



# the SIGNAL

BIMONTHLY PUBLICATION OF THE SOCIETY OF BROADCAST ENGINEERS

**APRIL  
2008**

*Volume 21, Number 2*

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## Many SBE events, meetings held throughout the 2008 NAB Show

**T**he 2008 NAB Show is quickly approaching and now is the time to familiarize yourself with the many events and meetings the Society of Broadcast Engineers will present at this year's show. To start the Show, SBE will present the special in-depth Ennes Workshops on Saturday on the topic of "File Based Workflow." Throughout the rest of the convention, SBE will also be holding a number of informative meetings including meetings of the Board, EAS and Certification Committees.

### **SBE Exhibit Booth**

This year's prominent booth will be on the second floor concourse of the South Hall, booth L27. Be sure to plan to visit the SBE booth while at the convention. Members can connect with the SBE



**The SBE booth will be located at L27 on the second floor concourse of the South Hall at the 2008 NAB Show.**

Board, Certification Committee members and staff at the SBE exhibit booth. Our booth will include the SBE Book Store, SBE logo items and the very popular "CertPreview" exam preparation CDs that now include the AM Directional and 8-VSB Specialist exam sections. Also available will be our SBE published books including the SBE Television

*See **NAB** on page **10***

## **FCC Extends 2 GHz BAS/LTTS Transition Date to March 5, '09**

**BY Chris Imlay, CBT**

*FCC Liaison Committee Chairman  
SBE General Counsel*

**S**BE is well-aware that broadcast engineers are typically responsible for broadcast auxiliary operations (BAS), and that 2 GHz TV BAS service is at the heart of local news, sports, and weather coverage that are the essence of broadcast localism. In March, SBE and its strategic partners, Sprint Nextel, NAB

and MSTV achieved a major victory for BAS licensees across the country by convincing the FCC to recognize the inordinate complexity of reconfiguring BAS systems and extend the deadline for Sprint Nextel to relocate BAS licensees to spectrum between 2025 and 2110 MHz until March 5, 2009. The FCC also stated that it might extend the deadline until August 2009 so long as all parties continue to work in good faith to move BAS above 2025 MHz as

*See **FCC** on page **20***

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# Marietta, Georgia site of June 6 Ennes Workshop

**F**or the second consecutive year, SBE Chapter 5 in Atlanta and the Georgia Association of Broadcasters (GAB) will be sponsoring an Ennes Workshop as a part of the GAB Annual Convention. This year, the workshop will be held June 6 at the Marietta Conference Center and Resort in Marietta, Georgia. The program, presented in cooperation with the national Society of Broadcast Engineers, will feature a full day of technical presentations of interest to broadcast engineers and technicians. Those working in television or radio, as well as in related fields, will find the Ennes Workshop an excellent educational experience. Attendance at Ennes Workshops qualifies for SBE recertification credit.

The program for the Georgia workshop is being developed as of this writing. The complete program and registration information will be posted on the SBE website, [www.sbe.org](http://www.sbe.org) in mid-April, in the calendar and education sections. Presentations made at the 2007 Georgia Ennes Workshop included improvements to FM and HD signal quality, digital video transport basics, audio over IP, engineering

considerations for digital microwave STL, TSL and ICR, monitoring and analysis of MPEG video systems and networking and data transmission for HD radio, among others. This year's event will have a lineup of topics just as informative and timely.

Ennes Trustee, Fred Baumgartner, CPBE, of Qualcomm, MediaFlo USA, is organizing the program and will serve as moderator. Local organizational support is being provided by SBE Chapter 5 Chairman, Bill Magliocco, CPBE, 8-VSB, CBNT; Vice-Chairman, Mark Fehlig, P.E., CPBE, CBNT and Jere Pigue, President of the GAB.

The Ennes Workshop is open to anyone interested in broadcast engineering and technology. Those from outside the state of Georgia are welcome to attend. Marietta is located approximately 18 miles northeast of Atlanta. The Marietta Conference Center and Resort is a AAA Four Diamond rated facility.

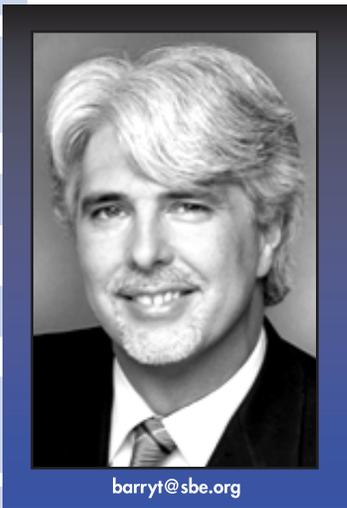
Other regional Ennes Workshop locations and dates planned for 2008 include August 27 in Oklahoma City, a date in September to be announced in Hartford, Connecticut and October 24 in Eugene, Oregon. The Ennes Trust and

SBE will also present the annual Ennes Workshop on April 12 in Las Vegas. as a part of the NAB Broadcast Engineering Conference.

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# Let SBE be the strong resource for you and your company

BY **Barry Thomas, CPBE, CBNT**

*SBE President*

I know you've all seen the press. TV and radio media seems to be at the front lines of a pending recession. Some large and influential radio companies have announced sometimes massive "restructuring."

Some large media groups are cutting travel budgets and other expenses related to technical staff. The pressure to keep costs down is enormous. Broadcast engineers often get the brunt of this as technical departments are essentially a cost center for station operations. I know we've seen budgets for education and travel have been cut all around the industry. Things seem dire.

In times like these, professional organizations like the Society of Broadcast Engineers become a critical resource for you and for your employer. Many employers support membership through reimbursement of dues or certification expenses. During economic downturns such support may wane as a cost-saving measure. If that's been the case with you, I urge you not to let your membership lapse because now is when you may need us the most. If your employer chooses not to invest in your career, that means you need to do so directly. The one who really stands to gain from your membership is you, although employers gain because your value is increased.

The Society offers career development opportunities through the SBE JobsOnline ([sbe.org/career\\_jobsonline.php](http://sbe.org/career_jobsonline.php)) and ResumeBank ([sbe.org/career\\_resume.php](http://sbe.org/career_resume.php)). These resources are often ignored until they are needed, but they are an important function of the Society that is supported through your membership dues. Your participation in an ongoing way helps us support and improve our career services.

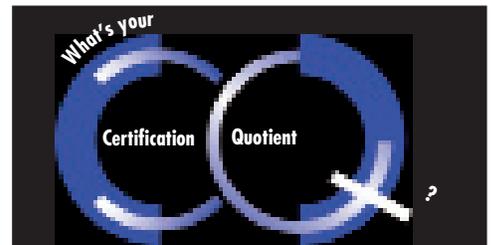
We often talk about the value of SBE certification and how certified engineers earn more than uncertified engineers. When you need to make a change, I cannot stress enough how important this objective measure of your skills can be. I'm extremely proud of my certification, particularly when I achieved CPBE, which is a level subject to peer review. I hope you are just as proud of your certification and are looking for the next challenge. For me it's adding the DRB and AMD specialist certifications for which I hope to test soon. Has my certification made the difference between getting the job or not? I can't say. What I can tell you is it's given me an edge in some cases over another, seemingly-equal applicant and I've been

able to get the all-important interview.

SBE membership provides career benefits that extend far beyond the specific programs offered by the National Office. Chapter participation keeps you plugged in to a network of local engineering talent that will not only keep you on top of new opportunities (as an employee or contractor) but will help you develop a knowledge base for solving problems on the job you're now doing. The natural extension of that knowledge base is demonstrated by the engineers that gather on the ham radio Chapter of the Air and the participants in the SBE Roundtable email list (<http://www.sbe.org/Roundtable.php>). I have said before that I consider these part of my 24-hour tech support network of skilled, capable, and connected broadcast engineers.

The SBE offers educational opportunities through its chapter meetings, Ennes Workshops, online seminars and published resources. Those opportunities are tailored to directly benefit your career as a broadcast engineer and help you build value by learning vital information about your technology. It's redundant to say that technology is changing at a breakneck pace but it's also a truism. You're not going to be able to keep up with everything you need to know to excel at your career by published resources alone. The social connection to the broadly experienced SBE membership can help you develop real-world education and keep up.

Professional and career development is not the responsibility of your employer. It's yours. Your membership dues and investment in SBE education or Certification programs is an



**What is meant by the term "double conversion superheterodyne"?**

- A. A receiver that provides twice as much audio output.
- B. A receiver with two intermediate frequency conversions
- C. A receiver that includes all television audio frequencies
- D. A receiver/transmitter combination

Question taken from SBE CertPreview. Turn to page 20 for the answer

investment in your marketability and value to advance your career objectives. We know that the SBE, the only organization dedicated to the stated purpose of supporting and promoting broadcast engineering, is the appropriate place for your investment.

Very often we are faced with a broadcast engineer who, when faced with a job loss, suddenly realizes the value of SBE participation and strives to “do everything at once.” This engineer will join, then test for certification and expect results immediately. Unfortunately this is not particularly effective as a short-term solution. Education, Certification, membership, and active participation must be an ongoing process in order to have the most impact. Think of your investment in the SBE as money and your personal capital deposited in the bank. The longer you invest (earn new certifications, attend seminars, participate in chapter or national office, interact with SBE members) before you withdraw, the more valuable the assets will be. Another way that SBE involvement is similar to banking: It’s a function of your contribution. The more you contribute, participate and lead, the greater the potential benefit from your participation in the SBE.

I’ve seen, on the Internet lists, an occasional complaint that “SBE Certification didn’t get me the job I wanted” or that “my prospective employer doesn’t know about the SBE so it didn’t make a difference.” In some cases, I’ve done some digging and discovered that the complaining engineer was often the type

I mentioned in the preceding paragraph. When faced with a job search, he or she suddenly reaches out to the SBE for help. Unfortunately, Society membership and certification is not a magic pill that will instantly get you the next job or even the next interview. It is part of a host of factors that go into career advancement. Certification and an impressive resume may get you a response or the interview, but your work history and presentation during the interviews will be the thing that makes the biggest difference. You still need to be a fit for the position both in skill and personality.

Think of another advantage of SBE participation (notice I said “participation”, not just membership or certification): You’ll be developing a network of skilled engineers who may become references for your next application. I’ve gained friendships through the Society that presented work opportunities such that (I’m proud to say) a nice number of engineers that I respect can honestly say they’ve seen my work. Have I used them as references for job applications? Heck yeah! I’ve been happy to return the consideration, as well. Much of this exposure would not have happened without the Society.

I hope you’ll think about your SBE membership and understand how your membership and active participation are crucial to increasing your value and “building a career advancement savings account.” The SBE has unmatched value to you as this resource!

The advertisement features a hand-drawn flowchart on the left side, illustrating the e2v support process. At the top is the e2v logo. Below it, 'expert advice' and 'responsive' are connected by arrows. '24/7 service' is connected to 'responsive' and 'expert advice'. '24/7 service' leads to 'technical support' and 'toll-free call'. 'technical support' also leads to 'toll-free call'. 'toll-free call' leads to 'fast' and 'reliable'. A hand is shown holding a pen, pointing to the 'fast' box.

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The website [WWW.E2V.COM](http://WWW.E2V.COM) is listed below the contact information.

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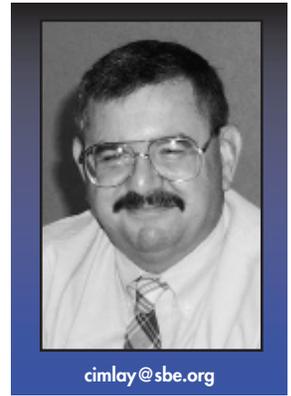
At the bottom of the advertisement, there are images of two product boxes: "EEV 10T" and "EEV 10T DIGITAL".

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# For the birds

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



**T**he American Radio Relay League challenged the FCC's rules governing the interference potential of Broadband Over Power Line (BPL) systems. Lately, I have been waiting not-so-patiently for a decision on this from the United States Court of Appeals for the District of Columbia Circuit. ARRL's appeal was argued back in October, and a decision seems to me to be overdue. Win, lose or draw, I would surely like to know the outcome of the case (and I probably will by the time you read this). In the meantime, however, I noticed a case decided in February of this year, in which the FCC took it on the chin from the Court of Appeals. This was a case brought by the American Bird Conservancy to test the FCC's responsiveness to the environmental issue of bird kills from communications towers. Since the case involves tall towers (which are always of great interest to me, being the means by which radio magic is performed), I thought you might be interested in hearing about it.

