FM/TV

OTL • 2010
Martin Rochon (574) 318-5810
Tower Lights (Lighting)

Panasonic Solutions Company • 1985
Joe Facchini (201) 392-6183
Professional Broadcast Equipment

Pasternack Enterprises • 2001
Christine Hammond (949) 261-1920
Coax & Fiber Products

Prime Image, Inc. • 1997
Rodney Hampton (408) 867-6519
Digital Audio/Video Equipment

ProAudio.com - A Crouse-Kimzey Co. • 2008
Mark Bradford (800) 433-2105 ext. 560
Proaudio Broadcast Equipment Distributor

Propagation Systems Inc. - PSI • 2010
Doug Ross (814) 472-5540
Quality Broadcast Antenna Systems

Pulsecom • 2003
Winnie Evans (703) 471-2926
AM, FM and HD STLs, Copper & Optical

Quintech Electronics and Communications Inc. • 2002
Paul Campagna (724) 349-1412
State-of-the-art RF Hardware Solutions

QVC • 2011
Kevin Wainwright (484) 701-3431
Multimedia Retailer

Radian - A Division of Prestige Telecom Inc. • 1986
John McKay (866) 4-RADIAN
Towers, Antennas, TV Installation

RCS • 2003
Diana Stokoy (308) 284-3007
Audio and Video Content Management

RDL • 2004
Chuck Smith (928) 778-9678, ext. 142
Audio, Video, Control & Test Equipment
Manufacturer

RF Specialties Group • 2008
www.rfspecialties.com
Everything from the microphone to the
antenna

Richland Towers • 2001
David Denton (813) 286-4140, ext. 4235
Tower Owner/Management

Rio Steel & Tower • 2010
Keith Cendrick (817) 225-0890
Turn-key Tower/Antenna Services

Rohde & Schwarz • 2003
Eddy Vanderkerken (469) 713-5322
Broadcast Transmitters, Test & Measurement

ROSCOR Corporation • 1998
Tom Voigts (847) 299-8080
DTV System Integrator

Ross Video Ltd. • 2000
Kyle Luther (613) 652-4886
Manufacturer, Television Broadcast Equipment

Sage Alerting Systems, Inc. • 2010
Gerald LeBow (914) 872-4069 ext. 210
Emergency Alert Systems Products

Salzbrenner Stagetec Media Group • 2009
(888) 782-4391
Professional Audio Solutions

SCMS, Inc. • 2000
Bob Cauthen (800) 438-6040
Broadcast Equipment - New/Used

Screen Service America • 2010
Graziano Casale (212) 695-8341
Broadcast Transmitter & ATSC Mobile

Seacomm Erectors, Inc. • 1997
John Breckenridge (360) 793-6564
Tower/Antenna Erections

Shively Labs • 1996
David Allen 888-SHIVELY
FM Antennas & Combiners

Sigmat • 2008
Ed Porto (610) 783-6666
Broadcast Equipment Support Sales

Snell Inc. • 1995
John Shike (818) 556-2616
Video Equipment Manufacturer

SpectraRep • 1998
Mark O'Brien (703) 802-2975
Coverage Maps and Services

Staco Energy Products Co. • 2010
Paul Heiligenberg (937) 253-1191 ext 128
Manufacturer Voltage Regulators, UPS

Stainless LLC/Doty-Moore • 2004
Ed Deetscreek (215) 631-1323
Towers - Engineering - Services - mds

Superior Electric • 1995
Michael J. Miga (860) 507-2025
Power Protection Equipment

Sutro Tower, Inc. • 1989
Eric Dausman (415) 681-8850
Broadcast Tower Leasing

TC Electronic • 2008
Ed Simeone (818) 665-4902
DTV Audio Level Processing

Technostrobe • 2009
Francis Lacombe (877) 578-7623
FAA lights - High Intensity

Tektronix, Inc. • 1977
James Lang (800) 833-9200
Video Test Equipment Manufacturer

Telos Systems/Omnia/Axia • 2003
Denny Sanders (216) 241-7225
Telos Systems - Talk-Show Systems

Terrestrial RF Licensing Company • 2003
Steven Slocum (888) 373-4832
FCC Broadcast Auxiliary Licensing Services

