# THE SIGNAL

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## Adrick, Charles, Foti earn NAB awards

The NAB recently announced the recipients of this year's NAB Engineering Achievement Awards. All three winners are members of the SBE.

Jay Adrick, Vice President, Broadcast Technology in the CTO Group of Harris Corp., Cincinnati, Ohio is the winner of the 2013 NAB Television Engineering Achievement Award. Frank Foti, CEO of the Telos Alliance, Cleveland, Ohio, is receiving the 2013 NAB Radio Engineering Achievement Award. The awards to Adrick and Foti recognize significant contributions to the state of the art in broadcast engineering.

A special award, the 2013 NAB Service to Broadcast Engineering Award, recognizing extraordinary service to

the industry, is being presented to Leonard Charles, CPBE, Director of Engineering, Midwest, at Morgan Murphy Media, Madison, Wis.

The three men will receive their awards during the NAB Technology Luncheon, to be held on April 10, during the 2013 NAB Show in Las Vegas.

The SBE extends its congratulations to each of these men; all long-time members and supporters of the SBE.



Jay Adrick

ck Leonard Charles, CPBE

Frank Foti

## Member Recognition and Prizes will be Featured at SBE Membership Meeting

This month, the SBE will hold its annual spring meeting of members attending the NAB Show in Las Vegas. The meeting will be held on the traditional Tuesday (April 9) but at a new, slightly later start time of 5:30 pm to accommodate the NAB Broadcast Engineering Conference schedule.

Vislink Broadcast will once again be our sponsor, making some nice door prizes possible and, to the first 100 in attendance, an SBE pedometer. Prizes include three dinner gift cards, SBE tumblers and, the big prize, a \$300 Fry's Electronics gift card, redeemable at any of their stores or for purchases from their on-line catalogue. A number of local SBE chapter certification chairmen will be recognized for their service and several updates on SBE activities will be provided, including the upcoming 50th anniversary coming up in 2014.

The SBE exhibit booth at the 2013 NAB Show will be on the second floor lobby area of the South Hall of the Las Vegas Convention Center. This is the same location as in recent years and close to the BEC session rooms. The booth will feature technical books, certification materials, SBE CertPreview (study guides). Members will be able to renew their membership at the booth and we'll accept new member applications as well. Members of the national board of directors and certification committee, as well as national staff, will be in the booth throughout the week to answer your questions.

We are pleased to have four SBE Sustaining Members each sponsoring a day at the booth (Monday through Thursday). Each day, we'll be giving away a \$200 Fry's Electronics gift card. Just stop by the booth and leave your business card in the "fish bowl" and you'll be eligible for the late afternoon drawing. Winners need not be present to win. The daily sponsors include, Boxx Communications, Ka You Systems, Nemal Electronics and Black Magic Design.

#### SEE SBE EVENT SCHEDULE, page 8

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# Always ON.

The engineer is the **"behind the scenes HERO"** that makes sure radio stays 'ON'. He's on call around the clock—weekends, holidays, every day—because he has to be. Radio is always 'ON' and he is the one that makes sure it stays that way. At BSW, we salute this hero of radio and are dedicated to serving him.

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## **NAB Broadcast Engineering Conference** includes Ennes Workshop

There are people in Las Vegas that work show after show. You can see the same people checking passes at the Consumer Electronics Show in January each year, and a hundred other shows. They always comment on that group of a few hundred that come in at 8:00 am on Saturday and stay the whole day. To hear them tell it, only a bunch of broadcast engineers would do that. I like to think I kind of resemble that remark. If you are like me, that's a darn good way to spend a day in Vegas.

The Saturday before the NAB Show floor opens, the SBE, with cooperation from PBS, presents the Ennes program as a part of the 2013 NAB Show's Broadcast Engineering Conference. We gather for a full day... mostly tutorial... set of presentations. This is no different than any of the last decade... yet each year in this industry is very different. The topic on all of our minds is the nature and impact of new means of distribution. Radio or TV, or things that look like radio and TV; it's clear that how our programming, and even when our programming reaches the audience, has changed. In TV, estimates suggest that depending on location, only 8-20% of our audiences watch via our transmitters. In radio, we're showing up all over the world and sometimes as an app. And it's not all about cable or satellite, where their numbers are eroding in favor of Over-The-Top and Web based distribution with clear trends to grow IP based delivery; some say limited only by the ever expanding connectivity.

It's those new means of distribution that drives this year's Ennes day-long program at NAB. From the two hour tutorial on streaming by Jan Ozer, the 2013 NAB Show.



Fred Baumgartner, CPBE, CBNT chairs this year's Ennes program at

to discussions of multicasting and new protocols for moving sound and video both inside the station (you didn't think BNCs would last forever did you?) and in the Internet, this year's sessions are as rapid fire and intense as any before. Ennes programs tend to be pretty good, which probably explains the attendance. This year is all about what many of us are or will be facing and interfacing to in the next year or so. It just might be a good year to check this out.

Full conference registration to the NAB Show, either the Flex or Smart Pass, is required for admittance to the SBE/Ennes program. To register, go to the NAB Show website and register using their on-line system.

## MARK YOUR CALENDAR

#### **SBE Membership Meeting**

April 9 Las Vegas Convention Center, Room S227 5:30 – 6:30 pm PT

**Certification Application Exam** Deadline April 12 Exams held in local chapters June 7-17

#### Webinar by SBE · IP Networking, part 6 - an Introduction to **Multicast**

April 25, 2 – 3:30 pm ET Instructor: Wayne Pecena, CPBE, 8-VSB, AMD, DRB. CBNE Cost: SBE Members · \$49; Non- Members · \$75

Webinar by SBE · Media Asset Management 101 May 16, 2 – 3:30 pm ET Instructor: Theresa Regli, The Real Story Group Cost: SBE Members · \$49; Non- Members · \$75

**Certification Application Exam** Deadline June 3, 2013 Exams held in local chapters, August 9-19

SBE Leadership Development Course August 13-15

Atlanta, Georgia Instructor: Rodney Vandeveer, Professor and Consultant Cost: SBE Members · \$590; Non- Members · \$640

**Certification Application Exam** Deadline September 13, 2013 Exams held in local chapters, November 1-11

**SBE National Meeting and IBA Broadcast Engineering** Conference October 29-30 Sheraton Indianapolis Keystone Crossing Hotel

For more information, visit our website at www.sbe.org.



LETTER FROM THE PRESIDENT

by Ralph Hogan, CPBE, DRB, CBNE SBE President

rhogan@kjzz.org

## **The Invisible Engineer**

Although SBE and its members are fully aware of the contributions engineers make to stations, groups or networks, the general staff and management often fail to grasp exactly what engineers do.

Going to work is not all about putting out fires for a broadcast engineer. Engineers often find a significant part of their day is spent keeping up with the leading edge of evolving and ever changing technology. One of the most important daily routines is researching and implementing better solutions for everyday problems.

What makes the engineer invisible to the organization? Staff generally do not see the hours away from the engineer's desk spent learning new hardware, working at the transmitter, or coming into the facility in the middle of the night to ensure everything will be working properly for the morning shift. End users seldom realize that quite often the device that seems to perform so flawlessly for the engineering team is not because of having a "magic" touch. Perfection comes from spending many hours using and testing new equipment so that when a technology is deployed, engineering will fully understand how to support that technology and the people who use it.

I asked Chris Furphy, one of our staff engineers at the stations I work, to give me a list of what might occur during a typical workday. Even though the list is not all-inclusive and everything listed does not happen every single day, it represents a good cross-section of what a typical day for an engineer might be.