I have written in this column before about the alleged problem of bird collisions with communications towers. My previous column was a bit too flippant, and I received some responses from broadcast engineers who were environmentalists taking me to task for it. Those criticisms were well-taken; this is a very serious issue and I should have treated it as one. Certainly enough, the American Bird Conservancy and Forest Preservation Council are serious about the issue, and everyone wants to prevent bird kills if at all possible. My only concern, and this is apparently shared by the FCC as well, is that there isn't a lot of conclusive environmental science about bird kills due to communications towers, and it doesn't seem reasonable to me to proceed with regulations of tower placement or height based on what right now is still fundamentally incomplete science. But that is not what American Bird Conservancy, Inc. et al., v. FCC, Case No. 06-1165 (D.C. Cir. February 19, 2008) was about, really. It was, instead, about what the FCC has to do when it registers a tower, and who gets to object before FCC registers one, and why. And it has some lessons about what you can expect when you do your station's next tower registration.

This case is related to the long-pending FCC WT Docket 03-187, which addresses the effects of communications towers on migratory birds (and on which no firm action has been taken by FCC yet). What happened started in August of 2002. The Bird Conservancy asked the FCC to prepare an Environmental Impact Statement (EIS) under the requirements of the National Environmental Policy Act (NEPA) which would analyze the effects of all past, present and reasonably foreseeable future tower registrations on migratory birds in the Gulf Coast region. It also asked the FCC to initiate a formal consultation process with the United States Fish and Wildlife Service (FWS) under the Endangered Species Act (ESA) to evaluate the Gulf Coast towers collective impact on various bird species. Finally, it asked the FCC to take steps in accordance with the Migratory Bird Treaty Act (MBTA) to reduce bird mortality at Gulf Coast tower sites. They also wanted notice to be given and an opportunity to comment on proposed Gulf Coast tower registration applications before they are granted.

Yes, I know, this is not what the FCC's tower registration procedure

was all about. It was implemented not as a tower approval or evaluation process, but rather purely as a registration procedure so that the FCC had a reliable basis for knowing where its licensees were locating their antennas, and that they were where they were supposed to be located relative to the locations specified in their licenses.

Before the FCC acted on the Bird Conservancy's request, the FCC in 2003 commenced a rulemaking proceeding about bird kills, in a Notice of Inquiry. FCC received 250 comments on that NOI. The comments reflected very different views about the effect of towers on birds. The Bird Conservancy said at the time that "towers kill" between 4 and 50 million birds per year. Telecom companies such as CTIA and NAB claimed that those estimates were far overstated.

By April of 2005, the Bird Conservancy had had enough of FCC's slow pace on their petition about Gulf Coast bird kills. They asked the U.S. Court of Appeals in D.C. to order the FCC to act on their petition filed in 2002. Five days after the oral argument on the Bird Conservancy's Petition for a Writ of Mandamus, the FCC issued an order denying in part, dismissing in part and deferring in part action on the Bird Conservancy's petition. FCC said it would address the Bird Conservancy's issues in a separate docket dealing with the bird collision issue on a nationwide basis.

FCC did nothing thereafter until November of 2006, when it issued a Notice of Proposed Rule Making in the same docket proceeding asking for further comment on the subject from factual, legal and policy perspectives. FCC asked whether the impact of communications towers on migratory birds was significant enough that it would have to take action under the environmental statutes that affect all Federal agencies. What FCC didn't seem to have were facts about the magnitude of the problem. The only decision from FCC was really no decision at all: it said that it "tentatively" proposed the use of medium intensity white strobe lights rather than red lights, since red lighting seemed to have a higher risk to migratory birds. Meanwhile, in May of 2006, the Bird Conservancy asked the Court of Appeals to review the FCC's order dismissing the Bird Conservancy's Gulf Coast request.

In its February, 2008 decision, the Court reversed and remanded the FCC's order denying and dismissing the Conservancy's petition because the FCC failed to apply the proper NEPA standard, and because FCC failed to provide a reasoned consultation with the FWS under the ESA. The Court also held that the FCC did not provide meaningful notice of pending tower registration applications before acting on them.

The court seemed to believe that tower registrations by FCC are actually approvals. Of course, they are not. Tower registrations are simply a means of allowing FCC to know where the towers are. On the other hand, the FCC is subject to the NEPA, ESA and MBTA statutes, and so even the process of registration of towers, said the Court, are

“permits or other regulatory decisions” under NEPA. That creates obligations during the registration process. The FCC has in the past taken the position that regulations implementing NEPA categorically exclude communications towers from environmental processing because they are deemed individually and cumulatively to have no significant effect on the quality of the human environment. However, there is still a procedure to challenge that presumption, in which case the tower owner must prepare an Environmental Assessment (EA). If that EA shows a significant effect on the environment, the FCC has to prepare an Environmental Impact Statement (EIS). FCC refused to do a programmatic EIS for tower registrations, because of lack of specific evidence concerning the impact of towers on human environment and the lack of consensus of scientists regarding the impact of communications towers on migratory birds. The Court, however, said that neither reason is sufficient to sustain the FCC’s refusal to take action pursuant to NEPA. The FCC’s action violated its own NEPA procedures. The Court vacated the FCC order on the NEPA part and told the FCC to conduct a programmatic EA as the Conservancy requested. So, the FCC will now have to conduct an environmental assessment about the location of towers within the tower registration process. It is obligated to do so under NEPA when a Federal action (such as a tower registration) “may” have a significant environmental effect. The Court said that on the record before it, there was no dispute that towers “may” have significant environmental impact, and therefore the FCC rules implementing NEPA are triggered, and an EA is necessary for the tower registration program.

The Court also said that under the ESA, the FCC was required to

consult with the Fish and Wildlife Service. The ESA requires that a Federal agency ensure that any action they take, authorize, fund or carry out is not “likely” to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of critical habitats. The FCC said only that there were no collective impacts of towers that were separate from their impacts individually. The basis for that conclusion was completely unexplained, however, and for that reason, that issue was remanded to FCC for further proceedings consistent with the ESA. The FCC will have to better explain what kind of showing would have to be made in order to justify the kind of study that the Bird Conservancy asked for.

Finally, the FCC was told to provide adequate public notice of tower registration applications before they are granted, in order that the public could ask for EAs relative to specific applications. This is the big hammer. The FCC only provides notices now after tower registrations are processed. After this remand by the Court, the FCC will have to air them out before they grant a registration. This will allow conservation groups to protest tower registrations (and actually, as the result, tower siting) both at the FCC and before local zoning boards. A new tower project could become a real nightmare, and the construction period for new station permits could become even more complicated than it now is.

Heck, it is for the birds, right? But why am I still wondering, after all these studies and requirements, whether there is enough science behind the guesswork? FCC can do EAS and EIS’ until the cows come home. It is hard to make regulations without firm science backing them up. It just doesn’t seem to be on the table.



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# SBE Annual Membership Meeting to honor local Certification Chairmen

BY **Megan E. Clappe**

*SBE Certification Director*

**W**ow, what a whirlwind year it has been and 2008 doesn't seem to be any less exciting.

With the Digital Television conversion less than a year away the SBE Program of Certification is taking steps to replace all of the information that will become

## 25 Years

- James Biggers, CPBE – Chapter 7, Jacksonville, FL
- Robert Good, Jr., CPBE – Chapter 41, Central PA
- Robert Venditti, CSRTE – Chapter 43, Sacramento, CA
- Donald Strauss, CPBE – Chapter 55, St. Louis, MO
- Robert Maw, CSTE – Chapter 86, Greenville Area, SC

## 20 Years

- Thomas Alderson, CSTE – Chapter 21, Spokane, WA
- Richard Ryan, CPBE – Chapter 28, Milwaukee, WI
- Robert Bell, CPBE – Chapter 30, South Bend, IN
- Brian Morgan, CPBE – Chapter 49, Central Illinois
- Michael Feist, CPBE, CBNT – Chapter 66, Fresno, CA
- Gilbert Garcia, Jr., CPBE – Chapter 79, Austin, TX
- Carl Davis, CPBE – Chapter 93, Raleigh-Durham, NC

## 15 Years

- Thomas Skubel, CPBE – Chapter 20, Pittsburgh, PA
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- Richard Serre, CBT, CBNT – Chapter 65, Quad Cities, IL
- Laverne Killion, CPBE – Chapter 87, Holdrege, NE
- Jon Strom, CBTE – Chapter 109, Des Moines, IA
- Dave Brawdy, CPBE – Chapter 117, Palouse Clearwater, WA
- James Hartzler, CPBE – Chapter 122, Youngstown, OH
- William Croghan, CPBE – Chapter 128, Las Vegas, NV

## 10 Years

- Robert Locke, CPBE, CBNT – Chapter 3, Kansas
- Thomas Valosin, CBT – Chapter 58, Northeast, NY
- John Batson, CPBE, CBNT – Chapter 68, Birmingham, AL
- Richard Goldy, CPBE – Chapter 105, Houston, TX
- Robert Connelly, CPBE – Chapter 129, Wyoming

obsolete come February 17, 2009.

In 2003 we began the tradition of honoring our local Certification Chairmen on a recurring five-year cycle. This year at NAB we will continue this practice of recognizing the service anniversaries of our volunteers at the SBE Membership Meeting. The annual SBE Membership Meeting will be held

## 5 Years

- William Magliocco, CPBE, 8-VSB, CBNT – Chapter 5, Atlanta, GA
- Christopher Scherer, CPBE, CBNT – Chapter 59, Kansas City, KS/MO
- Edward Roos, CPBE – Chapter 88, W. Palm Beach, FL

## First Year of Service

- David Fort, CPBE – Chapter 25, Indianapolis, IN
- Dennis Vigil, CSTE, 8-VSB, CBNT – Chapter 34, Albuquerque, NM
- Winston Tharp, CPBE – Chapter 40, San Francisco, CA
- Ernest Harvey, Jr., CSRTE – Chapter 72, New Orleans, LA
- Philip Mowbray, CPBE – Chapter 81, Grand Junction, CO
- Britt Lockhart, CPBE – Chapter 85, Central Western, OK
- J. Gibson Prichard, CBNT – Chapter 103, Nashville, TN
- John Ross, CSRE, CSTE, CBNT – Chapter 136, Rio Grande Valley

2008 also brings two anniversaries for the Certification Committee.

- Troy Pennington, CSRE, CBNT – 15 Years as a Certification Committee Member
- Christopher Scherer, CPBE, CBNT – 10 Years as a Certification Committee Member

Thank you to the local Chapter Certification Chairmen and the National Certification Committee members for the endless hours they devote to the Program of Certification. Without their help and dedication, the program would not be what it is today.

Please feel free to stop by the booth at the Show or contact me at anytime at [mclappe@sbe.org](mailto:mclappe@sbe.org) or 317-846-9000, if you have questions.



# CONGRATULATIONS

## New SBE Certification Achievements

### LIFE CERTIFICATION

Certified Professional Broadcast Engineers® and Certified Senior Broadcast Engineers® who have maintained SBE certification continuously for 20 years and are current members of SBE may be granted Life Certification if so requested. All certified who have retired from regular full-time employment may be granted Life Certification if they so request. If the request is approved, the person will continue in his/her current level of certification for life.

