



The Society of Broadcast Engineers

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

June 2018

Like us on FaceBook - [facebook.com/sbe80](https://www.facebook.com/sbe80)

Our website sbe80.org

Twitter: @sbechapter8

Our next SBE Chapter 80 meeting will be the Wisconsin Broadcasters Association Summer Engineering Day at the Hilton Milwaukee City Center. on June 20th. Please take a look at the Workshop [Agenda](#).

Sign up <https://www.wi-broadcasters.org/events/summer-conference-and-engineering-day/#engineering>

June 2018 Chairman's corner

Hello members and friends of Chapter 80! I am writing this right before departing for a strategic planning meeting held in Indianapolis for all chapter chairpersons. This has gotten me thinking about the future of the SBE. We have four terrific Chapters in the State of Wisconsin, though I admit to being a little biased towards Chapter 80. ☺

I would like to challenge each and every broadcast professional reading this to strongly consider committing 'just a little' more to SBE in the coming year. If you are not yet a member, consider joining. If you are a member but don't come to meetings, consider attending. If you cannot attend every single month, commit to attending at least one. Or one per quarter. Or every other one. If you attend meetings but are not involved further, consider assisting one of the many sub committees. Your assistance will make the work a little lighter for others and might actually be enjoyable! For those of you with a few years of experience, consider volunteering a little time to the SBE mentorship program. A few minutes of your time could help a young person start to enjoy this career as much as you have over the years. And for those of you who are already quite active, consider taking that next step and running for an office in our Chapter. There is no better way to help the SBE grow and achieve its goals.

This organization is only as strong as its member and the member's contributions. Consider doing "just a little" more and stand back and watch the results!

Hope to see many of you at the Wisconsin Broadcasters Association Summer Engineering Day sponsored in part by the four Wisconsin SBE Chapters. Although the program may look like a bit of a departure from the usual, we think it will be a strong program offering some great perspectives to all broadcast engineers. I am looking forward to it and I am sure you will find it worth the investment of your time. Thanks. –
Steve Brown

Important! Update your EAS unit by June 24th. See article below

CHAPTER 80 ELECTED AND APPOINTED OFFICERS

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Imm Past Chair	Mark Hoenecke	WPT	715-845-1319	Mark.Hoenecke@ecb.org
Secretary	Bill Hubbard	UW Green Bay	920-465-2510	hubbardw@uwgb.edu
Treasurer	Mark Hoenecke	WPT	715-845-1319	Mark.Hoenecke@ecb.org
Program Chairman	John Pfankuch	Heartland Video Systems	920-893-0204	jpgfankuch@hvs-inc.com
Membership Chairman	Mark Friedman	Retired	920-336-3541	m48dat@yahoo.com
Sustaining Membership	Stu Muck	Muck Broadcast services	920-960-0045	MBSFDL@yahoo.com
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
Newsletter Editor	Dave Driessen	WGBA WACY	920-494-2626	dave.dr99@gmail.com
Certification Chairman	Jim Sams	Retired	920-822-5951	jsams@netnet.net
Chapter 80 Webmaster	Mike Steele	WHBY	920-831-5605	msteele@wcinet.com
EAS Coordinator	Steve Konopka	Broadcast Field Services	(920) 788-7435	flashgun99@yahoo.com
Board of Dirs/SBE Liaison	Mike Hendrickson			mhendrickson@sbe.org

Look ahead at upcoming opportunities to take a [certification exam](#) in your area with the local chapter.

If you would like to take an exam but are not able to make it during these sessions, please contact Megan Clappe to ask about special proctoring.

Certification Exams The deadline to apply to take the SBE certification exam at your local chapter in June is April 21. Register today at sbe.org/certification.

Below is the upcoming certification exam schedule

Exam Dates	Location	Application Deadline (to SBE National Office)
August 3-13, 2018	Local Chapters	June 5, 2018
November 2-12, 2018	Local Chapters	September 24, 2018

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

Advanced RF Webinar Series and Transmitter Site Safety Webinar Begin This Month

Transmitter Site Safety, presented live by Jeff Welton, CBRE, Nautel

Thursday, June 14 from 2:00 p.m. - 3:30 p.m. ET

[This webinar](#) covers the various aspects of safety at the transmitter site. You will learn steps taken to reduce, avoid or eliminate hazards and about various items of Personal Protective Equipment (PPE) and the situations that require them. Learn approaches to use to show value and importance of transmitter site safety when talking to management. The cost is \$59 for SBE members and \$89 for non-members. SBE MemberPlus members can participate in the webinar for FREE. [Click here to register.](#)

Advanced RF Series: RF 201: Module 1 - FM Transmitters, presented by Chris Tarr, CSRE, AMD, DRB, CBNE of Entercom

Thursday, June 28 from 2:00 p.m. - 3:30 p.m. ET

This webinar discusses the basic operational theory of FM Transmitters, and goes in depth on the proper care and maintenance of existing systems, as well as design of new ones. Chris will also cover HD Radio/IBOC installation. The cost is \$59 for SBE members and \$89 for non-members. SBE MemberPlus members participate in the webinar for FREE.