A day in the life:

- Stuck in traffic listening to signal, make note to check processor settings
- Arrive at facility, get coffee and check discrepancy logs to see if there have been any failures
- Write report to management about upcoming expenditures
- Contact vendors to confirm availability for upcoming overnight service window
- Install software updates to staff pc
- Write users group to inform members as to upcoming power reduction requirements
- Contact vendors for specifications and pricing for proposed system upgrades
- Install firmware upgrades to existing EAS equipment
- Add network infrastructure to support new equipment in rack room
- Contact vendor to determine why product promised on Monday still isn't here on Tuesday
- Set up remote broadcast
- Prepare and turn in paperwork required for license renewal process

- Report to management the status of the budgeting quotes for next fiscal year
- Contact listener/viewer regarding their specific interference report
- Take full set of readings and inspect transmitter for any obvious operational concerns
- Explain that \\mydrive is not the same as //mydrive to the user
- Configure RDP access to new systems installed last night
- Document recent changes to facility in station documentation
- Visit transmitter and photo document current inventory
- Send blanket purchase order to distributers
- Order parts and supplies from local vendors
- Install replacement lamps in control surface
- Determine reason for power failure every day at 2:45 AM
- Answer calls from staff regarding a network issue
- Contact NOC in Washington regarding satellite program audio dropouts
- Contact master control to tell new operator that the audio dropouts are at network level and not their fault.
- Check operational logs for normal operation and sign off on previous day's logs
- Call the EAS LP1 to find out why the statewide test was done for the wrong state
- Document EAS errors on logs
- Eat lunch while driving to transmitter site for approval of tower crew's work.
- Answer emails from 267 people about the one problem affecting the signal for two minutes (those pesky network signal errors)
- Show face around station to see if there are any new problems
- Design new reporting system for off-air emergencies
- Call co-worker about a proper log-on for the machine that was updated
- Update master password list to include the new equipment
- Write email thanking vendor for coming out and demonstrating a new product, in same email ask for a better price so management may actually consider the new gear
- Call family and explain why dinner will be late
- Travel to other side of state to restore power to remote translator
- Assess new products while getting ready for bed
- Wakeup at 1 am and log into network to restart the web server

- Answer phone to tell boss why alarms are still going off even though systems have been restored
- Turn off alarms
- Get back to sleep at 3 so 6 am won't be so scary.

A broadcast engineer is so much more than an engineer just knowing how to solder. Being an innovator and communicator are as important as being a solver of problems. No one will deny that keeping the station on is of paramount importance. Many may be surprised to know that continual education and training are what makes greater reliability possible. Engineers never stop learning because knowledge is power to get the job done in the shortest and most cost effective manner.

The best engineers are innovative, promote outof-the-box thinking and use measured risk taking to move to the next level. They encourage others to problem solve and develop solutions to problems. They often talk to the staff and seek out their needs. To be most effective, it's imperative that those who work in other disciplines at our stations, or wherever we are employed, understand the value of the work we do. In 2014 the SBE will be helping to improve public and station perception of broadcast engineers by increasing awareness of the broadcast engineering profession during its 50<sup>th</sup> anniversary.





LEGAL PERSPECTIVE

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

## **The Protection Racket**

On February 5, 2013 the Commission issued a Public Notice announcing that beginning April 1, 2013, all licensees of TV Pickup BAS stations in the 6875-7125 MHz (7 GHz) and 12700-13200 MHz (13 GHz) bands *must* register their fixed receive sites using the ULS filing system. SBE's web site contains the entire notice telling you how to comply with this requirement. It is not complicated, and the public notice tells you how to do it step-by-step if you are not familiar with the ULS process. In fact, in order to encourage compliance with the registration requirement, FCC decided to suspend the payment of the \$150.00 application filing fee that would otherwise be required for an application to modify TV pickup licenses. This suspended fee is only valid through the April 1, 2013 (just remember, you would be a "fool" to pass up the opportunity to file on time) deadline.

This receive site registration requirement is not new at all. It was delayed in its implementation until FCC could get approval from the Office of Management and Budget under the Paperwork Reduction Act. It was first announced in the "Wireless Backhaul Docket" Report and order that was issued on August 9, 2011, when FCC allowed the Fixed Service (FS) to share the 7 and 13 GHz bands with BAS and CARS licensees. In that order, FCC also adopted Section

74.605 of its Rules, which requires that licensees of TV Pickup stations in the 7 GHz and

13 GHz bands list their stationary receive sites by a license modification using the Commission's Universal Licensing System. CARS TV Pickup stations are licensed in the Cable Operations and Licensing System (COALS), which already requires CARS licensees to identify receive sites.

According to FCC's February 5 Public Notice, registering fixed TV pickup receive sites in the ULS "will allow analysis to determine whether FS links will cause interference to TV Pickup stations." Well, that is a noble goal, but wait a minute: When the FCC allowed FS links into the 7 and 13 GHz band, didn't it protect incumbent BAS operation in those bands by excluding FS paths that cross or enter the service areas of BAS stations? If BAS stations are protected from interference from fixed links within the entirety of their service areas by virtue of that exclusion, why is FCC requiring the filing of modifications to all TV Pickup station licenses to list receive sites? If the entire service area of a BAS 7 or 13 GHz facility is off-limits to FS stations, what is the relevance of the location of a receive site? And what receive sites have to be registered? Permanent ones? Temporary ones? Both?

While SBE is now asking these questions of the Commission's staff, the August 9, 2011 Wireless Backhaul Report and Order may have some of the

answers in it. What FCC concluded in that proceeding was that it was not going to be possible to segment the 7 and 13 GHz bands. It could not allow FS stations into the band and keep them separate in frequency range from BAS and CARS licenses. This is because there are different types of operations in parts of the bands that vary from market to market. Also, to avoid interference between FS operations and TV pickup operations, FCC "prohibit(ed) FS paths from crossing the service areas of TV pickup authorizations and require(d) FS to coordinate with all relevant licensees, including TV pickup authorizations, pursuant to the formal Part 101 coordination procedures." This is a two-part obligation, not one: First, incoming FS stations have to avoid their paths crossing or entering the TV pickup service areas. Additionally, FS stations have to avoid interference to incumbent BAS licensees by coordination "with all relevant licensees." This includes TV pickup licensees. In order to fulfill the Part 101 coordination requirement obligation, it is necessary for the commercial coordinators looking at potential new FS paths to know where the receive sites are of BAS operations. Interference avoidance is therefore a multiple-step obligation for new FS stations.

This interpretation is supported by the Commission's statement as to who is protected going forward. FCC said that FS, BAS, and CARS will all be co-primary services required to protect pre-existing operations, but none of the three will have to protect future operations of the others. First in time, first in right. Not much new there. However, FCC said that because FS and BAS each have to use the prior coordination notice process under the Part 101 rules for commercial coordination, FS operations will be compatible with fixed BAS operations. Looking forward, knowing the receive sites of fixed BAS facilities will be necessary in order to implement a co-primary sharing arrangement where no service has priority.

As to mobile TV Pickup stations in the 7 and 13 GHz bands, however, FCC said that they could continue to use informal coordination procedures within their service areas, because of the urgency of electronic newsgathering operations and the "long history of successful real-time frequency coordination provided by local coordinators". Because of the decision not to allow FS within the service areas of mobile BAS/ CARS stations, there is no reason to require those stations to use formal coordination procedures.

FCC summarized the conditions under which Part 101 FS stations are allowed to share the 7 and 13 GHz bands as follows:

- FS stations in the 7 and 13 GHz bands are not allowed to locate their paths within the service areas of any previously licensed co-channel TV pickup stations.
- 2. FS operators are required to coordinate any new fixed links with TV pickup stations within the appropriate coordination zones of any new fixed links.
- 3. All fixed BAS, fixed CARS and Part 101 FS stations in the 7 and 13 GHz bands are to engage in the same frequency coordination process that is required of all Part 101 services.
- 4. FCC also reserved two 25-megahertz channels for BAS and CARS in the 7 GHz band (6975-7125 MHz) and two 25-megahertz channels in the 13 GHz band (13150-13200 MHz) nationwide to accommodate TV pickup stations covering events that occur outside the "license areas" (presumably meaning service areas) of local BAS and CARS operations.

Based on this statement of conditions, it appears that existing BAS stations at 7 and 13 GHz are protected in two ways: by the exclusion (per condition #1 above) of FS stations from the service areas of incumbent BAS stations, and (per condition #2 and #3 above) by the Part 101 frequency coordination process. This process requires that the coordinators know the location of receive sites. Hence the requirement commencing April 1. Which receive sites should be listed? Well, were I a licensee in this band, I would list all those fixed receive sites that you regularly, or even occasionally use, whether or not they are within your service area. And I wouldn't wait until late March to get this done, either.



A non-directional AM, a non-directional FM or a TV station has been constructed according to the terms of its construction permit and program tests have begun. How many days are allowed to complete equipment performance measurements and file an application for license to cover the outstanding construction permit?

A. 30 days B. 20 days C. 10 days D. 1 calendar week E. 1 calendar month



## **CERTIFICATION UPDATE**

Jim Bernier, CPBE, CBNT Chairman, SBE National Certification Committee jim.bernier@sbe.org

## Has your SBE certification lapsed? The Jubilee Project is for you.

The SBE Certification Committee thought we would use the impending 50th anniversary of SBE as an opportunity to offer those of you who have lapsed certifications to regain SBE certification with no exam required. The Jubilee Project, named for the 50th anniversary, will take place from April 1, 2013-April 30, 2014. Those who previously held an SBE certification that expired from January 1999-January 2012 will qualify for this one-time project.