#### CERTIFIED PROFESSIONAL BROADCAST ENGINEER® (CPBE®)

Michael Axman, Elkhart, IN – Chapter 30  
Jon Bennett, Richmond, VA – Chapter 60  
Dan Billings, Lehigh Arcres, FL – Chapter 127  
Paul Stoffel, Madison, WI – Chapter 24  
Thomas Ware, Kings Mountain, NC – Chapter 45

Benton Weiss, Kansas City, MO – Chapter 59  
William Wise, Richardson, TX – Chapter 67

#### CERTIFIED SENIOR TELEVISION ENGINEER (CSTE®)

Kenneth Daniels, Blaine, MN – Chapter 17  
John Kosobucki, Des Moines, IA – Chapter 109

#### CERTIFIED BROADCAST NETWORKING TECHNOLOGIST® (CBT)

Terrence Baun, Janesville, WI – Chapter 28  
Jon Bennett, Richmond, VA – Chapter 60  
William Hix, Denver, CO – Chapter 48

### NEWLY CERTIFIED CPBE®

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

#### CERTIFIED PROFESSIONAL BROADCAST ENGINEER® (CPBE)

Joseph Bartnik, Lawton, OK – Chapter 67  
James Radmann, Cedarburg, WI – Chapter 28  
Donald Renollet, Indianapolis, IN – Chapter 25  
David Siegler, Charlotte, NC – Chapter 45

### SBE CERTIFIED SCHOOL COURSE COMPLETION

#### DEFENSE INFORMATION SCHOOL

Maria Salcido  
Matthew Schiler, N. Las Vegas, NV – Chapter 128

#### NAPA VALLEY COLLEGE

Brian Hughes, Cotati, CA – Chapter 40

### FEBRUARY EXAMS

*"Thank You" CHAPTER CERTIFICATION CHAIRS FOR YOUR ASSISTANCE*

#### CERTIFIED BROADCAST RADIO ENGINEER (CBRE®)

Mark Heller, Two Rivers, WI – Chapter 80

#### CERTIFIED BROADCAST NETWORKING TECHNOLOGIST® (CBNT®)

Ronnie Barnes, New York – Chapter 15  
John Braunreiter, Milwaukee, WI – Chapter 28  
Timothy Chapman, Buchanan, MI – Chapter 30  
Glen Dion, Nashua, NH – Chapter 110  
Thomas Gabauer, Mesa, AZ – Chapter 9  
David Herron, Renton, WA – Chapter 16  
Bobby Johnson, Chicago, IL – Chapter 26  
Ronald Kelly, Raleigh, NC – Chapter 93  
Dennis Maddox, Fountain Inn, SC – Chapter 86  
Steven Miller, Clinton, MS – Chapter 125  
Edward Morsett, Castle Rock, CO – Chapter 48  
Mark Morton, Oxford, CT – Chapter 14  
Luis TaveRas, Raleigh, NC – Chapter 93  
Jorge Trimarchi, Miami, FL – Chapter 53  
Patrick Turley, Chicago, IL – Chapter 26  
Roger Wallace, Centennial, CO – Chapter 48  
Clifford Dos Santos, Aventura, FL – Chapter 53  
Jonathan Weirmeir, Zanesville, OH – Chapter 52

#### CERTIFIED BROADCAST TECHNOLOGIST® (CVT®)

Daniel Smith, Perris, CA – Chapter 131  
Dawid Vermaak, Dryden, NY – Chapter 140

#### CERTIFIED RADIO OPERATOR® (CRO®)

Sheila Cowley, Tampa, FL – Chapter 39

#### CERTIFIED TELEVISION OPERATOR® (CTO®)

Hugo Isensee, San Antonio, TX – Chapter 69  
Richard Zamora, San Antonio, TX – Chapter 69

### CERTIFIED BY LICENSE

#### CERTIFIED BROADCAST TECHNOLOGIST® (CBT®)

William Bleyle, Fayetteville, NY – Chapter 22  
Mark Morton, Oxford, CT – Chapter 14  
Kent Peterson, Redlands, CA – Chapter 131

### CERTIFIED RADIO OPERATOR® (CRO®)

#### CERTIFIED RADIO OPERATOR® (CRO®)

Richard Frischkorn, Suring, WI  
Brian Hay, Peshtigo, WI  
Dennis Jones, Oconto Falls, WI  
Thomas Smith, Landing, NJ  
Rodney Thomas, Valencia, CA  
Lorra Queen, Mountain Home, AR

### CERTIFIED TELEVISION OPERATOR® (CTO®)

#### CERTIFIED TELEVISION OPERATOR® (CTO®)

Forte Angley, Irving, TX

Ozzie Carrillo, El Paso, TX  
Clara Colmenero, Phoenix, AZ  
Richard Disney, Spuerior, NE  
Tasha Freeman, Hemet, CA  
Lauren George, Strongsville, OH  
Dale Jones, Grand Junction, CO  
Luis Lua, Thousand Palms, CA  
Daniel Marquez, Phoenix, AZ  
Jhonny Moscoso, Falls Church, VA  
John O'Leary, Temecula, CA  
George Ovalle, El Paso, TX  
John Peterson, El Paso, TX  
Malcolm Rackley, El Paso, TX  
Joshua Schiano, Norfolk, VA  
Michael Spivey, Burke, VA  
Mark Westermeyer, Norfolk, VA

### 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®)

Jon Bennett, Richmond, VA – Chapter 60  
Roger Dowdy, Cottontown, TN – Chapter 103  
James Hermanson, Middleton, WI – Chapter 24  
Robert Hoffman, St. Louis, MO – Chapter 55  
K. Terry Horbatiuk, Mississauga, Ontario, Canada  
David Ohmstede, Newton, IA – Chapter 109  
Mark Rapson, Shelby Twp., MI – 82  
Andrew Suk, Nampa, ID – Chapter 115  
Thomas Wixon, Sunland, CA – Chapter 47

#### CERTIFIED SENIOR RADIO ENGINEER (CSRE®)

Richard Gilbert, Tulsa, OK – Chapter 56

#### CERTIFIED SENIOR TELEVISION ENGINEER (CSTE®)

Jerry Shorter, Menifee, CA – Chapter 131  
Edgar Woodfin, Spartanburg, SC – Chapter 86

#### CERTIFIED BROADCAST RADIO ENGINEER (CBRE®)

William Gaddis, Tuscaloosa, AL – Chapter 68  
Stephen Konopka, Depere, WI – Chapter 80  
Michael Lennen, Omaha, NE – Chapter 74  
Saul Perez, Northridge, CA – Chapter 47  
Joseph Portelli, State College, PA – Chapter 41

#### CERTIFIED BROADCAST TELEVISION ENGINEER (CBTE®)

Melville Berry, Prospect Heights, IL – Chapter 26  
Thomas Brotsky, Rochester, MN – Chapter 17  
Francis Butler, Norfolk, VA – Chapter 54  
Renato Calalang, Orlando, FL – Chapter 42  
Jay Caldwell, Plain City, OH – Chapter 52  
David Falcon, San Antonio, TX – Chapter 69  
Miguel Garcia, Pembroke Pines, FL – Chapter 53  
Bryan Gordon, Atlanta, GA – Chapter 5  
James Hartland, North Olmsted, OH –

Chapter 70  
Rashid Khawaja, Germantown, MD – Chapter 37  
Tim Lange, El Cajon, CA – Chapter 36  
Michael Nudi, Oakdale, PA – Chapter 20

#### CERTIFIED BROADCAST TELEVISION ENGINEER (CBTE®) 8-VSB SPECIALIST

Chris Novy, Yukon, OK – Chapter 85

#### CERTIFIED AUDIO VIDEO ENGINEER (CEAV)

David Erickson, Anchorage, AK – Chapter 89

#### CERTIFIED VIDEO ENGINEER® (CEV®)

Michael Belanger, Morrow, OH – Chapter 33

#### CERTIFIED BROADCAST NETWORKING TECHNOLOGIST® (CBNT®)

W. Bradley Darby, Neptune Beach, FL – Chapter 7  
Albert Flores, Houston, TX – Chapter 105  
Kevin Foley, Knoxville, TN – Chapter 113  
Richard Gilbert, Tulsa, OK – Chapter 67  
James Hartland, North Olmsted, OH – Chapter 70  
James Hermanson, Middleton, WI – Chapter 24  
Joseph Kirby, Hartselle, AL – Chapter 111  
Chris Novy, Yukon, OK – Chapter 85  
Mark Simpson, Marana, AZ – Chapter 32

#### CERTIFIED BROADCAST TECHNOLOGIST® (CBT)

Gregory Ardrey, Thornville, OH – Chapter 52  
Herbert Boaz, Montvale, VA – Chapter 78  
Edward Buchan, Harrisburg, PA – Chapter 41  
Marshall Deets, Baraboo, WI – Chapter 24  
Raymond DeFrances, Atlanta, GA – Chapter 5  
Robert Fields, San Antonio, TX – Chapter 69  
Paul Hadley, Tucson, AZ – Chapter 32  
Clark Jillson, Boscobel, WI – Chapter 24  
William Kelley, Gig Harbor, WA – Chapter 16  
Timmy Mendenhall, Knoxville, TN – Chapter 113  
Timothy Parish, Central Point, OR – Chapter 43  
Mauro Pena, Honolulu, HI – Chapter 63  
Frank Peterman, Manuel, TX – Chapter 105  
John Sessler, Newark, TX – Chapter 67  
Randal Smith, Denton, TX – Chapter 67  
Brandon Stadler, Sachse, TX – Chapter 67  
Gary Spangler, Omaha, NE – Chapter 74  
Brian Urban, Gerogetown, TX – Chapter 67  
Paul Yonge, Syracuse, NY – Chapter 22

#### CERTIFIED TELEVISION OPERATOR® (CTO®)

Robert Dawson, Menifee, CA – Chapter 131  
John Johnson, Billings, MT  
Orlando Porter, Chicago, IL

## **NAB** from page 1

Operators Handbook, SBE Handbook for Radio Operators and the SBE Radio Chief Operators Handbook.

### **BOOTH HOURS**

Sunday: 2:00 p.m. to 4:00 p.m.

Monday to Wednesday: 9:00 a.m. to 6:00 p.m.

Thursday: 9:00 a.m. to 4:00 p.m.

### **SBE SPRING MEMBERSHIP MEETING**

Don't miss the annual spring Membership Meeting, at 5 p.m. on Tuesday, April 15. This annual meeting will highlight the week for SBE and will be held in S226/227, located on the second floor of the South Hall of the Las Vegas Convention Center. Some special prizes are in the works, so be sure to include the SBE Membership Meeting on your NAB convention schedule.

### **SBE Meetings**

SBE will hold several informative meetings during the NAB convention that may be of interest to you. (Meetings located at the Las Vegas Hilton Hotel unless otherwise indicated; subject to change)

#### **Saturday, 4/12**

**Certification Committee** (partially closed meeting), 6:30 p.m. to 11:00 p.m.; Conference Room 7

#### **Sunday, 4/13**

**Board of Directors Meeting**, 8:30 a.m. to noon; Conference Rooms 4-5

**EAS Committee**, 4:00 p.m. to 5:30 p.m.; Conference Rooms 1-2

#### **Monday, 4/14**

**SBE/NFL Game Day Coordinators Meeting**, 8:30 a.m. to 11:30 a.m., Conference Rooms 7-8

**SBE/U.S. Department of Defense** (closed meeting), 1:30 p.m. to 3:30 p.m.; Board Room

#### **Tuesday, 4/15**

**SBE Certification Exams** will be conducted from 9 a.m. to noon for those who pre-registered by the February 29th deadline. Conference Room 10

**SBE Frequency Coordinators Meeting**, 10 a.m. to noon; Conference Room 7-8

**SBE/ U.S. Department of Defense Meeting**, 1:30 pm to 3:00 pm; Conference Rooms 7-8

**SBE Membership Meeting**, 5 p.m. to 6 p.m.; Las Vegas Convention Center, South Hall Second Floor, Room S 226/227

### **NAB Broadcast Engineering Conference**

SBE is proud to be partnering again with NAB to produce the NAB Broadcast Engineering Conference (BEC). The BEC features a special Saturday in-depth Ennes Workshop as mentioned earlier, plus more than 20 informative sessions covering the latest in broadcast technology beginning Sunday and running through

Thursday morning.

This year, SBE member Steve Fluker of Cox Radio in Orlando, FL, chairs the BEC.

Also serving on the committee are Talmadge Ball of Bonneville International; Dave Converse of ABC/Disney Television Stations Group; Al Grossniklaus of WTHR-TV, Indianapolis; Gary Kline, CBNT of Cumulus Media; Wayne Kube of Belo Corporation; John Merrill of KPHO-TV, Phoenix and Paul Shulins, CBRE of Greater Media, Boston.