The Durst Organization - 4 Times Square • 2004
John M. Lyons, CPBE (212) 997-5508
TV/FM/Microwave Tower Site

The Switch Company • 2011
Peter Hanz (323) 645-8011
Fiber Transmission Provider

The Whitlock Group • 2000
Kevin Thompson (800) 726-9843
Broadcast and Presentation Solutions

Tieline Technology • 2003
Mary Ann Seidler (317) 845-8000
POTS, ISDN, Codecs & A/V Products

TV Magic • 2008
Bob Anderson (858) 650-3155
Broadcast Systems Integrator

Unimar, Inc. • 2001
Thad Fink (813) 643-6791 or (813) 943-4322
Tower Obstruction Lighting Designer,
Manufacturer, Distributor

Vislink News and Entertainment • 1991
Nadine Frechette (978) 671-5700
Video Microwave Systems

Ward-Beck Systems Ltd. • 2004
Michael Jordan (416) 335-5999
Metering, Monitoring, Distribution,
Conversion

Warning Systems, Inc. • 2008
Elysa Jones (256) 880-8702
CAP, Warning, Emergency Alert

Wheatstone • 2010
Jay Tyler (252) 638-7000
IP Consoles, Routers & Processors

Wireless Infrastructure Services • 2006
Travis Donahue (951) 371-4900
Broadcast Microwave, Tower and ENG
Installation, Integration Maintenance Services

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New Members

Richard L. Heath - Galesburg, IL
John D. Hurni - Chicago, IL
Nicholas Johnson - Springfield, OR
Brian Rose - San Diego, CA
Richard F. Shoff, III - Utica, NY
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Doug Maulden-Locke - Sterling, VA
Christopher J. Schwantner - Springfield, MA
Chad C. Brewer - Chicago, IL
Chris Behmlander - Marion, IA
Jeremy I. Ott - Denver, IA
Kenneth D. Bryant, III - Florence, SC
Gary M. Kahn - New York, NY
Timothy R. Taylor - Rancho Cucamonga, CA
Donavan J. Conway - Antelope, CA
Michael Johnson - Chester, PA
Gregory Pranievicz - Clarksville, MI
Edward Heller - Eugene, OR
Richard Hunt - La Verne, CA
Michael Kozdrey - Temecula, CA
Matthew A. Chambers - Macon, MO
Nikhilesh Kumar - Lorton, VA
Frank Boulton - Davie, FL
Henry R. Hernandez - Marysville, WA
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John H. Pfisterer - Oakdale, NY
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Joseph M. Royall - Mount Olive, NC
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Lamar Smith - Las Vegas, NV
Jose Verdejo - Manassas Park, VA
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Justin L. Richardson - Altadena, CA

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Sanders J. Falgout - Katy, TX
James A. Bremer - Redding, CA
Jeremy A. Scott - Beckley, WV
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Dennis M. Dozier - Lexington, KY
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Andy Singer - Tewksbury, MA
Steve Johnson - Ardara, PA
Jeffrey S. Heimburger - Phoenix, AZ

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Andrew J. Koziol - Kinnelon, NJ
Ethan A. Miller - Waterville, NY
Dylan R. Davie - Clagary, Alberta
Tyler J. Egnarski - Pulaski, WI
Abdisamed Farah - Clagary, Alberta
Zachary A. Konschuk - Crossfield, Alberta
Geoffrey C. Mason - Calgary, Alberta
Michael Nahas - Calgary, Alberta
Patrick J. Ryan - Calgary, Alberta
Kyle A. Tippin - Midland, Ontario
Erika Miranda - Lake Balboa, CA
Theresa Graves - Springfield, MO
Elizabeth A. Schroeder - Oshkosh, WI
Joshua J. Franovitch - Towson, MD
Sean P. Mahoney - Graham, WA
Will Wilkerson - Pasadena, CA
Neuben T. Nunez - Ocoee, FL
April R. Tessmer - APO, AE

Reinstated Student Members

Tsun Kei Soo - Kowloon, Hong Kong

New Associate Members

John Biedenbarn - Sunset Beach, CA
Hannah Trowbridge - Spencer, IN
Rob Lewis - San Francisco, CA
David E. Brett - Youngstown, OH

New Youth Members

Alexander I. Wright - Boise, ID
James D. Yaeger - Oregon, WI



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