



# The Society of Broadcast Engineers

**Fox Valley Wisconsin SBE Chapter 80 PO Box 1519  
Appleton, WI 54912-1519**

**November 2016**

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Our next SBE Chapter 80 meeting will be noon Tuesday November 15<sup>th</sup> at the Out of Town Club. Our speaker will be Eric Reese from Sennheiser. Our program will be "FCC Spectrum changes" as well as some Tips and Tricks for using wireless moving forward.

Friends and Members of Chapter 80,

The Broadcasters Clinic seems like a distant memory; our next chapter meeting is right around the corner next week Tuesday the 15<sup>th</sup> at the Out O' Town Club in Kaukauna. Eric Reese from Sennheiser is scheduled to be our presenter. And speaking of Broadcasters Clinic, wasn't that a great clinic this year? They are always good, but this year's topics and speakers seemed more relevant than ever. Add the chance to see fellow engineers from around the Midwest and all the good food - the WBA and SBE went all out for the 60<sup>th</sup> anniversary Clinic!

Coming up in January 2017, SBE will begin a new 8-part Webinar series called "RF 101", presented by Dennis Baldrige, CPBE, 8-VSB, AMD, DRB, CBNT. The Webinar is designed to target engineers with a background in IT, electronics technicians and military veterans interested in or new to broadcast engineering. Experienced engineers can also take advantage of this opportunity to brush-up on RF basics. Everyone is welcome to attend. The first part begins Thursday, January 26 at 1:00 PM Central Time. Registration opens later in November.

Please plan to join your fellow Chapter 80 engineers for lunch and the program on Tuesday!

Mark Hoenecke

## **Upcoming Chapter 80 Programs**

Tuesday November 15<sup>th</sup>: Eric Reese, Sennheiser

December Annual Christmas party

## CHAPTER 80 ELECTED AND APPOINTED OFFICERS

Chairman	Mark Hoenecke	WPT	715-845-1319	Mark.Hoenecke@ecb.org
Vice Chairman	Stu Muck	Muck Broadcast Services	920-960-0045	mbsfdl@yahoo.com
Past Chairman	Steve Konopka	WPNE TV/FM	920-336-3541	skonopka@ecb.orgn
Treasurer	Steve Brown	WHBY WAPL WKSZ WZOR	920-733-6639	sbrown@wcinet.com
Secretary	Bill Moede			
Program Chairman	John Pfankuch	Heartland Video Systems	920-893-0204	jpfankuch@hvs-inc.com
Membership Chairman	Mark Friedman	WPNE TV/FM	920-336-3541	mfriedman@ecb.org
Sustaining Membership	Stu Muck	Muck Broadcast services	920-960-0045	<a href="mailto:MBSFDL@yahoo.com">MBSFDL@yahoo.com</a>
Frequency Coord. < 1 GHz	Tim Laes	WGEE WIXX WNCY WROE	920-435-3771	tlaes@new.rr.com
Frequency Coord. > 1 GHz	Bill Hubbard	UW Green Bay	920-465-2510	hubbardw@uwgb.edu
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Chapter 80 Webmaster	Mike Steele	WHBY	920-831-5605	msteele@wcinet.com
EAS Coordinator	Steve Konopka	WPNE TV/FM	920-336-3541	skonopka@ecb.org
Board of Dirs/SBE Liaison	Keith Kintner	UWO	920-424-7357	<a href="mailto:kintner@uwosh.edu">kintner@uwosh.edu</a>

### IP Network Security Part 2 is November 15

Wayne Pecena, CPBE, 8-VSB, AMD, DRB, CBNE, will present [IP Network Security, Part 2](#), a live SBE webinar, on Tuesday, Nov. 15, from 2 to 3:30 p.m. ET.

As broadcast station IP networks have grown and become an integral part of the broadcast technical plant, so has the security threats grown such that network security is an ongoing essential task for the broadcast engineer with IT responsibilities. Network security is an on-going IT process and should never be considered a one-time, "setup and forget" process.

This webinar will build on the security foundation principals presented in part 1 by focusing on verification of a secure network environment by use of network penetration tools. Practical penetration test examples utilizing public domain tools such as nmap and the zenmap GUI will be presented. The presentation will include:

Brief Review of IP Network Security Fundamentals - Part 1 Takeaways

What Makes a Secure Network?

Verification of Network Security & Introduction to Penetration Testing

- Understanding IP port function

- Introduction to nmap

- Introduction to zenmap GUI

- Penetration exploration examples

Reference Resources

Conclusion, Takeaways, & Questions

At the conclusion of this webinar, you will have a fundamental understanding of network penetration testing to verify security parameters to insure a secure infrastructure.