### **Registration Discounts for SBE Members**

Members of SBE can register for the NAB convention at a special "partner" rate, a savings of \$200 off the NAB non-member rate. To receive the discount, SBE members register using the regular on-line registration form found at the NAB convention registration web site, [www.nabshow.com/registration.asp](http://www.nabshow.com/registration.asp). When you reach the "Profile" section, check the "Partner" box and select SBE from the drop-down box. The discount is only available using the on-line registration method. Hotel reservations can also be made through the NAB Housing office by visiting the NAB website.

### **ENNES Workshop**

The Ennes program is the Saturday before the 2008 NAB Show floor opens. It will be held at the Las Vegas Convention Center (S226) with the topic focusing on file-based workflow. This year's SBE/Ennes tutorials directly address the issues of this shift, with the most recognizable presenters in the industry. It's unlike anything else that happens at NAB. To attend, you must have full NAB Convention credentials.

The Ennes Workshop begins early at 8 a.m. April 14, with a beginner's tutorial – "File-Based Workflow 101." Harlan Neugeboren, CEO of the Workflow and Technology Group, will cover the basics of file-based workflow from acquisition through playback and archiving.

At 9:10 a.m. James O'Brien, president of Building4Media, will

## **MARK YOUR CALENDAR**

**July 17, 2008**

**Broadcast Trade Show**

**Roanoke Civic Center convention center, Roanoke, VA.**

**Hosted by** The Blue Ridge Chapter - SBE Chapter 78 and the Broadcast General Store.

**October 14 & 15**  
**2008 SBE National Meeting**

**Marriott Hotel Madison West, Madison, Wisc.**

**In conjunction with** The Wisconsin Broadcasters Clinic, presented by SBE Chapter 24, Madison and the Wisconsin Broadcasters Association.

present "Cross Platform Work Flow." O'Brien will be discussing considerations and developments in cross platform media operations and automation.

Following at 9:55 a.m. Al Kovalic, Strategist and Pinnacle Fellow, will present "Video Timing and Synchronization in a Web Services Environment." His talk will cover the essentials of timing concepts across distributed software systems, the salient aspects of how to achieve frame accurate video control using web services and SOA concepts.

Next, Clyde Smith of Turner Broadcasting System will present "Understanding and Describing File-based Workflow" at 10:35 a.m. He will be highlighting efforts by users and manufacturers to develop and deploy file-based workflow solutions in the broadcast environment.

The following tutorial will sort through the hype and go into exactly what BXF was designed to do, what it can do today, and what it might do in the future. Director of Integration and Standards of Harris Corp., Chris Lennon will present this session, "Broadcast Exchange Format" at 11:20 a.m.

After lunch at 1:15 p.m., Kovalic will be back to present "A Brief History of the Second." This short session will cover the development of timekeeping from water clocks to cesium fountain clocks to GPS and SMPTE 12M. Kovalic ties all of this into the needs of broadcasters.

At 1:30 p.m. consultant John Luff will present "Implementing Workflow Changes," covering planning and implementation from a holistic approach, centered on defining goals and managing change.

Following Luff at 2:15 p.m., John Footen, Vice President of National TeleConsultants, will present "Business Process Analysis." This presentation will be focused on Service-Oriented Architecture (SOA).

Engineering Director Michael Wellings will present "Codec Performance" at 3:00 p.m. The engineers at the University of Washington and the Research Channel have analyzed HD codec performance and documented their results. Wellings will present this data, along with an illustrative HD video showing codec loss using the SMPTE STEM uncompressed Mini-Movie.

At 3:45 p.m. John Wadle, Vice President of Technology at OmniBus Systems, will present "File-based Transmission Process." This will explore the impact and benefits of deploying a software-based transmission system in conjunction with file-based content workflows.

Finishing up at 4:30 p.m. Leonard (Joe) Fabiano, Chief Technology Officer of Pathfire, will present "Pathfire's Distribution of Files and the Impact of File Based Workflow."

We hope you'll join many of your fellow SBE members this year in Las Vegas for the 2008 NAB Show!

### WHAT HAPPENS WHEN YOU CUT YOUR ENERGY CONSUMPTION IN HALF?

Average Power 8VSB (kW)	CEA Efficiency (%)	IOT Efficiency (%)
10	50	28
15	55	33
20	58	36
25	60	38
30	60	40

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# Candidates for National Election

BY **Chriss Scherer, CPBE, CBNT**

*Nominations Committee Chairman,  
Immediate Past President*

The SBE Nominations Committee is assembling a slate of candidates for the next national election that will be held this summer. In the last issue of The Signal, I provided an overview of the eligibility requirements and responsibilities for candidates. The committee has received several inquiries from interested candidates, and we will continue to assemble a candidate list through April. The Committee's list of candidates is due in the National Office by April 30.

at that time, nominations from the floor will still be accepted until July 14. For an individual to be nominated from the floor, he or she must notify the SBE secretary and have the support of 10 voting members.

Election ballots will be mailed to all members by July 29. The ballots will be tallied on Aug. 28 by a board-appointed board of tellers.

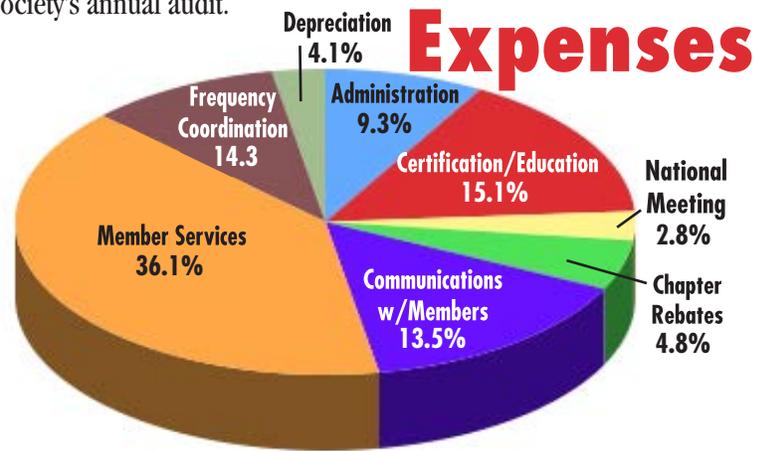
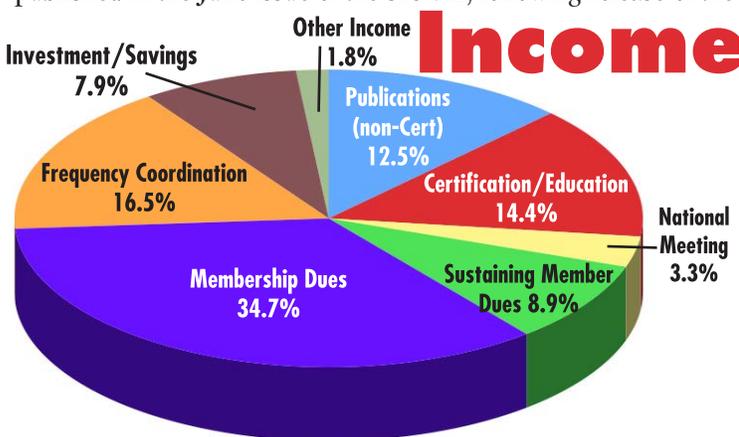
Serving on the Nominations Committee this year are Robert Hess, CPBE, of Chapter 43 Sacramento, CA; Kevin Kidd, CSRE AMD, of Chapter 111 Huntsville, AL; and Eric Reinert, CBTE, of Chapter 120 Lehigh Valley PA. I thank them for their work on this committee.

While the Nominations Committee's function will be completed

## 2007 SBE Financial Review

The Society of Broadcast Engineers, Inc. completed 2007 with net revenue from all sources of \$80,955. Gross revenue was \$825,622 while expenses were \$744,667. The value of SBE medium and long term investments increased in 2007 by \$55,669 over 2006. Total assets as of December 31, 2007 were \$1,193,792, an increase of \$80,809 over 2006.

A percentage breakdown of SBE income and expenses is depicted in the accompanying charts. A financial statement will be published in the June issue of the SIGNAL, following release of the Society's annual audit.



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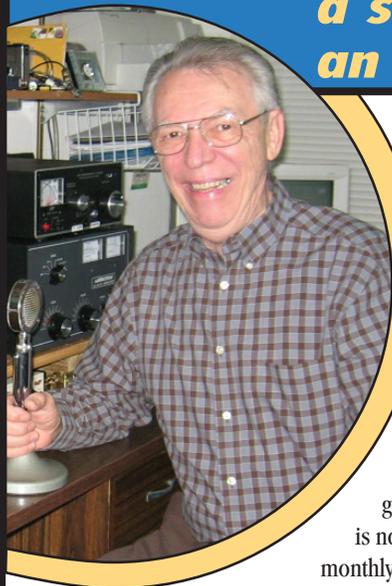
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**Join us at NAB Show Booth #N2532**

## In the Circle ...

*a snapshot of  
an SBE Member*



**Bob Hardie, CS RTE**

Chief Engineer  
WTIA TV, Sinclair Broadcast  
Group  
Tampa, FL SBE Chapter 39,  
Joined SBE in 1977

**Getting Started:** I became an Amateur Radio Op when I was 14 years old. Seems like I had a natural desire to go into broadcast engineering. Nothing else was interesting to me.

**Sphere of Influence:** I admire the "single shop" technicians/engineers that trudge along every day doing a great job in broadcasting and literally having to fight with management and other departments. These guys/gals are under direct fire. This also describes the job of the average Chief Engineer. Typically, this person is not thought of as a "down in the trenches engineer," even though he feels he is. This is one of the things that the monthly SBE meetings can do, is help these people to cope with the everyday stress.

**When I'm not working:** I've been a ham for 54 years now. My mother used to say, "ham radio keeps me off the streets and out of trouble". It still does, and my wife now says that she likes me being at home and out of trouble too. (smile)

**You may not know ...** I went to Purdue University to get a BSEE degree. I highly recommend to all to get as much education as one can. Don't just take electrical engineering courses. Take Business, HR and last but not least, getting along with "those guys." You know, the other people who work in broadcasting. The "non-engineers." Good education will make your life much easier not to mention make you more money. GET SBE CERTIFIED too.

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Dallas, TX  
Ph# 469-644-2215  
Jassen Hahn  
jhahn@tower-tci.com

**East Coast**  
1180 Columbia Ave, Ste 10  
Irmo, SC 29063  
Ph# 803-407-8489  
Jean Lecordier  
jlecordier@tower-tci.com

**www.Tower-TCI.com**

# Membership Drive going on now: Recruit and win!

**T**here's still time to "Be part of a Winning Team" during the 2008 Membership Drive. The annual drive started March 1 and continues through May 31, 2008. Now is the time to recruit new members for SBE. Members are what make our society strong, so help strengthen SBE by adding to its growing membership.

All current SBE Members who sponsor a new member during this year will receive \$5 off their 2009 dues for each Regular, Associate or Sustaining member that you sponsor (up to \$25). In addition, sponsors will have their names entered into the Membership Drive Prize Drawing where you could win one of many great prizes donated by SBE Sustaining Members and SBE Bookstore publishers.

If you plan to attend The 2008 NAB Show, this is a great time to introduce your friends and colleagues to SBE. Bring them to the SBE Booth in the upper level of the South Hall of the Las Vegas Convention Center with their applications where you can both pick up an SBE membership ribbon; or bring them to the booth so they can apply online. Then invite them to the SBE Membership Meeting on Tuesday April 15, at 5 p.m.