Applicants are required to fill out the Jubilee application (found on the SBE website under Certification/Applications) and provide either a resume or a letter to the certification committee on what he/she has done in the broadcast engineering field over the time period of their expired certification.

All SBE certifications are included in the reinstatement program, however, there are two price points. All certifications except Certified Professional Broadcast Engineer (CPBE) can be reinstated for \$100 for each certification. If you held CPBE and it expired between 1999-2012, you may either reinstate the senior level certification that you held prior to CPBE at the rate above, or you may choose to have your CPBE re-instated for \$175. All of these costs are for current members of SBE. If you are not currently a member of the SBE then non-member fees would apply, which is an additional \$75.

Also, the certification committee recently reviewed the policy for obtaining life certification. The committee decided against raising the life certification fee of \$50 per certification but felt that the requirements have not kept up with the changes in career pathing. SBE certification and recertification is in place to measure the broadcast engineer's continuing knowledge and education in the field. With the current requirements for life certification, theoretically an individual could obtain that level at the age of 38 and we would never ask them to prove their continuing education again. This type of scenario diminishes the validity of the certification. Therefore the committee proposed that the addition of the required age of 59 ½ be added to the existing life certification requirements. The SBE Board of Directors approved this at their meeting in Denver, Colo. last October.

Every year at the annual membership meeting during the NAB Show, the SBE recognizes the local certification chairmen who devote volunteer time to the SBE Program of Certification. These local certification chairmen receive a plaque on the recurring five year anniversaries. Following is a list of those who will be recognized in April. Thank you very much to all of the volunteers who devote so many hours to the SBE and the certification program.

#### **30-Years**

Chapter 41	Robert Good, Jr., CPBE
Chapter 43	Robert Venditti, CSRTE
Chapter 55	Don Strauss, CPBE
Chapter 86	Robert Maw, CSTE

#### **25-Years**

Chapter 21	Thomas Alderson, CSTE
Chapter 28	Rick Ryan, CPBE
Chapter 30	Robert Bell, CPBE
Chapter 49	Brian Morgan, CPBE
Chapter 66	Michael Feist, CPBE

Chapter 70	Gilbert Garcia, CPBE
Chapter 93	Carl Davis, CPBE

#### 20-Years

Chapter 20	Thomas Skubel, CPBE
Chapter 24	James Hermanson, CPBE, CBNT
Chapter 87	Laverne Killion, CPBE
Chapter 117	Dave Brawdy
Chapter 122	James Hartzler, CPBE
Chapter 128	William Croghan, CPBE

#### 15-Years

cke, CPBE, CBNT
on, CPBE, CBNT
oldy, CPBE
nnelly, CPBE

#### **10-Years**

Chapter 59	Christopher Scherer, CPBE, CBNT
Chapter 88	Ed Roos, CPBE

#### 5-Years

Chapter 143 Steve Epstein, CPBE

## SBE National Certification Committee 20-Years

Troy Pennington, CSRE, CBNT

#### 15-Years

Christopher Scherer, CPBE, CBNT One year of service Hal Kneller, Jr., CPBE, AMD, DRB, CBNT Ed Williams, CPBE

## Lead the Way – Grow the SBE and win a prize

The annual SBE Membership Drive began March 1 and runs through May 31. With the theme, "Leading the Way," this is your opportunity to recruit a new member and be recognized for your efforts. SBE members who recruit one or more new members during the drive and are listed as the sponsor on the application, are entered into a drawing for prizes provided by the SBE and by SBE Sustaining Members.

Members are entered into the drawing once each time they sponsor a new, full-dues paying member, and entered five times for sponsoring a Sustaining Member. Sponsors will receive \$5 off their 2014 membership dues for each new member they recruit, up to \$25.

The grand prize winner will be awarded a trip to the SBE National Meeting in Indianapolis, Ind., October

29-30. The SBE National Meeting is being held in conjunction with the annual broadcast engineering conference conducted by the Indiana Broadcasters Association. The prize package includes: round trip airfare for one; two nights stay at the Sheraton Indianapolis at Keystone Crossing Hotel, free admission to all national meeting and engineering conference events. For more information, visit the SBE website, www.sbe.org.

Additional prizes include a BRIC-Link Audio iP Codecs (2 available) courtesy of Comrex; Ebtech Swizzarmy Cable Tester, courtesy of Broadcast Supply Worldwide (BSW); Mic Adapter, courtesy of Tieline; Tool Bag with logo shirt, construction hat and multi-tool, courtesy of Middle Atlantic Products Inc.; Logo shirt, courtesy of Heartland Video Systems; *Directional Antennas Made Simple* by Jack Layton, CPBE, courtesy of Layton Technical Services; *Wireless Network Security A Beginner's Guide* by Tyler Wrightson, courtesy of McGraw-Hill; SBE CertPreview download (one exam), courtesy of SBE; (1) SBE University course (your choice) and (2) Acrylic Tumblers, courtesy of SBE.

Two chapters will be presented Golden Recruiter Awards at the end of the drive. This recognizes a chapter, one each in the large and small chapter size divisions, that has the highest percentage of current SBE members participating in the Member Drive. Participation is defined as recruiting one or more new members.

Help SBE lead the way and sponsor a new member today!

## New SBE Certification Achievements CONGRATULATIONS

LIFE CERTIFICATION		nt level of certification for life.		least 59 ½ years od and are current members of SBE ed Life Certification if they so request. If the request is Certified Broadcast Technologist® (CBT®) David Freeman, Key West, Fla. – Chapter 53 Michael Seaver, Quincy, Ill. – Chapter 49
	Certified Senior Television Engineer™ (CSTE®)	Certified Video Engineer® (CEV®)	David Spalding, Middleton, Conn. – Chapter 14	Michael Kennedy, Saint Charles, Mo. – Chapter 55
FEBRUARY EXAMS	Certified Senior Techsion Tagineet <sup>™</sup> (CSRE®) Certified Senior Radio Engineer <sup>™</sup> (CSRE®) Christian Vang, Denton, Texas – Chapter 39 Certified Broadcast Radio Engineer <sup>™</sup> (CBRE®) Todd Dixon, Jemison, Aka. – Chapter 118 Michael Jamnick, Minnetonka, Minn. – Chapter 17 Philip Mulivor, Cleveland Heights, Ohio – Chapter 70 Certified Broadcast Television Engineer <sup>™</sup> (CBTE®) Mark Pace, Carrollton, Ill. – Chapter 55	Certified Video Linguetto (CLIV9)) Bill Baty, Burke, Va. – Chapter 37 Enrique Gonzalez, Raleigh, N.C. – Chapter 93 Alex Voss, Dallas, Texas – Chapter 67 Certified Broadcast Networking Engineer <sup>TM</sup> (CBNETM) Christopher Crump, Buford, Ga. – Chapter 5 Andrew Hamann, Atlanta, Ga. – Chapter 5 Dexter Johnson, Shreveport, La. – Chapter 44 James Sallen, Bloomington, Ill Chapter 49	Dan't opaaning, inductori, com: – chapter 131 Dean Tracy, Moreno Valley, Calif. – Chapter 131 Christian Vang, Denton, Texas – Chapter 131 Christian Vang, Denton, Texas – Chapter 67 AM Directional Specialist <sup>TM</sup> (AMD <sup>TM</sup> ) David Dybas, Buffalo Grove, III. – Chapter 26 William Kirkpatrick, Rutherford, N.J. – Chapter 15 Certified Broadcast Networking Technologist® (CBNT®) Mark Guralnik, Henderson, Nev. – Chapter 128 Robert Hedges, Silver Spring, Md. – Chapter 37	Perry Kilns, Pearland, Texas – Chapter 105 Certified Broadcast Technologist® (CBT <sup>TM</sup> ) Ronald Haley, Blatimore, Md. – Chapter 37 Certified Television Operator® (CTO®) Mike Baeza, El Paso, Texas – Chapter 38 John Hundley, IV, Richmond, Va. – Chapter 60 Tyler Long, Chicago, III. – Chapter 26 John Sullivan, Las Vegas, Nev. – Chapter 128
SPECIAL Proctored exams	Certified Broadcast Technologist® (CBT®) Joel Curtin, Buffalo, N.Y. – Chapter 133	CERTIFIED BY LICENSE	Certified Broadcast Technologist® (CBT®) Nick Grbac, South San Francisco, Calif. – Chapte Michael Kennedy, Saint Charles, Mo. – Chapter	
COURSE COMPLETION	Certified Broadcast Technologist® (CBT®) Bates Technical College Michael Cahill, Orting, Wash. – Chapter 16 Richard Osborn, Tacoma, Wash. – Chapter 16	Joshua Parkerson, Lakewood, Wash. – Chapter 16 Anthony Phinney, Sumner, Wash. – Chapter 16 Milwaukee Area Technical College Dana Seay, Grafton, Wis. – Chapter 28	DINFOS Michael Burnside, Fayetteville, N.C. – Chapter 93 Todd Lanterman, St. Louis, Mo. – Chapter 55 Joseph McMaster, Depew, N.Y.	Orlando Watkins, Abilene, Texas – Chapter 67
<b>CERTIFIED TELEVISION OPERATOR® (CTO®)</b>	Christopher Bailey, Moscow, Idaho Bradley Clark, Brunswick, Ga. Erik Gonzalez-Lopez, Goodlesttsville, Tenn. Stephen Graham, Seattle, Wash. Shant Markarian, Norfolk, Va.	<b>CERTIFIED RADIO OPERATOR® (CRO®)</b>	Michael Phillips, New Milford, N.J. <b>Pasadena City College</b> Aerika Dave, S. Pasadena, Calif. Zack Elkhaldy, Covina, Calif.	
RECERTIFICATION		rocess either by re-examination, point verification throug Certified Broadcast Television Engineer <sup>TM</sup> (CBTE®) Bryan Gordon, Atlanta, Ga. – Chapter 5 Certified Video Engineer® (CEV®) Paul Stanion, Ithaca, N.Y. – Chapter 140 Certified Broadcast Networking Technologist® (CBNT®) Chris Hoopes, Troy, Ala. – Chapter 118 Troy Pennington, Hermitage, Tenn. – Chapter 68 Thomas Sadler, Woodbridge, Va. – Chapter 37	h the local chapters and national Certification Committe Certified Broadcast Technologist® (CBT®) Samuel Smith, Trevor, Wis. – Chapter 28 Certified Television Operator® (CTO®) Cindy Arredondo, Dallas, Texas Clay Buchanan, Plano, Texas James Coons, Euless, Texas Kelly Ehridge, Plano, Texas Kristina McCaleb, Garland, Texas Chris Nixon, Fort Worth, Texas	ee approval and/or met the service requirement. Mike Purdy, Dallas, Texas Jason Roach, Dallas, Texas