Completion of the SBE webinar "IP Network Security, Part 1" is not required to take Part 2. The completion of this webinar from Webinars by SBE qualifies for 1 credit, identified under Category I of the Recertification Schedule for SBE Certifications.

[Register online at the SBE website for the webinar.](#) The cost for members of SBE is \$55. The cost for non-members is \$85.

Wayne Pecena is the assistant director of educational broadcast services in the Office of Information Technology at Texas A&M University. In this position, he serves as the director of engineering of TTVN: The Enterprise Video Conference and Data Network serving the Texas A&M University system and public broadcast stations KAMU-TV and KAMU-FM serving the Brazos Valley area. He has more than 35 years of broadcast telecommunications experience and holds BS and MS degrees from Texas A&M University.

[More >](#)

## "Holiday Sale" on SBE Webinars

Beginning Nov. 15, SBE members will be able to access many of the on-demand webinars for 20% off the regular registration price. The sale will run through Jan. 2. The "on-demand" webinars are archived versions of live webinars presented over the past several years. Topics vary and include programs on radio and television engineering, IT and IP technology for broadcasters, RF safety and others.

To access the SBE webinars, go to the [SBE website](#), click on the Education tab, SBE Webinars and then the SBE On-demand Webinars page. You can access them 24/7.

More >

**On To Stage Three** On October 12, the second stage's reverse auction ended after 53 rounds with a total proposed payout of \$56,543,032,836 to broadcasters for their spectrum, which was \$31.83 billion less than the amount of \$88.35 billion the broadcasters were offered in the first stage. The forward auction started and ended on October 19 after only one round with the wireless bidders only offering \$21,519,907,210 which was \$0.93 billion less than the \$22.45 billion they offered to the FCC in the first stage. Stage three started on November 1 with a new reverse auction. The FCC is seeking 108 MHz from broadcasters and after subtracting the needed spectrum for guard bands, the FCC will offer 80 MHz to the wireless bidders.

There was one round on November 1st with the reverse auction going to two rounds a day on November 2nd and ending on November 4. On the start of the new week on November 7, the reverse auction went to three rounds a day. The reverse auction will not be held on Friday, November 11 because of Veterans Day, but will continue until Round 53, unless enough stations drop out and the FCC meets the number of remaining stations it needs to clear the spectrum.

The forward auction should start in the beginning of December. If wireless bidders do not meet the amount that the TV broadcasters are offered, the auction will go to stage 4 which is for 84 MHz with 70 MHz going to the wireless providers to be bid on. This is the stage where many believe that the bidding will turn serious and the direction of the outcome of the auction may start to be known. Information on the current stage can be found at (<https://auctiondata.fcc.gov/public/projects/1000>).

Totals for the reverse auction will not be released until after the last round. Forward auction totals are posted as each round ends. (Tom Smith SBE24)

## WBA and the WBA Foundation offer programs for engineers

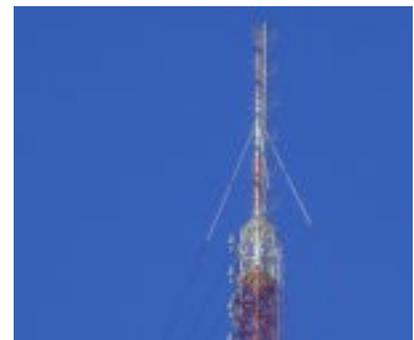


### Engineering Fellowship Grant Program

The WBA and the WBA Foundation appreciate those who committed to broadcast engineering as a profession. They realize that all broadcast engineers must stay current in broadcast engineering knowledge, skills, practices and technologies, and that it involves an investment of time and money.

As the broadcast industry evolves, so must our understanding of how to implement new media transmission. Unfortunately, busy schedules and tight budgets for most engineering departments often do not allow engineers to learn new skills and grow their understanding of new technology.

The WBA and the WBA Foundation would like to provide a possible solution by offering Engineering



*By Alvimann on Morguefile*

Fellowship Grants. This program is meant to provide a stipend for continuing education in broadcast engineering for senior broadcast engineers currently serving Wisconsin member stations. Senior broadcast engineers who are interested must apply directly to the WBA. The WBA Foundation will award five \$1,000 grants statewide. These grants are to be used for continuing engineering education in courses such as information technology/networking, engineering leadership/management, electrical engineering/transmission, and other new technology training. The grants are NOT to be used to attend trade shows. They are intended for enrollment in continuing education courses, post-secondary education courses, or factory training on broadcast equipment. The grants may be used to attend such courses. Grant recipients will be expected to provide the WBA with an after-event report on the use of the grant.