Be part of a **March 1 - May 31**  
**WINNING**  
2008 SBE  
Membership Drive  
**TEAM**



## This year's prizes: **GRAND PRIZE**

Trip to the 2008 SBE National Meeting in Madison, WI from October 14 - 15.  
*Two night hotel stay, airfare for one within the continental U.S., Conference ticket*

## **OTHER PRIZES**

- (2) Eton E1XM AM/FM/Shortwave/XM ready Radio Courtesy of Westwood One
- Apple IPOD Nano Courtesy of ADC
- Antenna Engineering Handbook courtesy of McGraw-Hill
- Digital Signage Broadcasting by Lundstrom Courtesy of Elsevier
- HD Radio Implementation by Thomas Ray Courtesy of Elsevier
- Basic NEC with Broadcast Applications by JL Smith Courtesy of Elsevier
- Directional Antennas Made Simple by Jack Layton
- The Public Inspection File by Jack Layton
- NAB Engineering Handbook Courtesy of National Association of Broadcasters
- Telos ProFiler Automated Program Archiver software Courtesy of Telos Systems / Omnia / Axia
- Heil Sound Fin Courtesy of Broadcast Supply Worldwide
- Yamaha AV Receiver RX-V661 Courtesy of Neural Audio
- \$100 Gift Certificate to L.L. Bean Courtesy of Shively Labs
- \$100 Gift Certificate to Amazon.com Courtesy of Dielectric
- \$75 Gift Certificate to Powell.com Courtesy of du Treil, Lundin & Rackley, Inc.
- STABILINE Uninterruptible Power Supply Courtesy of Superior Electric
- (2) Logo Polo shirts Courtesy of Kathrein Scala
- Logo pull over fleece Courtesy of Kathrein Scala
- Logo Golf Shirt Courtesy of Continental Electronics
- (2) 1 GB USB Drive Courtesy of Broadcast Electronics
- (5) White ball cap Courtesy of Broadcast Electronics
- (5) Logo T-shirt Courtesy of Broadcast Electronics
- (25) Adjustment Tweaking Tools Courtesy of Continental Electronics

## **STILL MORE TO COME!**

## **Need a little inspiration?**

Recruit a new member during the 2008 SBE Membership Drive, March 1 - May 31, and not only will you strengthen the voice of broadcast engineers in the industry, but your name will be entered into a prize drawing with many great prizes!

## **Renew your membership**

It's that time of year again, for Regular, Senior, Associate and Student Members to renew their SBE memberships.

SBE Membership dues for Regular, Senior and Associate Members are \$63. Dues for Student Members are \$20.

Membership renewal notices were mailed out to all Regular, Senior, Associate and Student members in early February. If you did not receive your renewal notice, contact the SBE National Office at (317) 846-9000.

Membership Renewal for Youth and Sustaining members is due on the anniversary month of joining the Society.

# The Society of Broadcast Engineers would like to welcome its newest members to the organization:

## NEW MEMBERS

Douglas E. Allen - Baton Rouge, LA  
Eric Anderson - Charlotte, NC  
Solomon N. Bachman - Tucson, AZ  
Dave M. Calhoun - Beachwood, NJ  
Wendell D. Claibourn - Columbia, SC  
Javier Cruz - Roy, UT  
Philip C. Davis - Smyrna, GA  
Glen A. Dion - Nashua, NH  
Gordon C. Dunlap - Glen Burnie, MD  
Richard K. Foley - Hubbard, OH  
John Footen - Valencia, CA  
Robert W. Goessler - Schenectady, NY  
Bruce H. Hanselman - Lawrenceville, GA  
Douglas Houston - Aurora, CO  
Brian Hughes - Sterling, VA  
Hugo H. Isensee - San Antonio, TX  
John B. Jackson - Wentzville, MO  
Stephen Jaskela - Brookline, MA  
Bobby Johnson - Chicago, IL  
Richard H. Lieb - Pittsburgh, PA  
Varian C. Lucas - Lewisville, TX  
Dennis W. Lusk - Odessa, FL  
Steven D. Lynch - Chapel Hill, TN  
Omar Malik - Land O Lakes, FL  
Frank L. Martin - Monrovia, CA  
James R. Offerdahl - Fosston, MN  
Iilir Prifti - Albuquerque, NM  
Lloyd P. Robinson - Louisville, KY  
Robert D. Romonosky - Harrisburg, IL  
Christopher J. Schnur - Fairfield, OH  
Bruce Sherman - Prescott, AZ  
Dan F. Smith - Brooks, KY  
Scott Solko - Greenfield, WI  
Edward L. Stoffel - Stephens City, VA  
Patrick A. Turley - Chicago, IL  
Mark E. Turner - Syracuse, NY  
Fernando M. Vega - Leesburg, VA  
Derrick W. Warren - Johns Creek, GA  
Robert C. Worek - Cheswick, PA  
David W. Ahneman - Lopez Island, WA  
Nickolas P. Anderson - Onawa, IA  
Stephen B. Anthony - Bristol, RI  
Justin L. Atkin - Eugene, OR  
David W. Bash - Ashburn, VA  
Marlon S. Baskerville - Portsmouth, VA  
William R. Bleyle - Fayetteville, NY  
Claude L. Booth - Garden Grove, CA  
John J. Braunreiter - Milwaukee, WI  
Kevin L. Buskirk - Parkersburg, WV  
James D. Byron - Houston, TX  
Brandon M. Cantrell - Moreno Valley, CA  
William P. Case - Springfield, MO  
Ibrahim Cerda - El Paso, TX  
Rome Chelsi - Evergreen, CO

Shea Clark - Clearwater, FL  
Zach R. Cochrane - Eugene, OR  
Bruno Cruz - El Paso, TX  
Marvin E. Dabelow - Terre Haute, IN  
Lee J. Damschroder - Centennial, CO  
Roger D. Dawson - Hurricane, WV  
Clifford T. Dos Santos - Aventura, FL  
Benjamin G. Echols - Riverside, CA  
Jon M. Edwards - Wagoner, OK  
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Timothy A. Kelly - Columbus, OH  
Jeremiah Layno - Chula Vista, CA  
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Gordon D. McFarland - Omaha, NE  
Scott McPherson - Concord, NH  
Rick A. Miller - San Jacinto, CA  
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## NEW STUDENT MEMBERS

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Roger Rafson - Pittsburgh, PA  
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Jack Wenzinger - Broomfield, CO  
Thomas Conroy - Rocky Mount, VA  
Rodney C. Vandever - West Lafayette, IN

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Thomas H. Sittner - Bulverde, TX

## REINSTATED ASSOCIATE MEMBERS

James F. Armstrong - Duluth, GA

## REINSTATED STUDENT MEMBERS

Quentin E. Silver - Crofton, MD

# Chapters – A great resource

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

**S**BE chapters have been the backbone of the Society since the earliest days of SBE, when Chapter 1 was organized in Binghamton, New York. Monthly chapter meetings are, for many members, the place where they feel they get the most benefit from their SBE membership. Continuing education, professional and social networking and recognition are all a part of a good chapter program that, if you have not been attending chapter meetings, you've been missing.

If you have gotten away from attending your chapter's meetings, why not put the next one on your calendar. I've included below a list of SBE chapters, organized alphabetically by state. The chapter chairperson is listed with, in most cases, their e-mail address. Where we don't have an e-mail address on record, their telephone number is included. If you haven't been to a chapter meeting in a while, contact your chapter chair and find out when and where the next meeting is and plan to attend.

You'll notice that a handful of chapters say "TBD" in the chapter chairperson

column. In those cases, there is no chapter chair and the chapter is likely not currently meeting. Would you like to see some chapter activity in your area and feel you can help? Contact me at the SBE National Office, [jpoy@sb.org](mailto:jpoy@sb.org) or (317) 846-9000; or Chriss Scherer, Chapter Liaison Chairman, [cscherer@sb.org](mailto:cscherer@sb.org). We'll work to help you get your chapter moving again.



State	Ch #	Chairperson & Contact information.
AK	Alaska	89 Terry K. Reynolds, CPBE <a href="mailto:reynolds@mtaonline.net">reynolds@mtaonline.net</a>
AL	Birmingham	68 Tim Costley, <a href="mailto:tcostley@wto.sbgnet.com">tcostley@wto.sbgnet.com</a>
AL	Huntsville	111 Joseph W. Kirby, CBTE, CBT, CBNT <a href="mailto:engineerjoe@bellsouth.net">engineerjoe@bellsouth.net</a>
AL	Montgomery	118 Montgomery Larry J. Wilkins, CPBE, CBNT, AMD <a href="mailto:larrywilkins@charter.net">larrywilkins@charter.net</a>
AZ	Lower Colorado River	138 Robert J. Russell, CSTE, CBNT <a href="mailto:robert.russell@sprint.com">robert.russell@sprint.com</a>
AZ	Phoenix	9 Rick R. Salsman, CPBE <a href="mailto:rsalsman@univision.net">rsalsman@univision.net</a>
AZ	Tucson	32 TBD
CA	Fresno	66 Patrick C. Fennacy, <a href="mailto:sbe66@hotmail.com">sbe66@hotmail.com</a>
CA	Inland Empire	131 Jerry L. Shorter, CSTE <a href="mailto:shortjl@dodmedia.osd.mil">shortjl@dodmedia.osd.mil</a>
CA	Los Angeles	47 James E. Sensenbach, CPBE <a href="mailto:jsensenbach@univisionradio.com">jsensenbach@univisionradio.com</a>
CA	Sacramento	43 Jack L. Davis, CPBE <a href="mailto:tvchief@engineer.com">tvchief@engineer.com</a>
CA	San Diego	36 Eric B. Schecter, CBRE <a href="mailto:eschecter@jpc.com">eschecter@jpc.com</a>
CA	San Francisco	40 Arthur Lebermann, CPBE <a href="mailto:artleb@earthlink.net">artleb@earthlink.net</a>
CO	Denver	48 James B. Schoedler, CBNT <a href="mailto:jschoedler@usa.net">jschoedler@usa.net</a>
CO	Grand Junction	81 Bill Frost, CSRE <a href="mailto:bill@datavix.com">bill@datavix.com</a>
CT	Connecticut Valley	14 Valley Scott A. Baron, <a href="mailto:engineer@worc.com">engineer@worc.com</a>
DC	District of Columbia	37 Thomas P. Shedlick, <a href="mailto:tom.shedlick@citicomm.com">tom.shedlick@citicomm.com</a>
FL	Central Florida	42 Frank Torbert, <a href="mailto:ftorbert@wkmg.com">ftorbert@wkmg.com</a>
FL	Jacksonville	7 James O. Biggers, CPBE <a href="mailto:jobtv4@aol.com">jobtv4@aol.com</a>
FL	Palm Beach	88 Gary A. Minker, <a href="mailto:gary@radioworksrfconsulting.com">gary@radioworksrfconsulting.com</a>
FL	South Florida	53 TBD
FL	Tampa Bay Area	39 Roswell D. Clark, CSRE, CBNT <a href="mailto:roz.clark@coxtampa.com">roz.clark@coxtampa.com</a>
GA	Atlanta	5 William P. Magliocco, CPBE, CBNT, 8-VSB <a href="mailto:wmagliocco@earthlink.net">wmagliocco@earthlink.net</a>
HI	Hawaii	63 TBD

IA	Des Moines	109	Gregg T. Richwine, CBTE <a href="mailto:gregg.richwine@whotv.com">gregg.richwine@whotv.com</a>
IA	Quad Cities	65	TBD
ID	Palouse Clearwater	117	Darryl D. McGlothen, CBNT <a href="mailto:darryl.mcg@klewvtv.com">darryl.mcg@klewvtv.com</a>
ID	Southern Idaho	115	Richard Kemp, <a href="mailto:rick-kemp@qwest.net">rick-kemp@qwest.net</a>
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IN	South Bend	30	David E. Gooding, CPBE <a href="mailto:dgooding@fox28.com">dgooding@fox28.com</a>
IN	Tri-State	121	Ben A. Davis, <a href="mailto:bdavis@regentevansville.com">bdavis@regentevansville.com</a>
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NC	Winston-Salem	84	TBA
NE	Holdrege	87	Laverne T. Killion, CPBE vkillion@alltel.net
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NM	Albuquerque	34	Michael F. Snyder, CPBE mike.snyder@citcomm.com
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NY	Binghamton	1	Thomas G. Siglin, tiglin@sigtomics.com
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SC	Charleston	107	TBA
SC	Columbia	101	David R. Tancig, CBTE, CBNT, 8-VSB, CTO, CRO speedysignal@yahoo.com

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WI	UW Oshkosh	80.1	Dale J. Schroeder (Student Chapter)
WI	Madison	24	Dennis C. Baldrige, CPBE, CBNT, AMD baldrige@mwt.net
WI	Milwaukee	28	Todd A. Boettcher, CPBE tboettcher@milwpc.com
WI	Western Wisconsin	112	Paul A. Orth, CBNT paulorth@clearchannel.com
WV	Mountain State	116	Noel W. Richardson, CSRE nrichardson@wvradio.com
WY	Wyoming	129	TBA

Is an update necessary to your chapter listing? Contact Scott Jones at [kjones@sbe.org](mailto:kjones@sbe.org)



**John 'Jack' M. Bushnell**  
**OKLAHOMA CITY, OKLA.**  
**1924-2008**  
*SBE Charter, Life Member*



# 2008 Leader-Skills Registration

**COURSE INFORMATION:** Each course includes three days (24 hours) of programming, all seminar materials, completion certificate and classroom refreshments. Class size is limited to a minimum of 10 and a maximum of 18 participants per course.