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## Visit the SBE while at the 2013 NAB Show

April 6-11 brings the annual NAB Show in Las Vegas, attracting thousands of electronic media professionals from around the world to view the latest technology, attend informative educational sessions, and, perhaps, spend a few minutes taking advantage of what Las Vegas has to offer. It's also an opportunity to take part in meetings and activities of your SBE.

SBE Schedule of Events and Meetings

### Saturday, April 6

Ennes Program 8 a.m. - 5 p.m. NAB Conference registration required LVCC South Hall, S225

**SBE Frequency Coordination Committee Meeting** 3 - 5 p.m. Las Vegas Hotel and Casino, Conference Room 8

**SBE Certification Committee Meeting** 6:30 - 11 p.m. Las Vegas Hotel and Casino, Conference Room 9

## Sunday, April 7

**SBE Board of Directors Meeting** 8:30 a.m. - 12 p.m. Las Vegas Hotel and Casino, Conference Rooms 8 & 9

**Education Committee Meeting** 3 - 4:30 p.m. Las Vegas Hotel and Casino, Conference Room 10

## Tuesday, April 9

SBE Certification Exams

9 a.m. - 12 p.m. Las Vegas Hotel and Casino, Conference Rooms 9 & 10

**Frequency Coordinators Meeting** 

10 a.m. - 12 p.m. Las Vegas Hotel and Casino, Conference Rooms 13 & 14

**SBE Spring Membership Meeting** 

5:30 - 6:30 p.m. IVCC South Hall, S227 Thank you to our meeting sponsor



## **SBE Booth Hours**

#### Sunday · 2 - 4 p.m.

Monday • 9 a.m. - 6 p.m. \$200 Gift Card Giveaway Courtesy of Boxx Communications

Tuesday • 9 a.m. - 5:30 p.m. \$200 Gift Card Giveaway Courtesy of Ka You Systems

Wednesday • 9 a.m. - 6 p.m. \$200 Gift Card Giveaway Courtesy of Nemal Electronics

**Thursday · 9 a.m. - 2 p.m. \$200 Gift Card Giveaway** Courtesy of Blackmagic Design



through Thursday.

# Discount available to SBE Members

The SBE is NAB's production partner for the NAB Broadcast Engineering

Conference (BEC), which runs from Saturday, April 6 through Thursday, April

11. SBE also has a full schedule of meetings and events during the week and will

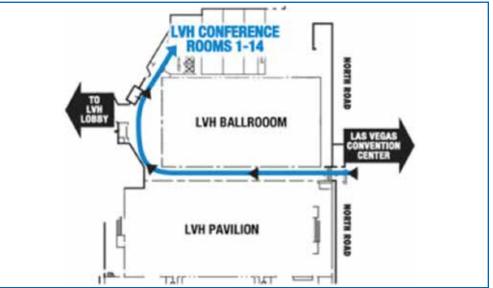
have a busy exhibit booth with hours beginning Sunday afternoon and then daily

The Society of Broadcast Engineers has arranged a discount for members of the SBE on registration for the 2013 NAB Show in Las Vegas, April 6-11. If you or your employer is not a member of the NAB, you can register for the conference Smart Pass or Flex Pass at \$100 off the non-NAB member rate. Members of the SBE can also register for a free Exhibits-Only pass.

Register on-line at the 2013 NAB Show. Near the end of the registration process, there is the opportunity to enter a discount code.

For the \$100 discount on the Smart Pass or Flex Pass packages, use code EP38. For the free Exhibits-Only pass, use code EP08.

## **To LVH Conference Rooms**



## SBE Meetings & Events at the 2013 NAB Show



**THE** signal

## **SBE Leadership Course heads back to Atlanta**

"It is your attitude at the beginning of a difficult task that, more than anything else, will bring about its successful outcome." from the SBE Leadership Development Course Manual

For more than 15 years, hundreds of broadcast engineers and their employers have benefitted from expert, real-world instruction on leadership and management skills through the popular SBE Leadership Development Course (and many more before that, when it was sponsored by the NAB). If you have been waiting to take this course, or you have someone you manage you'd like to send, the next opportunity will be Tuesday-Thursday, August 13-15 in Atlanta, Ga. at the Hyatt Place Atlanta Airport South hotel.

This course includes a leadership self-assessment, provides insights into generational differences, explains the value of communication, team dynamics, how attitude affects your leadership, building a winning team and much more.

Instructing the course once again this year is Rodney Vandeveer, a Professor of Organizational Leadership and Supervision at Purdue University in West Lafayette, Ind. He brings more than thirty years of industrial and business experience in management positions in human resources, training and development and manufacturing. When asked about the teaching staff of the 2012 leadership course, Bob Sulecki of WRTV Indianapolis said, "Rodney knows this stuff inside and out and makes it interesting as well; plus the real life examples from his careers help prove the points." Throughout this three-day course there are group exercises to help students work through various situations. One SBE member, Randy Garrett, who attended last year's course, said of the collaborative environment, "Very well presented – good group procedures to prove points."

Vandeveer has been a professor at Purdue

University since 1994, teaching classes in Human Behavior in Organizations, Leadership Philosophy and Leadership Strategies for Quality and Productivity. He also operates his own business, VanTECH Training.

Invest in your future! To register, visit the SBE Leadership Development Course page on the SBE website, found in the Education area. The enrollment fee is \$590 for members of the SBE and \$640 for non-members.

The hotel is close and convenient to Atlanta's Hartsfield/Jackson airport and the room rate is just \$84 per night, plus tax.



During the SBE Leadership Development Course, participants are often divided into smaller groups and given problems to discuss and solve.



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## **EDUCATION UPDATE**

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

# New SBE IT and media asset management webinars are coming up

The SBE Education efforts are off to an excellent start in 2013 with several offerings. Several webinars have been offered this year, ranging from continuation of the IP networking series to FCC Enforcement Actions – an Analysis of Broadcast Violations. Remember, if you missed these webinars when originally presented, all previous SBE webinars are available to you on-demand at the SBE website.

The SBE University, Adaptive Media Systems Engineering Course is now online and available. This course, authored by member Phil Cianci, CSTE, addresses the challenges of a broadcast technologist transitioning into the media engineering environment. Cianci has authored several texts focused upon television technology and has provided an excellent course for our SBE University series.

#### **Upcoming SBE Webinars:**

The SBE IP Networking Webinar series continues on April 25 with Part 6 – "An Introduction to IP Multicast". IP Multicast is a unique aspect of IP networking technology that provides "one – to – many" communications between multiple subscriber IP hosts. The use of IP Multicast for delivery of real-time media content often finds widespread use in the broadcast facility. This webinar will focus on understanding the concepts of IP Multicast and look at practical applications in AoIP and IPTV broadcast networks.