Advanced RF Series: RF 201: Module 2 - FM Antenna Systems, presented by Tom Silliman, PE, President ERI

Thursday, July 26 from 2:00 p.m. - 3:30 p.m. ET

This webinar covers a host of topics related to side mounted FM antennas, FM multiuser panel antennas, and the filter networks needed to combine the individual FM stations onto these custom antennas. Topics include; antenna input power and transmitter output power; how to calculate the transmission line loss of the feed line running up your tower; antenna gain and antenna radiation pattern considerations; calculation of the FM station's ERP; and theory of operation of side mounted FM antenna arrays.

The cost is \$59 for SBE members and \$89 for non-members. SBE MemberPlus members participate in the webinar for FREE.

Watch for announcements for additional SBE Advanced RF Series webinars and ATSC 3.0/Next Gen TV webinar series in 2018.

SBE and ATSC to Develop ATSC 3.0 Certification for Broadcast Engineers

The Society of Broadcast Engineers, Inc. (SBE), the association for broadcast and multimedia technology professionals, and the [Advanced Television Systems Committee](#), Inc. (ATSC) today announced a cooperative effort to develop a new Specialist level of SBE certification that will benchmark an individual's proficiency in the ATSC 3.0 System standard.

"SBE Certification covers a range of experience levels and disciplines in broadcast and media engineering. As broadcast engineering diversified beyond legacy technology, the SBE Certification Program also diversified by adding certifications for computer networking and IT, and then a series of specific Specialist Certifications for television transmission, AM directional arrays, and digital radio. With the industry preparing to implement ATSC 3.0, broadcast engineers must be proficient in the next-generation television technology. The SBE and ATSC are working together to develop the next SBE Certification Specialist to cover ATSC 3.0," said SBE President Jim Leifer, CPBE.

"ATSC is pleased to work with SBE to develop an ATSC 3.0 Specialist Certification program. The SBE has

extensive experience training and certifying broadcast engineers. Our work with the SBE is part of efforts to support deployment of ATSC 3.0," said Mark Richer, president of ATSC.

The world's first internet-based broadcast television standard, ATSC 3.0 will give stations and viewers more choices and options now that broadcast TV can seamlessly connect with broadband-delivered content. Approved for use by U.S. broadcasters and deployed in South Korea, ATSC 3.0 technologies make it possible to transmit in Ultra High-Definition, to offer immersive audio, and to add more capabilities like high dynamic range, wide color gamut, and interoperability with Internet-delivered content.

The Society of Broadcast Engineers Certification Program is part of the society's efforts contributing to the advancement of broadcast engineering for the general benefit of the entire broadcast industry. The program was created in 1975 to recognize and raise the professional status of broadcast engineers by providing standards of professional competence. Through the years, the SBE's certification program has become recognized in the industry as the primary method of verifying the attainment of educational standards. With the industry constantly changing, the SBE-certified engineer must keep up with those changes.

To hold SBE Specialist Certification, an individual must first hold one of the SBE core-four certifications: CBT, CBRE/CBTE, CSRE/CSTE or CPBE. Once the new Specialist Certification is released, applicants will take a 50-question, multiple-choice exam and answer an essay question.

More information about SBE certification is online at sbe.org/cert.

ELIMINATING THE POSTING OF STATION LICENSES PROPOSED

On May 10th, the FCC issued a Notice of Proposed Rulemaking ([NPRM](#)) that asked for comments on eliminating the requirement for the posting of broadcast stations and broadcast auxiliary licenses. Licenses are required to be posted either at the transmitter or at the control point which is normally at the studio control room. FM translator stations are required to post call letters and contact information at the transmitter so that it can be seen by the public.

The reason for this possible action is that a control point can be anywhere because of changes in the way that one can communicate with the remote control system such as use of dial-up phone or by web enabled connections via computer or Smartphone. Also with the information on the station's FCC public file, the information is available to everyone. There will be a 30 day comment period with a 15 day reply period. This is part of the FCC's rule modernization project. (Tom Smith SBE24)

FCC TO ACT ON C-BAND SPECTRUM

In a speech before the Wireless Infrastructure Association, ([DOC-350919A1.pdf](#)) FCC Chairman Ajit Pai announced that the Commission will take action on repurposing the 3.7 to 4.2 GHz spectrum used for C-band satellite downlinks. This band is heavily used by TV and radio stations and cable systems to receive programming. The FCC issued a notice on May 1st asking for comments on the possible use of the spectrum on using the band for wireless broadband use. Comments were due on May 31st and replies will be due on June 15th. The FCC will close the period for submitting registrations for existing C-band receive stations on July 18th. Chairman Pai did not give a date for the July Meeting, but there appears that there will be little time between the registration period and the meeting. The Commission may not have a final total of receive earth stations when they take their action. The part of the Chairman's statement concerning the possible action is as follows:

"I've got some good news to report on the mid-band front. Last year, the FCC agreed to explore repurposing more mid-band spectrum, including the 3.7 to 4.2 GHz band, commonly called the "C band." We have done a lot of work on this issue in the time since-enough so that I'm pleased to announce today that at the FCC's July meeting, I intend to put up for a vote a proposal to make more intensive use of that

500 MHz of spectrum, including seeking additional input on making it available for commercial terrestrial use."

In the speech, he did not state if the action would be a Notice of Proposed Rulemaking or would be a Report and Order issuing a final rulemaking. The Commission is under Congressional action as a result of the Ray Baum Act which was passed on March 23, 2018 that requires the FCC to evaluate the possible use of the 3.7 to 4.2 GHz band. This followed FCC releasing a Notice of Inquiry last August 3, 2017 asking for comments on mobile use of the 3.7-4.2 GHz, the 5.925-6.425 GHz and the 6.425-7.125 GHz bands, all which are used by broadcasters. The last two bands are used for fixed microwave and mobile remote video relays. That Notice is named Expanding Flexible Use in Mid-band Spectrum Between 3.7 and 24 GHz. The docket number is GN Docket No. 17-183. (Tom Smith SBE24)

Update your EAS unit by June 24 (Thanks to DASDEC and Sandy Kenyon)

Sage ENDEC

<https://www.sagealertingsystems.com/index.htm> [[sagealertingsystems.com](https://www.sagealertingsystems.com)]

Important! Certificate Updates - May 29, 2018

This release updates CAP alert authentication certificates that are needed to continue to receive CAP alerts from IPAWS and some other CAP alert providers. This update must be installed by 11:45am EDT on June 24, 2018. The release also contains root certificates used for HTTPS access to web sites that provide alert audio files.

Sign up for email notifications

We will email you when a software update is available for the Sage Digital ENDEC.

Send an email to support@sagealertingsystems.com with a subject of "add".

Monroe EAS Device users who are being contacted directly.

User notices are being sent out, directing to the following links:

<http://www.digitalalerts.com/resources/fsb.html> [[digi%20talalerts.com](http://www.digitalalerts.com)] and http://monroe-electronics.com/EAS_pages/eas_fsb.html [monroe-electronics.com].

Trilithic updates can be found here:

<https://eas.trilithic.com/Documents/Firmware/index.html> [eas.trilithic.com]

Gorman-Redlich updates can be found here:

<http://www.gorman-redlich.com/downloads/> [[gorman-redlich.com](http://www.gorman-redlich.com)]

DASDEC

This should be relevant to any DASDEC or OneNet user.

We have released a FEMA digital certificate, very recently issued, to replace a cert that will expire on June 24th 2018. DASDEC and OneNet users are advised to replace the certificate to assure their EAS devices will continue to operate properly, if message authentication has been enabled. The FEMA IPAWS digital certificate file and field service bulletin are available at www.digitalalerts.com/resources_fsb.html.

DASDEC users should go to the website, download the field service bulletin for instructions, and link to the new CA file. Users who fail to update their equipment before June 24 could see the error message “Event Log:Digital Signature VERIFICATION ERROR : Signer UNTRUSTED! Check for correct CAP decoder CA file.”

These emergency alerts may not be transmitted after June 24th if digital signature authentication is enabled and the update is not applied.

We understand there is a short fuse on this certificate update. We turned around this update and advisory right after FEMA provided the info to us.

Also, please note that there are likely to be two additional certificate updates before the end of the year: In August, for an IPAWS certificate expiring in September, and then again in October, for a change in the Federal public key infrastructure (PKI) which will likely require all certificates to be replaced. In general, IPAWS will release a cert about a month before expiration.

Picture of the month. A 600lb washer so our new antenna will fit the existing top plate



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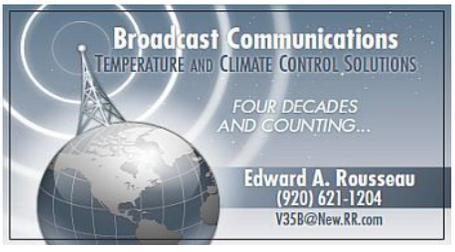




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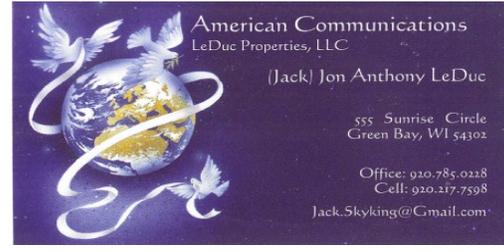
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