Name of Participant \_\_\_\_\_ E-mail: \_\_\_\_\_

Company: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Daytime Phone: \_\_\_\_\_

If someone other than the participant is filling out this form, please provide the following information:

Company Contact \_\_\_\_\_ Title: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

**COURSE**  Course I: Leadership – The Framework of People Skills, June 3-5, 2008 (Registration deadline: May 1, 2008)

**SELECTION:**  Course II: Leadership – Expanding Your People Skills, August 5-7, 2008 (Registration deadline: July 1, 2008)

Prerequisite: Course I, please list location and year: \_\_\_\_\_

Course I and Course II (Registration deadline: May 1, 2008)

**PAYMENT INFORMATION:** Registration for each course is \$500. Payment is required in advance via credit card or check (payable to SBE).

Total: \$ \_\_\_\_\_ by (check one):  Check  Visa  MasterCard  American Express

Credit Card No.: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Security Code: \_\_\_\_\_

Print Cardholder Name: \_\_\_\_\_ Signature: \_\_\_\_\_

**NOTE:** Cancellation, with no substitution, within 18 days of the seminar will result in forfeiture of full registration fee; a \$50 charge may be applied if cancellation, with no substitution, occurs more than 30 days from the seminar.

**HOUSING INFORMATION:** Reservations, if requested, will be made for you at the Embassy Inn Select Indianapolis Airport (site of the Leader-Skills Seminar) by the course organizers. Cost for accommodations is \$115 per night, plus tax.

Request Housing – Course I  No  Yes, please reserve (circle one) single / double Date Arriving: \_\_\_\_\_ Date Departing: \_\_\_\_\_

– Course II  No  Yes, please reserve (circle one) single / double Date Arriving: \_\_\_\_\_ Date Departing: \_\_\_\_\_

Room guarantee required (check one):  Visa  MasterCard  American Express

Credit Card No.: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Security Code: \_\_\_\_\_

Print Cardholder Name: \_\_\_\_\_ Signature: \_\_\_\_\_

If you have special needs, please specify: \_\_\_\_\_

**MAIL TO:** SBE Leader-Skills Series, Society of Broadcast Engineers, 9102 North Meridian Street, Suite 150, Indianapolis, IN 46260

**OR FAX TO:** (317) 846-9120

**QUESTIONS:** Holly Beek at [hbeek@sbe.org](mailto:hbeek@sbe.org) or (317) 846-9000

<b>OFFICE USE ONLY:</b>	Date Received: _____
Registration Confirmation: _____	
Hotel Confirmation: _____	

# Attend 2008 Leader Skills Series

**T**he deadline to register for the 2008 Leader Skills Series is quickly approaching. Register now to reserve your spot to gain valuable leadership skills this summer. By attending this popular seminar specifically created for broadcast engineers, you'll make your company better and become a better leader. "My leadership skills improved and now our department will excel," said Michael Linz, who attended Leader-Skills Courses I and II in June and August of 2007.

"Every aspect was beneficial and relevant," he said. Linz was one of 10 who attended the Leader-Skills Seminars in Indianapolis.

The Leader-Skills Series is in its 12th consecutive year with SBE. It is specifically designed for broadcast engineers who have or aspire to have management responsibilities.

Many of the most respected broadcast engineering managers in the country today are graduates of the program and continue to send members of their staffs to the seminars. "This is what I needed, and now my team will be on the front lines," said Benjamin Higley, who also attended Course I last June.

The Leader-Skills Seminars are designed to take technically proficient people and instill in them sound supervisory and management skills. "The series opened my eyes to a whole new way of looking at leadership and challenged me to act," explained Rich Parker, an attendee from 2006.

SBE offers the two-part series in cooperation with instructors Richard D. Cupka and Rodney Vandever. "Dick Cupka is one of the most influential people I have ever in my life had the pleasure to learn from. Rodney Vandever is also most excellent," said Linz. "I have never been so moved by a speaker and educator in my life."

Known for his unique style of teaching, Cupka has directed and taught the Leader-Skills seminars to broadcast engineering managers, supervisors and technicians for over 40 years. This summer is Cupka's last year instructing the Leader-Skills Seminars before he fully retires, then Vandever will continue on instructing the SBE series in future years.

This year, Course I, "Leadership – The Framework of People Skills" will be held June 3-5 at the Holiday Inn Select Airport in Indianapolis. It covers the function and nature of your leadership role; how to build stronger teams and effective internal cooperativeness; the complex differences of people; and discovery of your natural style of leading and how to nurture a developed style to help you adjust to different people in differing situations.

Course II, "Leadership – Expanding Your People Skills" picks up where Course I leaves off and will be offered from August 5-7. Each course is limited to a minimum of 10 and a maximum of 18 participants, so register early. "I wish I'd done this years ago, but I'm glad I finally did it," said Parker.

The cost of the registration is \$580, which includes three days of instruction, all course materials, a certificate of completion and classroom refreshments. All transportation, housing and meals are the responsibility of the participant. A single or double room can be reserved through SBE at the Holiday Inn Select Airport, where the course will be held, at a rate of \$115 per night.

Register now, as space is limited. Fax your registration to 317-846-9120 or mail it to 9102 N. Meridian St., Suite 150, Indianapolis, IN 46260. If you would like more information on the SBE Leader-Skills Series, please contact Holly Essex at (317) 846-9000 or hessex@sbe.org.

## ENNES

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Thomas Wimberly, Bakersfield, CA  
John Turner, Mountain Lakes, NJ  
John Batson, Birmingham, AL  
Robert Connelly, Riverton, WY

#### Robert Greenberg Scholarship

Russell Harbaugh, Southfield, MI  
Joel Saxberg, Arcadia, CA  
Ernest Sutton, Jr., Sweetwater, TN  
Frederick Ervin, Grove City, OH  
Milford Smith, Jr., Lawrenceville, NJ  
David Stewart, Dallas, TX  
Timothy Parish, Kennewick, WA  
Jules Cohen, Silver Spring, MD  
Rick Levy, Cambridge, MA

#### Youth Scholarship Scholarship

David Lamoreaux, Brecksville, OH  
J. Cole McClellan, Austin, TX  
Gary Faller, Winter Garden, FL  
Richard Barnes, Pasadena, MD  
David Stewart, Dallas, TX  
Stephanie Weil, New York, NY  
Timothy Parish, Kennewick, WA  
Kishore Persaud, Charlottesville, VA

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.

expeditiously as possible.

This decision is extremely good news. The BAS transition has not proceeded as quickly as we would like, despite good faith by licensees, Sprint Nextel, manufacturers and systems integrators. The short extension will give broadcasters, manufacturers, and Sprint Nextel the time they need to produce, integrate, and install new equipment in local markets across the country.

But neither the BAS licensees, nor Sprint Nextel can take the additional time for granted. The FCC has sought comment on whether and how to allow MSS and MSS ATC operations to commence nationwide regardless of whether the transition is complete beginning January 1, 2009. To allow mobile-satellite service licensees to enter the 2000-2020 MHz band this year, moreover, the FCC has required Sprint Nextel to transition four additional market clusters – Salt Lake City, Utah; Raleigh-Durham, North Carolina; Washington, DC; and Houston, Texas – no later than September 30, 2008. In addition, the FCC required Sprint Nextel to file station-specific reports every other month on BAS relocation progress beginning April 1, 2008. The reports must identify each station's

progress in obtaining price quotes for BAS equipment, finalizing frequency relocation agreements with Sprint Nextel, submitting purchase orders, and other areas. The existing schedule also includes several important benchmarks for BAS performance, including:

- March 18, 2008 – Quote Packages for Replacement BAS Equipment Due
- July 1, 2008 – Signed Frequency Relocation Agreements Due

With MSS market entry looming, nationwide MSS-BAS sharing on the horizon, and detailed reporting requirements beginning in April, every day counts.

The FCC now knows, thanks to the joint parties' ongoing and extensive lobbying efforts at the FCC, how challenging the BAS relocation is. The FCC has acknowledged the unanticipated complexity of the relocation effort, the highly specialized equipment, and the limited number of qualified manufacturers and installers. While the FCC has done the right thing in granting additional time, the agency's patience will not last forever. Therefore, we urge you to pay close attention to the cut-over schedule and make every effort to meet the interim benchmarks for relocation performance leading up to the anticipated relocation weekend in

your market. If problems arise, contact your market's frequency coordinator, SBE, and/or the local market's Sprint Nextel representative, before issues can contribute to delay. Working together, we will complete a smooth BAS relocation.



**Ben Allen, CBT** has joined Burk Technology as Applications Engineer. Prior to that Allen was with Equity Broadcasting of Little Rock.

**Larry Bornacelli, CBRE, CBNT** became the new Chief Engineer and IT Director for Northeast Broadcasting - WXRV-FM, WNYN-FM, WGAW-AM, WJOE-AM - in Haverhill, MA.

**Ralph Hogan, CPBE DRB CBNT**, is now Director of Engineering for KJZZ-FM and KBAQ-FM of Maricopa Community College in Tempe, Arizona. He was formerly Assistant General Manager, Engineering Services at Washington State University in Pullman.

*If you or someone you know moved, changed positions, or been honored in some way in the broadcast engineering industry, submit details to Member on the Move at [hesssex@sbe.org](mailto:hesssex@sbe.org) or to Attn Holly Essex, 9102 North Meridian St., Suite 150, Indianapolis, IN 46260*

# SBE Certification 2007 Exam Schedule

Dates	Location	Application Deadline
April 15, 2008	NAB	CLOSED
June 6-16, 2008	Local Chapters	April 18, 2008
August 8-18, 2008	Local Chapters	June 6, 2008
November 7-17, 2008	Local Chapters	September 19, 2008

\*\*Chapter 78 will be giving exams during the Virginia Regional, July 17, 2008. Please have your application into the National Office by June 26, 2008

**A: (B) A receiver with two intermediate frequency conversions**

ANSWER from page 4



# Annual Awards Nomination Form for 2007

**INSTRUCTIONS:** Use one form per nomination. Photocopy this form for additional nominations. Please include all pertinent information about your nomination, as well as yourself. Supply as much information as possible, as this will assist the Awards Committee in its nomination process. Nomination materials will be photographed for each judge; if you wish each judge to have an original of any of your support materials (such as resolutions, CEs or anything printed in full color), please send five sets. Nominations may be disqualified if requested support material is not provided.

**DELIVERANCES:** Mail completed entries to: The Institute of Electrical Engineers, Inc., Awards Branch Committee, 1000 North 17th Street, Suite 150, Indianapolis, IN 46204. For questions concerning nominations, contact Megan L. Clapp, Classification Director, at [mclapp@ieee.org](mailto:mclapp@ieee.org) or (317) 246-9000 or Lucy Wilton, Awards Committee Chair, at [lucy.wilton@ieee.org](mailto:lucy.wilton@ieee.org) or (317) 246-9004.

**DEADLINES:** Nominate entries received by the National IEEE office by May 31, 2007. Winners will be announced in July and awards presented October 15, 2007, at the 2007 Awards Dinner.

Along with the 2007 National Meeting, being held in conjunction with the Washington State Convention in Bellevue, WA.

**OFFICIAL RULES:** Nominations valid only for achievements occurring from Jan. 1, 2007 through Dec. 31, 2007. Only active IEEE Members and Chapters in good standing (having reported at least five (5) chapter meetings for 2007) are eligible for awards. These awards are distributed using the random draw process as of Dec. 31, 2007, as the drawing line between Class A (less than the median) and Class B (greater than the median). The discretion of the judges is final.