On May 16, Theresa Regli will present a Media Asset Management webinar. It is often repeated that "if you can't find the content, you really don't have it." What were once boxes of tape neatly labeled on a shelf is now most often files with cryptic names in some invisible place. Digital asset management systems organize and make this content searchable. We all know how important metadata tagging is, but we broadcasters often see ourselves as living in a largely "turn and burn" world where an asset can have a short shelf life. Asset management systems can be expensive and complicated, suited for curation tasks like managing sports or news footage. Still, some larger facilities are now very dependent on asset management, and as time goes on, there appears to be right-sized solutions being developed for broadcasters. More importantly, the topic of asset management more and more frequently comes up in broadcast facilities; often in the context of moving a station's content to the cloud, and as stations reach easily into very large, remote storage locations. Asset management has a language of its own and basic workflow principles, of which, broadcast engineers should have a conversational knowledge.

This Webinar by SBE will focus on the ins and outs of the software systems that manage broadcast media assets and provide an excellent understanding of Media Asset Management ("MAM") components and functions. Practical application requirements will be reviewed to understand who the industry players are, how the various MAM system services work, and the implementation architecture approach. Theresa is a twenty-year veteran of the content technology industry and offers a unique industry perspective to SBE members needing to learn about Media Asset Management.

#### **How Can You Help?**

These webinars and other Webinars by SBE are focused on enhancing the broadcast engineers' knowledge of the technology and practical implementation of that technology in the broadcast plant. In addition, they often provide an excellent tutorial for those preparing for SBE networking certifications such as the newly offered Certified Broadcast Networking Engineer<sup>TM</sup> (CBNE<sup>TM</sup>).

The education committee is comprised of your peers; SBE members who volunteer their time, knowledge and expertise to identify education needs of the membership and industry, determine and review content of programs offered, develop new programs, and select those best qualified to deliver the desired content.

Let the education committee know your professional development interests and needs. Suggest presenters that you feel have expertise and knowledge to share with the industry. Volunteer your knowledge and expertise by teaching, writing or sponsoring an education event for the SBE membership. Remember, the SBE is your professional society!

SBE members receive discounts on education and professional development opportunities. Visit www.sbe.org today to review a variety of educational opportunities.

For more information on any SBE education program, contact Kimberly Kissel, education director at the national SBE office.

## **Candidates sought for national SBE Board of Directors**

Capable members from all corners of the field of broadcast engineering are needed to serve on the national SBE Board of Directors. The board consists of 17 members; four officers, the immediate past president, and 12 directors. An election of all four officer positions and six of the twelve director seats is being contested this year.

To be eligible, a candidate for national office must be a Member, Senior, Life or Fellow member of the SBE, or be the designated representative of an SBE Sustaining Member (supplier company), in good standing. All candidates must also hold a current SBE engineering-level certification and must maintain that certification through all terms of office. All of the directors serve in an "at-large" capacity.

Directors serve two year terms and are expected to attend two full meetings of the board each year. These meetings are held in the spring during the NAB Show, and in the fall during the SBE National Meeting. Terms of officers are one year. Officers are expected to attend the two full meetings of the board plus two meetings of the executive committee that are held in January and June. All those who serve must be willing to cover their own travel expenses to attend the meetings. Some employers and chapters have helped cover this expense for some members of the board in the past.

Members interested in running for office on the national board are asked to contact Vinny Lopez, CEV,

CBNT, chairman of this year's nominations committee (vlopez@sbe.org or(315) 472-6800) or committee members Michael Maville, CBT, CBNT (mmaville@ gmail.com) or Barry Thomas, CPBE, AMD, CBNE (barryt@sbe.org).

The SBE Nominations Committee will submit its list of candidates to the national office by April 30. If you're interested, be sure to contact one of the committee members before that date.

The election takes place this summer. Those elected will be inducted into office on October 30 during the 2013 SBE National Meeting, to be held in Indianapolis, Ind., in conjunction with the Indiana Association of Broadcasters Engineering Conference.



FOCUS ON SBE by John L. Poray, CAE SBE Executive Director iporay@sbe.org

## The reasons to belong

Your SBE is in the midst of its annual effort to attract new members. At the same time, the April 1 membership renewal deadline is upon us. Both of these tasks beg the question, why should I join or renew my membership with the SBE? There are a variety of reasons why people join and remain a member of the SBE. Ask ten people and you may get ten different answers. Have you been wondering what to tell a colleague who you have thought about inviting to join? Or maybe you've been holding off sending in your renewal because you're weighing the value of membership. Here are three points to consider.

Forty-nine years ago this month, the SBE came into existence. What motivated the organizers back then to make the considerable effort and expend their personal resources to create a new professional society focused on broadcast engineers and broadcast engineering? Clearly, the continuing education needs of radio and television engineers were at the top of the list. All one has to do is leaf through the pages of the first issue of the *SBE Journal*, the SBE's initial membership publication, published in June 1964, to realize that. Edited by SBE founder, John Battison, most of its 16 pages were filled with technical articles submitted by members, sharing their knowledge with the other 250 members that the SBE had at the time.

The field of Broadcast Engineering is somewhat unique when compared to other engineering disciplines. Unlike chemical, electrical, civil and other engineering disciplines, broadcast engineering doesn't benefit from a specific college or university four-year "broadcast engineering" degree program; at least, not one that survives today. Many members have graduated from some fine twoyear technical programs and others have earned four-year degrees in electrical engineering or a related field. Many others, though, entered the field by learning their craft from broadcast engineers who came before them. They had to pour through books and equipment manuals on broadcast technology and learn from other engineers in their market. Sound familiar? A reliable and independent source of information and education on broadcast technology has been a critical need since before the SBE began.

The SBE, through its network of 114 local chapters, provides regular opportunities for our more than 5,000 members to learn from technical topic experts. In addition, the SBE's growing list of on-line courses, live and archived webinars and traditional seminars, provides a means to acquire the information needed to meet the knowledge demands of today's mix of IT and RF technology for broadcast stations.

Another need in this field that was apparent 50 years ago to the founders, was to nurture and develop a community of broadcast engineers who would share their knowledge, experience and support one another. Again, this same need exists today, perhaps more than ever, with shrinking staffs and expanding technology and station demands.

The opportunity for individual broadcast engineers to attend monthly local chapter meetings provides this resource. Face-to-face meeting opportunities are supplemented with today's on-line tools that the SBE has embraced, including the SBE Blog, Facebook, Linked-In, Twitter and our own discussion groups, SBE Roundtable (technical and SBE discussion), SBE Exchange (EAS discussion) and SBE Chat (open topics). Members have a built-in resource of other local broadcast engineers they can call on for help or advice on a technical matter. Most members are happy to help. When a member has employment needs, the SBE's JobsOnline national job list and SBE Resume Bank are there to help. Those local members are also a great source for information about local openings.

The final area of membership benefit I will discuss, but certainly not the least, is recognition. A basic tenant of a professional society is that it provides opportunities for its members to be recognized for their good work and contributions within an industry. The SBE provides this to members in many ways. The most familiar to most in our industry is through the SBE certification program, which recognizes members' (and non-members who pay a higher rate) knowledge and experience in radio and television engineering, their knowledge of IT as it relates to broadcast stations, specialty subjects such as maintaining AM directional antenna arrays and 8-VSB, and master control operations. These certifications illustrate to other engineers and savvy station management that the holder has attained proficiency that is invaluable and needed to create and maintain the best possible technical broadcast product. That translates into profits, or public support in the case of non-commercial stations, when a station's content delivery systems are consistently of high quality and reliable.

Members have the opportunity to be recognized in other ways at the local or national level of the society. Many chapters recognize their leadership and other members whose activities have contributed to the local chapter or market through teaching, writing, mentoring, etc. The national SBE has recognized chapters and individual members since 1989 through the SBE National Awards. This year, we've added a new award that recognizes an "engineer of the year" in each chapter. Members can also be elected to the Fellow rank of membership in recognition of their service and contributions and a select few have earned the society's Lifetime Achievement Award.

So, to say it in just a few words: education, community and recognition are what the SBE has to offer the prospective member – and the current member. If you haven't renewed your membership yet, I hope you will do so today. Then, reach out to someone you know who is not a member who could benefit from what the SBE has to offer, and invite them to join. You might provide them with a copy of this article. You can renew or join on-line at www.sbe.org.