\* \* \* \* \*

### **One grant awarded**

### **Get your application in today!**

Congratulations to Britny Williams from Wisconsin Public Radio. Britny is into a more behind-the-scenes engineering roll and will be putting a grant toward an associate degree in electrical engineering.

“Britny has it all: Drive, ability, enthusiasm, logic, creativity, and a willingness to try,” said Steve Johnston, WPR Director of Engineering and Operations. “I’ve mentored and supervised her at WPR as she moved through promotions from part-time student employee to a full-time recording engineer, and now a full-time broadcast engineer. A true ‘can-do’ spirit pervades everything she does. And perhaps particularly appropriate to a young person in our field, she cares about where the industry is headed and wants to do her part to serve the listeners in the long term.”

**For more information on both of these valuable and timely initiatives, visit the WBA’s Website at [www.wi-broadcasters.org](http://www.wi-broadcasters.org) or contact WBA Vice President Linda Baun at 800-236-1922 or [lbaun@wi-broadcasters.org](mailto:lbaun@wi-broadcasters.org)**

Broadcaster Clinic 2016 (pictures courtesy of WBA)



# Certification News

## 2016 - 2017 Exam Schedule

### Exam Dates Location Application Deadline (to SBE National Office)

February 3-13, 2017 Local Chapters December 31, 2016  
April 25, 2017 NAB Show (Las Vegas) March 17, 2017  
June 2-12, 2017 Local Chapters April 21, 2017  
August 4-14, 2017 Local Chapters June 5, 2017  
November 3-13, 2017 Local Chapters September 25, 2017

## **The Certified Radio Operator (CRO) Certification and Certification Handbook for Radio Operators, 2nd Ed. (from *sbe.org*)**

In the early 1980's, and as part of their deregulation process, the Federal Communications Commission (FCC) abolished the mandatory requirement for Radio Station Operators and Engineers to hold an FCC license of any class. That left the industry without a tool for measuring a perspective employee's proficiency in station operations. Since that time the Society of Broadcast Engineer's certification program has become the industry's benchmark standard for gauging an individual's knowledge, skills, and abilities required for the operation of a broadcast station.

This handbook helps operators learn more about the technical and business facets of a radio station. Its broad-scope contents are extremely helpful to seasoned professionals as well as anyone who is new to the radio station business. The book covers the general responsibilities of a radio operator including professional etiquette, management structure, station operations, FCC rules, and a typical radio station technical layout. Topics include various types of microphones and their use, digital audio mixing devices, audio processors, equalizers, electronic audio routing, computerized recording and playback systems, program-audio delay equipment, telephone-interface equipment, studio to transmitter (STL) links, transmitter remote control and monitoring methods, and satellite program delivery systems. The book refers to many of the digital technologies used in broadcasting. Other chapters cover station logs, the Emergency Alert System (EAS), safety requirements, meter reading procedures, and station identification requirements and procedures. A comprehensive glossary is included as a quick reference guide. A thorough study of this book will prepare the reader for the SBE Radio Operator certification test.

Successful completion of the test assures any perspective radio station employer of your knowledge and skills required to become a Radio Station Operator. You may order the operator handbooks from the SBE Bookstore. Once you have completed studying a handbook, you may fill in the application for certification included in the back of the handbook. You have one year from the purchase date of the handbook to take the exam, and your deadline will be clearly stamped on the application.

These exams are given by a special designated proctor or a local SBE chapter. Membership in the SBE is not required for operator certification. The cost of certification testing is included in the price of the handbook. The Certified Radio or Television Operator Exam: Exams consist of 50 multiple-choice questions based entirely on the material in the handbooks. The exam is closed book and one hour is allotted. Each exam is computer-selected from a pool of questions, and every exam is unique. The exam questions cover essentially the same material as the questions in the sample exam found in the back of each handbook. Passing score for the exam is 90%.

When you are ready to take an SBE exam, please fill out the appropriate application and send it into the SBE National office (see address below). You will be notified once your application has been approved. Approximately 3 weeks before the exam time, your local certification chairman will receive a list of applicants in his/her area. He/she will then contact those applicants to schedule a date, time and place for the exams. The exams will be mailed back to the National office for grading. The pass/fail grades will then

be mailed directly to the applicants.  
You may mail, email or fax your applications to:  
Megan E. Clappe, Certification Director  
9102 N. Meridian St. Suite 150  
Indianapolis, IN 46260  
317-846-9120 Fax  
mclappe@sbe.org

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