## CHAPTER AWARDS

### BEST ANNUAL CONVENTION OR CONFERENCE:

Recognizes the effort of the local chapter that sponsored, organized and held a regional technical conference or other convention that had far-reaching goals and objectives of the Society. **INCLUDE:** A) Conference Location/Date; B) Conference Coordinator(s); C) Conference brochure or hotel written description.

**BEST CHAPTER NEWSLETTER:** Recognizes one local chapter that provides the best locally published newsletter in its class, providing up-to-date and relevant information about the chapter in a graphically pleasing and effectively annual manner. Chapters must exercise full control over its content, writing and site. **INCLUDE:** A) Newsletter Name; B) Newsletter Editor; C) Description of how it is produced, including list of contributors; D) Three (3) samples of 2007-published issues.

**BEST INTERACTIVE CHAPTER:** Recognizes the local chapter that most actively attempted inter-connections with organizations in industries related to the Electrical Engineering profession (example: IEEE, IFA, IEEE, etc.). **INCLUDE:** A) Interacting Organizations; B) Date/Description of common events; C) Program announcements, attendance sheets or other evidence of common meetings/events between your chapter and associated groups.

**BEST CHAPTER FREQUENCY COORDINATION EFFORT:** Recognizes one local chapter that sponsored the greatest and most effective effort toward frequency coordination in its market, service area and class. **INCLUDE:** A) Frequency Co-ordinator(s); B) Evidence (CE, link or printout); C) Written description.

**BEST CHAPTER WEBSITE:** Recognizes the local chapter with a website providing up-to-date information about the chapter, including officers and meetings; making effective and creative use of graphics; providing links to the IEEE National website; and effectively representing the chapter and IEEE. **INCLUDE:** A) Website address; B) Webmaster.

**BEST DISTINGUISHED CHAPTER, HIGHEST MEMBER ATTENDANCE, and GREATEST GROWTH IN NEW MEMBERS:** These three awards are distributed with statistical information based on Dec. 31, 2007, figures on file at the IEEE National Office. Chapters established in 1947 are not eligible for the Greatest Growth in New Members award.

\*AWARDS COMPATIBLE WITH YOUR CLASS AWARD

## INDIVIDUAL AWARDS

**BROADCAST ENGINEER OF THE YEAR:** Recognizes the IEEE Member who has made the greatest contribution to the broadcasting industry and to furthering the goals and objectives of the Society. **INCLUDE:** A) City and state; B) Current employer; C) Detailed written description of contribution; D) Member profile (if possible).

**BROADCASTER OF THE YEAR:** Recognizes the IEEE Member who is dedicated to the education of broadcast engineers through personal writings, teachings, programs and employment and who furthers the goals and objectives of the Society. **INCLUDE:** A) City and state; B) Current employer; C) Detailed written description of contribution; D) Bio-fer profile (if possible).

**TECHNOLOGY AWARD:** Recognizes the IEEE technical or practicing member who has provided the industry with the best new or innovative technical item or idea to further the interests of broadcast engineering and to merit for broadcast engineer to be more productive in the craft. Only items that have been shown with others in the industry are eligible. **INCLUDE:** A) Technology Number; B) City and state; C) Written description.

**BEST TECHNICAL ARTICLE, BOOK OR PROGRAM BY AN IEEE MEMBER:** Recognizes the author of the best technical article, book or paper in its contribution towards the increase of scientific, operational, artistic or technical knowledge in the broadcast engineering industry. **INCLUDE:** A) Title of book/article/program; B) City and state; C) Copy of article, book outline or program paper.

**BEST ARTICLE, PAPER OR PROGRAM BY A STUDENT MEMBER:** Recognizes the IEEE Student Member who has shown excellence in the presentation of a technical, operational or scientific paper published in an IEEE or other national or industry-related publication; or program presented at a local chapter meeting, national/regional convention or broadcast engineering-related class. **INCLUDE:** A) Title of article/paper/program; B) School attended, city and state; C) Copy of article, book outline or program paper.

**IEEE LIFETIME ACHIEVEMENT AWARDS:** Recognizes and pays tribute to individuals for their dedication, lifelong achievement and outstanding contributions to the broadcast industry. Nominees must be IEEE members in good standing and have been active for 40 years or more in the broadcast engineering industry or a closely allied field that benefits broadcast engineering. Nominations must come from IEEE members in good standing, and will include the endorsement of three other IEEE members in good standing. **INCLUDE:** A) City and state; B) Current employer (if applicable); C) Career biography; D) Detailed written description of contributions.

**OFFICIAL RULE FOR LIFETIME ACHIEVEMENT AWARDS:** Nominations for this award can be made at any time, but no more than one accepted will be named in a given year. Awards are distributed by a 50/50 random draw of the IEEE Board of Directors, based upon recommendations made by the IEEE Awards Committee.

## COMPLETE THE FOLLOWING INFORMATION

**AWARD:** \_\_\_\_\_

**NO MINORATION (CHAPTER OR INDIVIDUAL NAME):** \_\_\_\_\_

**SUPPORT ITEM A:** \_\_\_\_\_

**ITEM B:** \_\_\_\_\_

**ITEMS C & D:** Please submit descriptions on a separate sheet; other items requested may be originals or photocopies.

I, \_\_\_\_\_, respectfully submit the above nomination for consideration by the National IEEE Awards Committee.

Daytime Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_ Chapter Name and No. \_\_\_\_\_

Address: \_\_\_\_\_ City/State/Zip: \_\_\_\_\_ Date Submitted: \_\_\_\_\_

**Silver Members, those with at least 25 years of membership, are highlighted with a silver box**  
**New Members are listed in blue**

**ADC Telecommunications Inc.**•1998  
Anne-Marie Gunderson  
(952) 917-3072  
End to End Connectivity Solutions

**Advanced Test Equipment Rentals**•2006  
Martin Jahn  
(800) 404-2832  
Test and Measurement Equipment Rentals

**Ai**•1995  
Mark Polovick  
(607) 215-0653  
UHF TV Broadcast Transmitters

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

**Anixter**•2005  
David Ste-Marie  
(800) 995-6158  
Audio/Video Cable & Interconnect Products

**Anton/Bauer Inc.**•2004  
Paul Dudeck  
(203) 929-1100  
Battery Solutions for ENG

**Audemat-Aztec Inc.**•2000  
Sophie Lion Poulain  
(305) 249-3110  
RDS Generator, Metering, Monitoring, Remote Control Manufacturer

**Autodesk**•1998  
Christina Shackleton  
(212) 338-3888  
Digital Content Creation Software

**AXCERA**•1983  
Mike Rosso  
(800) 215-2614 ext. 101  
Television Transmitters & Exciters

**Belden Electronic Division**•1991  
George Stillabower  
(765) 983-5200  
Cable and Connectivity

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

**Broadcast Electronics, Inc.**•1978  
Ray Miklius - Studio Products  
Tim Bealor - 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  
Russell Murphy - East  
Jim Kubit - West  
(540) 932-3660, (805) 581-4566, (800) 669-9667  
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  
One Stop Broadcast Store

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

**Chyron Corp.**•1992  
Carol Keane  
(631) 845-2031  
HD/SD Character Generators & MOS

**Clark Wire & Cable**•1991  
Shane Collins  
(800) 222-5348  
Audio, Video and Remote Camera Cables

**COMET North America**•2005  
Steve Claterbaugh  
(214) 235-6596  
Capacitors, Variable & Fixed

**Comrex Corporation**•1997  
Chris Crump  
(978) 784-1776  
Remote Audio Broadcast Equipment

**Comsearch**•2004  
Tim Hardy  
(703) 726-5651  
Frequency Coordination Services, Continental Electronics

**Continental Electronics Corporation**•1976  
Michael Troje  
(214) 381-7161, (800) 733-5011  
AM & FM IBCO Transmitters

**Crispin Corporation**•2006  
Brian Gleason  
(919) 845-7744  
Broadcast Automation Solutions

**Dataworld**•1998  
John T. Neff  
(800) 368-5754  
Coverage Maps and Services

**Dialight Corporation**•2006  
Doug Woehler  
(732) 991-2837  
Obstruction Lighting, L.E.D. Based

**Dielectric Communications**•1995  
Jay S. Martin  
(207) 655-4555  
TV & FM Broadcast Products

**Digital Alert Systems, LLC**•2005  
Bruce Robertson  
(520) 488-8667  
IP Based EAS ENDEC

**DiskStream Incorporated**•2006  
Rein Taul  
(519) 579-8166, ext. 57  
Capsa USA Archive

**DMT USA, Inc.**•2003  
Tom Newman  
(856) 423-0010  
Television Transmitters, Translators and Antennas

**DSC Laboratories**•2002  
Michael Kent  
(905) 673-3211  
Test Charts & Illuminators

**DTVinteractive**•2007  
Jennifer Jang  
(+82) (0) 2-3446-2040  
Test & Measurement Solution Provider

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

**DYMO Corporation**•2006  
Robert Garvey  
(717) 342-8090  
RHINO Professional Labeling Products

**e2v technologies Inc.**•1997  
Rick Bossert  
(800) 433-8269, (800) 342-5338  
Klystrons, MSDC IOTs, IOTs, Satcom Amps, TWTs

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

**Electrack Enclosure Products**•2008  
Todd Schneider  
(714) 776-5420  
Racks, Enclosures, Power, Accessories

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

**Environmental Technology Inc.**•1997  
John Cahill  
(800) 234-4239, ext. 229  
Dehydrators, Deicing Sensor & Controls for Broadcast/FM and Satellite Antennas

**Environmental Technology Inc.**•1997  
John Cahill  
(800) 234-4239, ext. 229  
Dehydrators, Deicing Sensor & Controls for Broadcast/FM and Satellite Antennas

**Environmental Technology Inc.**•1997  
John Cahill  
(800) 234-4239, ext. 229  
Dehydrators, Deicing Sensor & Controls for Broadcast/FM and Satellite Antennas

**ERI - Electronics Research**•1990  
David White  
(812) 925-6000  
Antennas, Towers, Filters, Combiners

**ETS-Lindgren/Holiday EMF Measurement**•2003  
Dave Seabury  
(908) 876-5042  
RF Safety Instrumentation

**Excelsior College**•2007  
Andre Adams  
(518) 464-8777  
Distance Education Degree Programs

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

**Freeland Products**•1997  
Joel Freeland  
(800) 624-7626  
Rebuilt Power Tubes

**Frontline Communications Corp.**•2000  
Doug McKay  
(727) 573-0400, ext. 120  
Broadcast/Command/HLS Vehicles

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

**Gepco International, Inc.**•1995  
Ken Bernd  
(847) 795-9555  
Audio, Video Cable Products

**Google Inc.**•2005  
Scott Bodgan  
(949) 791-1200  
SS32, Maestro, ASP Solutions

**Harris Corporation, Broadcast Communications Division**•1977  
Joe Mack (TV), Chris Pannell (Radio), Bob Duncan (Software)  
(513) 459-3406, (406) 556-0280, (719) 439-0130  
Broadcast Equipment & Services

**HD World**•2006  
Michael Driscoll  
(203) 371-6322  
HD World Conference & Exposition (Oct. 10-11, 2007, New York)

**Holbrook Enterprises, Inc.**•2006  
Heywood Bagley  
(208) 468-8797  
WireCAD - Serious design tools

**Image Video**•1997  
Dave Russell  
(416) 750-8872 ext. 230  
Under Monitor Tally Display Systems, Monitor Walls, Signal Alarm Systems

**JDSU**•2007  
Jeff Reynolds  
(919) 338-5061

**Joseph Electronics Inc.**•2003  
Yohay Hahamy  
(847) 501-1584  
Broadcasters One-Stop Supplier

**Kathrein Inc., Scala Division**•1985  
Michael Wm. Bach or Mike Johnson  
(541) 779-6500  
Antennas for Broadcasting & Communications