## Still time to renew your membership

It's not too late to renew your membership in the SBE. Those in the Member, Senior, Student, Associate and Fellow membership categories may renew by returning the renewal form received in February by mail or fax, or renew online at http://www.sbe.org. The online system is a quick, complete and secure renewal method available 24/7. An automated email

message is sent to the renewing member confirming renewal and payment.

Members attending the 2013 NAB Show may renew their membership at the SBE exhibit booth, L29, located in the South Hall, second floor lobby area of the Las Vegas Convention Center. Booth hours are 2 to 4 pm, Sunday, April 7; 9 am to 6 pm, Monday, April 8 and Wednesday, April 10; 9 am to 5:30 pm, Tuesday, April 9 and 9 am to 2 pm, Thursday, April 11.

Members with questions about renewal, or those who did not receive a renewal reminder in February, should contact Scott Jones at the SBE National Office at (317) 846-9000 or kjones@sbe.org.

## **2012 SBE financial year in review**

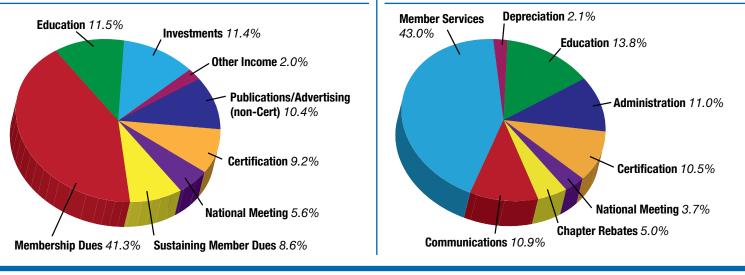
The Society of Broadcast Engineers, Inc. completed 2012 with net revenue from all operations of -\$22,689. Gross income from all sources was \$718,977 while expenses were \$741,667. The value of SBE savings and

investments as of December 31, 2012 was \$1,039,230. Total SBE assets as of December 31, 2012 were \$1,063,553, a decrease of \$22,690 over 2011. A percentage breakdown of SBE income and

**Expenses from All Sources** 

expenses is depicted in the accompanying charts. A financial statement will be published in the June issue of The Signal, following completion of the Society's annual audit.

## **Income from All Sources**



## New award recognizes "Engineer of the Year" in each SBE Chapter

The SBE has thousands of members active in over one hundred chapters throughout the United States and in Hong Kong. For 24 years, the SBE has recognized achievement by presenting awards to a vast number of those people. However, this year the SBE Board of Directors and the National Awards Committee felt that a new award should be established. Beginning this year, the SBE Chapter Engineer of the Year will be an award that provides an opportunity for every chapter to nominate, select and recognize a local recipient. Recipients from each chapter will then be entered into nomination for the national Robert W. Flanders SBE Engineer of the Year award. Other individuals may also be nominated for the national award, as in past years.

So many of you dedicate your time and efforts

to the promotion and betterment of the broadcast engineering field and the SBE, but you may not be recognized for your efforts. Here is an opportunity for each chapter to acknowledge those who do this.

Each chapter is responsible for nominating and selecting the winner of the local award to one member in good standing from their chapter. The SBE Chapter Engineer of the Year should be awarded to a chapter member who best furthers the goals and objectives of their SBE chapter and provides an outstanding example of local/regional leadership and ethics. Chapter winners must be selected by May 15, 2013 and nomination made to the national office, by June 14, 2013. SBE will provide a special certificate, free to each chapter, for presentation at a future chapter meeting. The national winner will be recognized during the SBE National Awards Dinner on Wednesday, October 30, held as a part of the SBE National Meeting, which is in Indianapolis, Ind. this year. All local winners will be recognized in the SBE Signal and on the SBE website.

The National Awards Committee is also currently accepting nominations for the other national awards that recognize chapter and individual achievement. These awards run the gamut from Best Chapter Newsletter to the James C. Wulliman SBE Educator of the Year. Don't let the efforts of your fellow SBE members and chapters go unrecognized!

You can access the award nomination forms and view past winners on the SBE website. Go to Membership/Awards & Recognition.



## SUSTAINING MEMBERS Support the companies who support the SBE and the industry

Advanced Broadcast Solutions • 2012 Arco Groenenberg (206) 870-0244 Systems Integrator Advanced Electronic Services (AES) • 2012 Eda Gray (336) 719-0755 Ext. 142 Electronic, Hydraulic, Motor Repair American Tower Corporation • 2000 Peter A. Starke (781) 461-6780 Development/Construction/Management Anton/Bauer Inc. • 2004 Kyle Dann (203) 929-1100 Manufacturer Portable Power Systems ATCi • 2012 Antony Graves (480) 844-8501 Satellite Communications Solutions Provider Audemat-Worldcast Systems Inc. • 2000 Christophe Poulain (305) 249-3110 Control Manufacturer AVCOM of Virginia, Inc. • 2010 Warren McElfresh (804) 794-2500 ext. 312 Spectrum Analyzers Avid Technology • 2011 Bill Barton (978) 640-4020 Broadcast Products and Services Belden Electronic Division • 1991 Steve Lampen (800) 235-3361 Cable and Connectivity Bexel • 2009 John Root (818) 565-4314; Calrec Broadcast and Audio Consoles Blackmagic Design • 2012 Terry Frechette (978) 337-0991 Switchers, Digital Cameras, Routers Switchers, Digital Cameras, Routers Boxx Communications • 2012 Mark Walker (310) 287-1285 HD Wireless Video Transmission Bracke Manufacturing LLC • 2012 Patra Largent (949) 756-1600 RF & Microwave Components Broadcast Electronics Inc. • 1978 Tom Beck (217) 224-9600 Radio Equipment Manufacturer Broadcast Engingering Magazing • 1 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 Supplia 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 Cavell, Mertz & Associates Inc. • 2011 Gary Cavell (703) 392-9090 Consulting Services Chyron Corporation • 2013 Kieran Foster (905) 330-8902 Broadcast Graphics Solutions Broadcast Graphics Solutions 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 Connocation • 1976 Continental Electronics Corporation • 1976 Michael Troje (800) 733-5011 AM & FM IBOC Transmitters AM & FM IOU TRAISINGERS Dialight Corporation • 2006 US Headquarters (732) 919-3119 FAA Obstruction Lighting, L.E.D. Based Dielectric Communications • 1995 Joe Zuba (609) 256-8190 or Matt Leland (207) 655-8139 TV & FM Broadcast Products Digital Alert Systems, LLC • 2005 Bill Robertson (585) 765-1155 Emergency Alert Systems DoubleRadius, Inc. • 2012 Jeffrey Holdenrid (704) 927-6085 IP Microwave STL 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** 

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 Elenos USA • 2012 (305) 799-5571 Energy Efficient FM Transmitters Elettronika America Inc. • 2010 Maria Quintero (305) 592-4506 High Efficiency FM/TV Transmitter & Exciters ENCO Systems Inc. • 2003 Don Backus (800) 362-6797 Digital Audio Automation & Delivery ERI - Electronics Research • 1990 David White (812) 925-6000 Broadcast Antennas, Transmission Line, Filters/ Combiners, Towers and Services Federal Communications Compliance LLC. • 2012 Jim Purther (202) 670-4322 FCC Public File Compliance Florical Systems • 2008 Ashley Condon(352) 372-8326 Television Broadcast Automation Fujinon, Inc. • 1986 Thom Calabro (973) 633-5600 Broadcast & Communications Products Gepco International/General Cable • 1995 Joe Zajac (847) 795-9555 Audio, Video Cable Products Graham Brock, Inc. • 2012 Marilyn Matheny (912) 638-8028 Technical Consultation - Radio/TV Grass Valley • 2000 Grass Valley • 2000 Andy Jackson (404) 929-5000 TV/Film Production & Broadcast Professionals Harris Corporation • 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 Systems Integrator Henry Engineering • 2011 Hank Landsberg (562) 493-3589 "We Build Solutions" High Resolution Systems • 2011 Drew Taylor (888) 742-7690 ext. 108 Systems and Show Control Systems and show control Image Video • 1997 Zach Wilkie (416) 750-8872 ext. 228 Under Monitor Tally Display Systems, Monitor Design and Manufacture Broadcast Equipment Broadcast Equipment Inovonics Inc. • 2012 Lukas Hurwitz (831) 458-0552 Radio Broadcast Equipment International Datacasting Corporation • 2012 Rudi Polednik (613) 596-4120 ext. 2222 Media-aware Content Delivery Mena-aware content Denvery JAMPRO Antennas Inc. • 2011 Alex Perchevitch (916) 383-1177 DTV/DVBT & HD Radio-IBOC Solutions Ka You Systems • 2011 Ka You Systems • 2011 George Gimourginas (301) 585-4302 Audio, Video, IP - Satellite Kathrein Inc., Scala Division • 1985 Michael W. Bach (541) 779-6500 Antennas for Broadcasting & Communications L-3 Communications Electron Devices • 2003 Steve Bliek (570) 326-3561, ext. 229 Tubes, Power Lubes, rower Latakoo Inc. • 2011 Rod Taylor (512) 825-8709 Internet Video Distribution LBA Technology Inc. • 2002 Javier Castillo (252) 757-0279 Javier Castillo (252) 757-0279 AM/MW Antenna Equipment & Systems Lincoln Financial Media • 2007 Barry Thomas (404) 239-7211 Media Group Owner IYNX Technik • 2007 Steve Russell (661) 251-8600 Broadcast Terminal Equipment Manufacturer Markertek Video Supply • 2002 Andrew Barth (845) 246-3036 Audio, Video, AVI Broadcast Supply Audio, Video, AV Broadcast Supply Maxell Corporation of America • 1991 Patricia Byrne (973) 653-2423 Data/Broadcast Video Media

DVEO - Division of Computer Modules Inc. • 2011 Laszlo Zoltan (858) 613-1818 Everything About Transport Streams Micronet Communications Inc. • 2005 Jeremy Lewis (972) 422-7200 Coordination Services / Frequency Plan Jeremy Lewis (972) 422-7200 Coordination Services / Frequency Planning Microwave Video Systems • 2011 Warren J. Parece (781) 665-6600 Microwave Equipment Rental, Sales & Service Middle Atlantic Products • 2005 David Amoscato (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 (813) 282-8612 Raiph Beaver (815) 282-8012 Game Day Coordination Operations Nautel Inc. • 2002 Jeff Welton (877) 662-8835 Radio Broadcast Transmitter Manufacturer Nemal Electronics Int 1 Inc. • 2011 Benjamin L. Nemser (305) 899-0900 Cabels, Connectors, Assemblies and Fiber Optic Neutrik USA, Inc. • 2012 Kathy Hall (704) 972-3050 Rutgedized Optical Fiber Systems 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 AMFMTV Panasonic Solutions Company • 1985 Joe Facchini (201) 392-6183 Professional Broadcast Equipment Pasternack Enterprises • 2001 Christine Hammond (949) 261-1920 Coax & Fiber Products Potomac Instruments Inc. • 2012 Guy Berry (301) 696-5550 RF Measurement Equipment Manufacturer ProAudio.com- A Crouse-Kimzey Co. • 2008 Mark Bradford (800) 433-2105 ext. 560 Proaudio Broadcast Equipment Distributor Progressive Concepts • 2013 Sara Enriquez (630) 736-982 FM & LPFM Radio Broadcast Propagation Systems Inc. - PSI • 2010 Doug Ross (814) 472-5540 Quality Broadcast Antenna Systems Pulsecom • 2003 Puisecom • 2005 Winnie Evans (703) 471-2926 AM, FM and HD STLs, Copper & Optical Qualis Audio Inc. • 2011 Douglas Ordon (310) 621-4448 Audio and Loudness Monitoring 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 RCS • 2003 Diana Stokey (308) 284-3007 Audio and Video Content Management  $RDL \bullet 2004$ 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 Ryan Willaman (813)579-4239 Tower Owner/Management Rohde & Schwarz • 2003 Eddy Vanderkerken (469) 713-5322 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 Emergency Alert Systems Products 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 Smvety Labs • 1996 Dale Ladner 888-SHIVELY FM Antennas & Combiners Shure Incorporated • 2012 Bill Ostry (847) 600-6282 Microphones, Wireless Systems, Headsets Sierra Automated Systems and Engineering Inc. • 2011 Cam Eicher (818) 840-6749 Routers Wireless Correlos Laterative Routers, Mixers, Consoles, Intercoms Sigmet • 2008 Ed Portko (610) 783-6666 Broadcast Equipment Support Sales Signiant • 2012 Doug Prouty (781) 221-4000 Signiant Content Delivery Software Snell Inc. • 1995 John Shike (818) 556-2616 John Shike (818) 556-2616 Video Equipment Manufacturer Solid State Logic • 2011 Steve Zaretsky (212) 315-1111 ext.15 Digital Audio Consoles/Router Stace Energy Products Co. • 2010 Paul Heiligenberg (937) 253-1191 ext 128 Manufacturer Voltage Regulators, UPS Superior Electric • 1995 Michael J. Miga (860) 507-2025 Prower Protection Protection Environment Power Protection Equipment Sutro Tower Inc. • 1989 Eric Dausman (415) 681-8850 Broadcast Tower Leasing TC Electronic • 2008 Laura Davidson (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 Teradek • 2011 Jon Landman (949) 743-5783 Camera-top ENG Solutions Terrestrial RF Licensing Company • 2003 Steven Slocum (888) 373-4832 FCC Broadcast Auxiliary Licensing Services TFT • 2011 Darryl E. Parker (408) 943-9323 STL, EAS/CAP, RF Monitors S IL, EAS/CAP, Kr Monitors 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 Peter Hanz (323) 645-8011 Fiber Transmission Provider Tieline The Codec Company • 2003 Mary Ann Seidler & John Lackness (317) 845-8000 POTS, ISDN, Codecs & AV Products Tower Engineering Company • 2013 Madison Batt (425) 640-2266 Fower Engineering Analysis & Design Trilithic • 2011 Tom Cridlin (317) 895-3600 Emergency Alert Equipment (EAS) **TV Magic** • 2008 Bob Anderson (858) 650-3155 bob Alderson (\$55) 500-3155 Broadcast Systems Integrator Unimar Inc. • 2001 Thad Fink (315) 699-4400 ext. 307 or (813) 943-4322 Tower Obstruction Lighting Designer, Manufacturer, Distributor Manufacturer, Distributor Vislink Broadcast • 1991 Mark Tommey (978) 671-5700 Video Microwave Systems Voice of America • 2011 Richard P. Barnes, PhD, CBRE (202) 203-4848 Ward-Beck Systems Ltd. • 2004 Michael Jordan (416) 335-5999 Metering, Monitoring, Distribution, Conversion Wheatstone • 2010 Jay Tyler (252) 638-7000 IP Consoles, Routers & Processors WideOrbit • 2012 Brad Young (214) 923-6337 Brad Young (214) 923-6337 Broadcast Management Software, Automation and Master Control Wireless Infrastructure Services • 2006 Travis Donahue (951) 371-4900 Broadcast Microwave, Tower and ENG Installation, Integration Maintenance Services



## Yezmin Blue, CBTE, CBT

works for Major League Baseball's Seattle Mariners as their Manager of Broadcast Engineering. She's been a member of the SBE since 1999 and is an active member of Chapter 16 in Seattle. She currently serves as chapter secretary. Yezmin describes herself as perseverant, intense and resourceful; good qualities to have when working in the pressure-filled environment of live television. Who has influenced you or who do you admire in the industry?: It's hard to pick one mentor when throughout your life you've met so many amazing engineers who have different unique views to work and life. Yet, if I had to mention just one person that I admire, it would be Michael Scott, instructor at Bates Technical College. From him I learned skills and methodology to approach different problems. His background in the industry has made him a wonderful asset in the classroom, and his approach to broadcast engineering helped set a strong foundation for what was to come.

What do you like most about your job?: I work at a baseball stadium that hosts 81 games and over 400 events each year; I have had the joy and challenge of wearing many different hats. My main role as a video engineer is not limited to troubleshooting problems, maintenance, design and implementation of gear, but also, depending on the day, being able to use other talents as a camera operator, technical director or DJ. There is never a dull moment at my job, which gives me a sense of pride and ownership at the end of the day.

What do you enjoy when you're not working?: I enjoy going to the movies, theater, festivals, fairs, walks, reading books, drawing and cooking. When

I'm not at work, I spend all my time with my family.

What do you enjoy or value most about your involvement with the SBE?: SBE offers a broad range of educational and networking opportunities. In 1999, I received the Ennes Scholarship, which helped me pay for tuition at school. The SBE has opened doors to networking with peers in the field and valuable educational enrichment programs, training and certification.

**People may not know about me:** I was born in San Martin Texmelucan Puebla, Mexico and lived in Mexico City for half of my life. My first job at age 15 was singing in a group and I dabbled in theater and music until my early 20's, later trading art for technology in 1998. It's been a fun ride.

**Do you have a favorite gadget?:** Portable, inexpensive and probably one of the best companions to have at home, in the car or on the run... a Fluke RMS multimeter.