**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

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

**LEA International**•2004  
Carol Rassier  
(208) 762-6121  
Power Quality Products & Services

**Lincoln Financial Media**•2007  
Don Shaw  
704-374-3639  
Media, Communications

**Lincoln Financial Media**•2007  
Don Shaw  
704-374-3639  
Media, Communications

**Lincoln Financial Media**•2007  
Don Shaw  
704-374-3639  
Media, Communications

**LP Technologies, Inc.**•2006  
Samuel Lee  
(316) 816-9696  
Spectrum Analyzers

**LYNX Technik**•2007  
Steve Russel  
(661) 251-8600  
Broadcast Terminal Equip

**Mackay Communication**•2002  
Patrick Fisher  
(919) 850-3164  
Satellite Communications Equipment & Airtime

**Markertek Video Supply**•2002  
Tom Moretti  
(845) 246-3036  
Audio, Video, Audio Visual Broadcast Supply

**Maxell Corporation of America**•1991  
Patricia Byrne  
(201) 794-5900  
Broadcast Video Products

**Micro Communications, Inc.**•1998  
Frank Malanga  
(603) 624-4351, (800) 545-0608  
TV & FM Antennas & RF Components

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

**Microwave Filter Company, Inc.**•2003  
Sherry Bell  
(513) 438-4700  
Passive Electronic Filters

**Microwave Radio Communications**•1991  
Nadine Frechette  
(978) 671-5700  
Video Microwave Systems

**Microwave Service Corporation**•1997  
Warren J. Parece  
(978) 556-0970  
Microwave Equipment Rentals/Sales/Service

**Middle Atlantic Products**•2005  
David Amoscatto  
(973) 839-1011, ext. 1197  
Enclosures, Power, Accessories, Furniture

**Minkin Design Inc.**•2005  
Jay Minkin  
(206) 250-7481  
System Integration/Design/Documentation

**Mohawk**•1995  
Jamie Silva  
(800) 422-9961  
Wire and Cable

**Morrow Technologies, Inc.**•2002  
Tish Boyles  
(727) 531-4000  
Spectrum Analyzers

**Moseley Associates, Inc.**•1977  
Dave Chancey  
(805) 968-9621  
RF & TI STLs

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

**National Football League**•1999  
Jay Gerber  
Game Day Coordination Operations

**Nautel, Inc.**•2002  
Wendell Lonergan  
(207) 947-8200  
Radio Broadcast Transmitter Manufacturer

**Neural Audio**•2006  
Mark Seigle  
Surround Sound Technologies

**Nott Ltd.**•2002  
Ron Nott  
(505) 327-5646  
Folded Unipole Antennas; Detune Systems; Lightning Prevention

**Noctum, Inc.**•1996  
John Dulany  
(908) 852-3700  
Digital Microwave Transmission Equipment

**Noctum, Inc.**•1996  
John Dulany  
(908) 852-3700  
Digital Microwave Transmission Equipment

**Noctum, Inc.**•1996  
John Dulany  
(908) 852-3700  
Digital Microwave Transmission Equipment

**NVISION, Inc.**•1997  
Doug Buterbaugh  
(530) 265-1000  
Routers, Master Control & Terminal Equipment

**Oldcastle Precast, Inc.**•2006  
Douglas Domas  
(678) 371-8315  
Precast Buildings/General Construction/Program Management

**OMT Technologies Inc.**•2001  
Ron Paley  
(888) 665-0501  
Automation, Skimming/Logging Software

**Panasonic Broadcast & Digital Systems Company**•1985  
Tom Moore  
(201) 392-6176  
Professional Broadcast Equipment

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

**PESA Switching Systems, Inc.**•1997  
Robert McAlpine  
(800) 328-1008  
Routing Switcher Manufacturer

**Pike & Fischer**•1991  
Andy Myers  
(800) 255-8131, ext. 234  
FCC Rules & Regulation

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

**Pro-Bel**•2002  
Terry Barnham  
(631) 549-5159  
Automation, Routing & Infrastructure

**Propagation Systems, Inc.(PSI)**•2005  
Doug Ross  
(814) 472-5540  
Quality Broadcast Antenna Systems

**Prophet Systems Innovations**•2003  
John Gager  
(308) 284-3007  
Audio and Video Content Management

**ProVideo Systems, Inc.**•2000  
Dave Goldsmith  
(419) 874-2850  
Sales, Consulting, Design & Integration

**Pulsecom**•2003  
Stan Bailey  
(630) 961-3253  
Telco Broadband Audio Transmission

**Quintech Electronics and Communications Inc.**•2002  
Richard E. Bush  
(724) 349-1412  
RF Signal Management

**Radian Communication Services Inc.**•1986  
John McKay  
(866) 4-RADIAN  
Towers, Antennas, TV Transmitter Installation

**RDL**•2004  
John Gatts  
(928) 778-9678, ext. 111  
Audio, Video, Control & Test Equipment Manufacturer

**RF Central, LLC**•2005  
Jeff Winemiller  
(717) 249-4900, ext. 222  
Digital Wireless Microwave Equipment

**Richardson Electronics**•1987  
Chris Chinchilla  
(800) 348-5580  
Power Grid Tubes

**Richland Towers**•2001  
David Denton  
(813) 286-4140, ext. 6872  
Tower Owner/Management

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

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

**Ross Video Ltd.**•2000  
Burt Young  
(613) 726-4886  
Manufacturer, Television Broadcast Equipment

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

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

**Secore, Inc.**•2005  
Jeff Murray  
(800) 736-2673  
Audio/Video Test Equipment

**Shively Labs**•1996  
David Allen  
(207) 647-3327 or 888-SHIVELY  
FM Antennas & Combiners

**SignaSys**•2005  
Jeff Wolter  
(408) 350-7210  
Integration, Support, Training

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

**Stainless LLC/Doty-Moore**•2004  
Les Kutasi  
(215) 631-1313  
Tower Engineering/Tower Service

**Stantron/APW**•2006  
Jay McGrath  
(518) 731-7447  
Equipment Racks

**Stratos Global Corporation**•2006  
Folef Hooft Graafland (Eastern USA), Chris Mott (Western USA)  
(888) 766-1313 (USA)  
(709) 748-4233 (Rest of World)  
Streaming & Voice via Satellite

**Strobe Tech, LLC**•2008  
Wes Pimentel  
(931) 648-8414  
Tower Lighting Experts

**Sundance Digital, Inc.**•2004  
Steve Krant  
(972) 444-8442  
Broadcast Automation Solutions

**Superior Broadcast Products**•1999  
Benny Springer  
(800) 695-7919  
Vacuum Tube & Solid State Transmitters

**Superior Electric**•1995  
Michael J. Miga  
(860) 585-4552, (800) 787-3532  
Power Protection Equipment

**Sutro Tower, Inc.**•1989  
Gene Zastrow  
(415) 681-8850  
Broadcast Tower Leasing

**Switchcraft, Inc.**•1995  
Jim Hoffman  
(773) 792-2700  
Electronic/Electromechanic Components

**Telex Communications, Inc.**•1992  
Murray Porteous  
(818) 566-6700  
Intercom Systems, Microphones, Headsets

**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 Licensing Services

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

**Thomson Broadcast & Media Solutions**•2000  
William Powers  
(404) 929-5007  
TV/Film Production & Broadcast Professionals

**Tieline Technology**•2003  
Kevin Webb  
(888) 211-6989  
POTS, ISDN Codex & Audio/Video Products

**Total RF Marketing**•2001  
Tom Sharkoski  
(215) 633-1000  
Wireless Broadcasting Equipment Rental

**Trilithic, Inc.**•2007  
Art Leisley  
(317) 895-3600  
EAS ENDEC Equipment

**Thomson Broadcast & Media Solutions**•2000  
William Powers  
(404) 929-5007  
TV/Film Production & Broadcast Professionals

**Tieline Technology**•2003  
Kevin Webb  
(888) 211-6989  
POTS, ISDN Codex & Audio/Video Products

**Total RF Marketing**•2001  
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EAS ENDEC Equipment

**Troll Systems, Inc.**•2006  
Brian Goldberg  
(661) 702-8900  
Broadcast Control Systems

**TRON-Tek, Inc.**•1993  
W.M. (Bill) Grass  
(888) 819-4877  
Part 74 Video Links

**Turner Broadcasting/CNN**•2007  
Brad Ramer  
(404) 827-5020  
Television Engineering Services

**Unimar, Inc.**•2001  
Michael A. Marley  
(315) 699-4400, (800) 739-9169  
Tower Obstruction Lighting Designer, Manufacturer, Distributor

**TV Magic**•2008  
Eva Langer  
(858) 650-3155  
Broadcast Systems Integrator

**VALCOM**•1996  
Bill Burtenshaw  
(519) 824-3220  
AM/FM Broadcasting Antennas

**VCI Solutions**•2007  
Kristin Garini  
(413) 272-7200  
Broadcast Traffic & Automation Solutions

**Venture Technologies Group, LLC**•2006  
Larry Rogow  
(323) 965-5400  
Television Stations

**V-Soft Communications**•2002  
Adam Puls  
(319) 266-8402  
Broadcast Engineering Software & Consulting

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

**Wire Wizards Integration**•2007  
Mr. Mark Guidire  
(619) 992-0549  
Reliable Specialized Installation Technicians

**Wireless Infrastructure Services**•2006  
Mr. Travis Donahue  
(951) 371-4900  
Broadcast System Integration Services

**Wohler Technologies Inc.**•2004  
Milton Garcia  
(510) 870-0810  
In-Rack Audio & Video Monitoring

**WSI Lighting**•2008  
Randy Doremus  
(800) 783-1450  
Lighting Distributor/Obstruction Lighting

**Wydong Enterprises Inc.**•2005  
Rodney Wysong  
(423) 325-6900  
Helicopter E.N.G. Solutions

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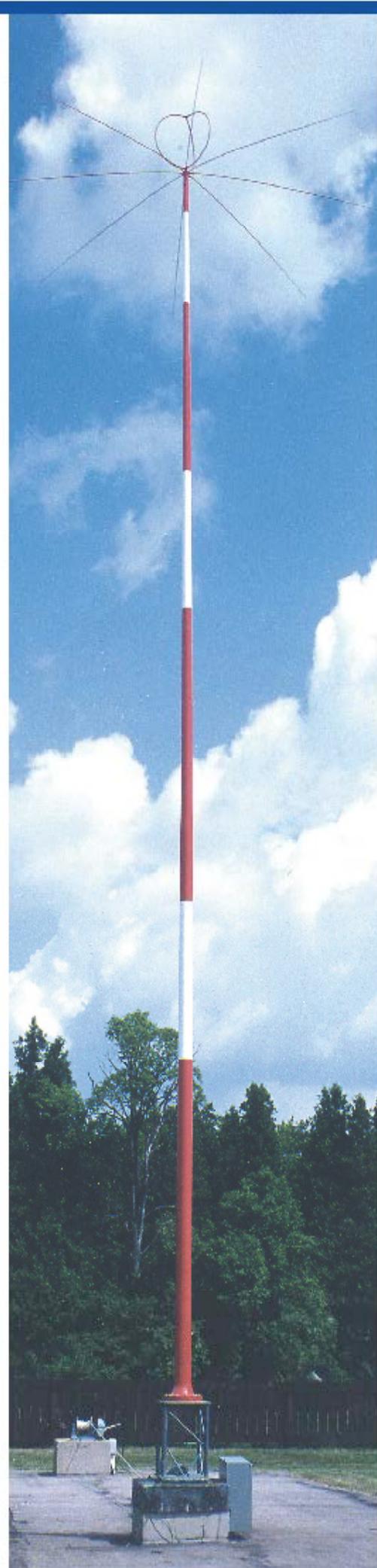
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## **Free Standing AM Broadcasting Antenna**

### **FCC Media Bureau Adopts Simplified Application Procedures for AM Nondirectional Valcom Antennas**

By this Public Notice, the Media Bureau ("Bureau") announces simplified procedures for AM station construction permit applications which specify Valcom antennas. Based on its review of the Valcom field tests and internal reports submitted to the Commission for evaluation, the Bureau announces that it will not routinely require the submission of a proof of performance, current distribution measurements, or a formula for the vertical plane radiation characteristic for nondirectional AM facilities which utilize these antennas.

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