**Pictured here:** SBE member, Yezmin Blue, CBTE, CBT of Seattle relaxes with her daughter Zair on a trip to Hawaii.

## **CHAPTER SPOTLIGHT** Chapter 42, Orlando, Florida

Good meeting topics and good communication are cited by outgoing chapter chairman, Steve Fluker, CBT, as the keys to success of Chapter 42 of Orlando, Fla.

The heavily populated central Florida area is home to an array of broadcast stations and many of the engineers who take care of them are regulars at the chapter's monthly meetings. "We try to keep the meetings interesting. Our members know when and where our meetings typically are held, even without the monthly reminders sent out," said Fluker.

One of the chapter's successful meetings was held in January this year at Universal Studios. Fluker said, "We had our typical business meeting, followed by a presentation on the new Sony Field Acquisition Backpak Camera (HXR-NX30). After the meeting, we were given a short presentation of what Universal Studios is up to. Then, we were taken into the Islands of Adventure park." After the park closed, chapter members were treated to a private tour and ride on the newly updated Spiderman ride in 4K and 3D. For those who wanted to make a full evening of it, they were taken to a soundstage and provided with ringside seats for a "Live Impact" Wrestling event that was being telecast live on Spike TV. Hulk Hogan and his daughter were a part of the show. Fluker remarked, "Just goes to show that an SBE meeting doesn't have to be all business and presentations."

Past trips have included a tour through the ESPN 3D facilities, and a trip through the new Amway Center, home of the Orlando Magic of the NBA. The trip included a tour of the technical areas and a demonstration of the HD scoreboard.

At most meetings, the chapter has presentations on new technology or discussion related to events that are currently happening and important to members. A recent such meeting covered the implementation of the CALM Act, and another, the local EAS plan. Meetings are held at 6:30 p.m., so dinner is a part of most meetings and helps to draw attendance. Interests of both radio and TV engineers are included at least in alternating meetings.

Fluker mentioned that the chapter hosted an Ennes Workshop last year and more than 70 people attended. They used some of the funds from their annual chapter rebate check to help fund the program, providing a registration scholarship to any Chapter 42 member whose employer would not reimburse them for the fee. He said, "We have also held a VSB seminar locally for TV station engineers, and are looking to hold another, possibly this year."

Because of the SBE meetings, many of the engineers in central Florida have gotten to know each other on a personal basis. This has helped members feel more comfortable asking questions of each other when they need help. Members have stepped up to help each other.

By the time this article appears, Steve will have passed the chairmen's gavel on to his successor but he sees the success of the chapter continuing, explaining, "I think just stability (leadership) and communication to members makes it successful."



Members of Chapter 42, Orlando, Fla. enjoy a private preview screening at Universal Studios during one of their recent meetings.

ENNES

The trust offers scholarship and educational programming and grants that benefit broadcast engineering and the broadcast engineer. Submit tax-deductible donations, payable to the Ennes Educational Foundation Trust, to the Society of E D U C A T I O N A L FOUNDATION TRUST donations, payable to the Ennes Educational Foundation Trust, to the Society of Broadcast Engineers, 9102 N. Meridian St., Suite. 150, Indianapolis, IN 46260.

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Vislink Broadcast, Billerica, Mass,

#### THANKS TO THE FOLLOWING SUPPORTERS FOR THEIR CONTRIBUTIONS:

YOUTH

#### **ENNES**

Thomas Alderson, Spokane, Wash. Hai-jong Chon, Woodbridge, Conn. Jorge Conde, Guayama, P.R. Edward Damerel, Richmond, Va. Stephen Davis, Coweta, Okla. John Demshock, Altamonte Springs, Fla. Joe Dimaggio, Wethersfield, Conn. Alan Eng, Oakland, Calif. Karl Lahm. P.E., Lake Villa, III. Kate Landow, Denver, Colo.

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## MEMBERS ON THE MOVE

John Bisset, has joined the Telos Alliance as director of western sales for radio brands.

Kirk Harnack, CBRE, former VP of Telos Products, has been named vice president and executive director of the Telos Systems brand.

**Dennis Covill**, founder of Nautel, and **John Ross**, retired president and founder of Ross Video, have both been awarded the Order of Canada, the highest civilian honor in that nation. Ross Video and Nautel are both Sustaining Members of the SBE.

Mary Ann Seidler has rejoined Tieline Technology to become vice president of sales for the Americas. Tieline is an SBE Sustaining Member company.

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

## In Memoriam



#### Doyle D. Thompson, Sr., Member #4062

Fellow and Life Member

Former national President 1983-1984



Answer question on page 5

C. 73.1620(a)(1) The permittee of a non-directional AM or FM station, or a non-directional or directional TV or Class A TV station, may begin program tests upon notification to the FCC in Washington, D.C., provided that within 10 days thereafter, an application for a license is filed with the FCC in Washington, D.C.

# WELCOME TO THE SBE

#### **NEW MEMBERS**

Chris A. Cecil - Fort Collins, CO Daniel F. Ethen - Santa Rosa, CA Aaron E. Harris - Los Angeles, CA **Don Sherouse - Hampton, VA** Jacob J. Solomon - Mammoth, PA Scott Wohler - Halethorpe, MD Jeff L. Laird - Houston, TX Michael L. Burnside - Fayetteville, NC Jeffrey Snell - Pullman, WA Curtis A. Blount - Lucedale, MS **Charles Brammer - Winchester, VA** James Crawford - Davie, FL Michael S. Creamer - Johnson City, TN Stephan DeLabastide - Plantation, FL Aaron V. Diezman - Tucson, AZ David Duncan - Highlands Ranch, CO Debra J. Grivois - Baltimore, MD Edward Huerta - North Miami, FL James R. Mabrey - Columbia, SC James Stephens - Medford, OR John M. Sumrell - Lorton, VA Jeremy Baker - Mount Holly Springs, PA Joe Frankland - Viola, WI Dean Vaccher - Gettysburg, PA Joshua S. Porter - Sanbornton, NH Robert N. Allen - Vernon, CT Mike C. Cardin - Salem, VA Todd E. Lanterman - FPO. AE Robert C. Mumm - Colorado Springs, CO Michael Poff - Christiansburg, VA Jeremy D. Ruck - Canton, IL

Ricky A. Williams - Roanoke, VA Jason R. Ackman - Castle Rock. CO **Rick Durham - Nashville, TN Ontarrio James - Mobile, AL** Daniel Konhauser - San Francisco, CA Arturo Linares - Hialeah, FL Gibson White - Mesa, AZ Adam R. Carlson - Chaska, MN Gerald W. Clark - Lake Charles, LA Michael P. Downes - Brooklyn, NY Collin Fraum - Boynton Beach, FL Patrick Kelly - Omaha, NE Venant J. Massaba - Mesa. AZ William B. Smith - Richmond, KY Al Kornak - Dallas, PA Todd R. Loney - Galiano Island, British Columbia, Canada Ian R. Huckaby - Toledo, OH Walter C. Dutra - Phoenix, AZ Zane Parnell - Winston Salem, NC Orlando E. Watkins - Abilene, TX Benjamin Brodeur - New York, NY Steven L. Barrett - Elizabeth, CO Michael Crutchfield - Ypsilanti, MI Thomas J. Finnegan - Los Angeles, CA Micah Hayes - Fort Bragg, NC Benjamin Pidek - Lennon, MI Terry T. Terman - Thornton, NH Benjamin I. Thomas - Charlotte, NC Stefan Hadl - Sacramento, CA James Warner - Clinton, MA

#### **REINSTATED MEMBERS**

Llovd P. Robinson - New Albany, IN Richard E. Levandowski, Jr. -Independence, WI Mark Huffstutter - Seattle, WA Alan E. Foessel - Moore, SC Eugene P. Balossi - St. Louis, MO David Nicosia - Amsterdam, NY John R. Horton - Cheektowaga, NY Thomas H. Messerli - Maguoketa, IA Frederick Fazekas - Holbrook, NY Franklin C. Brannock - Decatur, IL Dana Seay - Grafton, WI Carroll J. Lee - Springfield, VA Lowell G. Beckner - Jacksonville, FL Roger E. Rosendahl - Newport, NH

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#### **NEW STUDENT MEMBERS**

Paul Skurzewski - Salt Lake City, UT Marion R. Asbury - Lakewood, WA Michael A. Cahill - Orting, WA Eric A. Christensen - Tacoma, WA **Richard W. Osborn - Tacoma, WA** Joshua S. Parkerson - Lakewood, WA Anthony D. Phinney - Sumner, WA

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#### **NEW ASSOCIATE MEMBERS**

**Bob Hivner - Landisville, PA** 

**April** 2013

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finally, bricks done right..

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