



# The Society of Broadcast Engineers

**Fox Valley Wisconsin, Chapter 80  
2308 East Henry Street  
Appleton, Wisconsin 54915-3547**

**February 2009**

The next meeting of Chapter 80 SBE will be at the Out of Town club on Tuesday, February 17, 2009, starting at noon. Our program will be IP Audio Coding for Transmission

## **Chairman's Corner**

Our next meeting of Chapter 80 will be on Tuesday, February 17, 2009, starting at 12:00 noon at the Out 'O Town Club in Kaukauna. This was the original date for the last terrestrial analog television signals for high-power transmitters, but we decided to meet as usual.

Wednesday, February 4, 2009, less than two weeks to the deadline, Congress has now decided to give people four more months to prepare for the upcoming transition from analog to digital TV broadcasting. The House voted on February 4 to postpone the end of analog TV signals until June 12. The move is meant to address concerns that more than 6.5 million Americans with older TVs would not be ready by Feb. 17, the originally mandated deadline. The Senate had previously voted for the delay, and President Obama is expected to sign the bill.

Our program for February will be presented by Chris Crump from Comrex. He will discuss IP Audio Coding for transmission of broadcast quality audio. The discussion will include an overview of BRIC Technology (Broadcast Reliable Internet Codec) and how it enables broadcasters to use the public Internet to transmit reliable, real-time, high quality and fully bi-directional audio. Since BRIC Technology was first introduced in 2006, Comrex has added several innovative features to their ACCESS Product line including the BRIC Traversal Server and their new BRIC-Link Codec for dedicated links. Applications such as STL/dedicated studio links utilizing ISM band radios, satellite data services and high speed, wired or wireless dedicated IP data circuits will also be discussed.

Crump began his radio career in 1987 as a producer at WHYT-FM in Detroit before his work as an editor for the radio trade magazine Monday Morning Replay. He went on to serve as a Remote Broadcast Engineer then Creative Services Director for Capitol Broadcasting (and subsequently Paxson Communications) in Orlando as well as the Ron & Ron Radio Network in Tampa. Since 1996 he has served in sales capacities for Euphonix, Symetrix and Klotz Digital. He is currently Director of Sales for Comrex Corporation. Chris also offered to pick up the tab for our lunch. Plan to join us, and bring a friend, co-worker, etc. I look forward to seeing you there!

Our January meeting was held on Tuesday January 20, 2009 at the Out O' Town Club in Kaukauna. We enjoyed another delicious meal and the company of our fellow engineers. A special thanks to Al Kilgore for his presentation on the new digital EAS receiver from Sage-Endec. The really big advantage is: "No more paper tape"! Although the FCC has not made its final decision on implementation of the new EAS standards, the Sage unit is ready now, and will work with the current standards, as well.

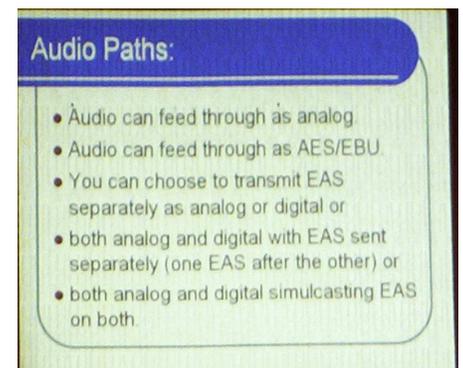
Here's a list of upcoming events:

- Tuesday, March 17, 2009 – SBE Chapter 80 -- TBA
- April 18-23, 2009 – NAB 2009, Las Vegas, NV
- Tuesday, April 14 or Tuesday, April 28, 2009 – SBE Chapter 80 --TBA
- Tuesday, May 19, 2009 – SBE Chapter 80 -- TBA

I look forward to seeing you on Tuesday, February 17, 2009 at noon the Out O' Town Club.

Regards,

Keith M. Kintner





**Mark Bartolotta**  
Regional Sales Manager

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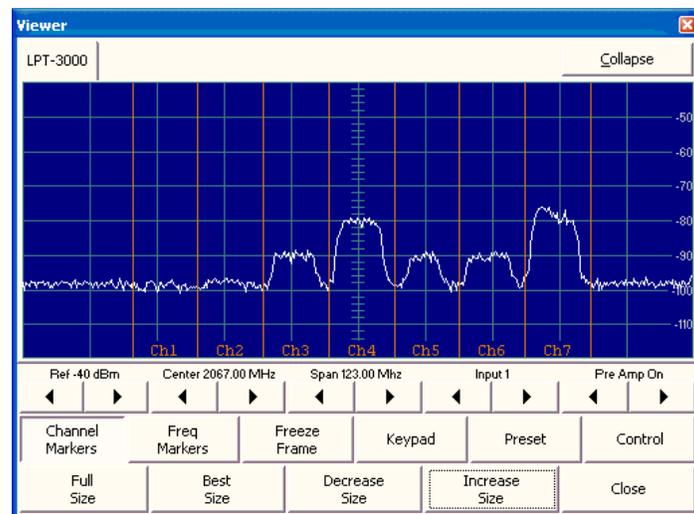
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**PSC adds overlay area codes in 715 and 920** by Neal McLain The Wisconsin Public Service Commission has announced that it plans to add two area codes in Wisconsin. Both will be overlays: 274 will overlay 920 and 534 will overlay 715. After the overlays are implemented, ten-digit dialing will be required in those geographic areas. According to the Commission's press release, this action was taken because 715 and 920 are projected to run out of available phone numbers near the end of 2011. Why Overlays? Why did the PSC opt for overlays instead of splits? This issue inevitably comes up in areacode relief proceedings. The arguments are always the same: • A split means that half the phone numbers in the affected area get a new area code. Businesses don't like this because they have to change their phone numbers on everything from letterheads and business cards to trucks, buildings, websites, and billboards. Companies that do a lot of business with out-of-town customers lose business because their old customers can't reach them. An overlay means 10-digit dialing for local calls. Theoretically, it's possible to retain 7-digit dialing within each separate area code, even in an overlay situation, but customers would still have to dial ten digits to reach numbers in the other area code. The Wisconsin PSC expects that 534 will be implemented 2010, and 274 will be implemented in 2011. (Chapter 24 newsletter)

still 7 channels available, they are narrower to clear the former ENG channel 1 and 2 for new uses.



All channels in use on the new bandplan

**Green Bay market 2GHZ relocation a success.** On January 30<sup>th</sup> all the 2GHZ band users transitioned to the new 12MHz band plan. After switching the transmitters to the new plan everyone simultaneously transmitted signals to confirm we were all on our new frequencies. There are

**2009 SBE Certification Application and Exam Schedule**

Exam Dates	Location	Application Deadline
November 7-17, 2008	Local Chapters	CLOSED
February 6-16, 2009	Local Chapters	December 31, 2008
April 21, 2009	NAB	April 1, 2009
June 5-15, 2009	Local Chapters	April 17, 2009
August 7-17, 2009	Local Chapters	June 5, 2009
November 6-16, 2009	Local Chapters	September 18, 2009

1150 WHBY  
105.7 WAPL  
95.9 WKSZ  
94.7 WZOR  
1570 WSCO  
104.3 WECB

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**Local TV broadcasters held a second analog shutoff soft test** on January 12<sup>th</sup>. At 6:10pm a slide was broadcast on the analog channels only reminding viewers of the impending analog shutdown followed by analog channel only crawls for most of the evening. The phone bank was busy the whole evening.

**SBE University opens with AM Antenna Computer Modeling Course** The FCC now permits moment method computer modeling of many AM directional arrays as an alternative to traditional cut-and-try adjustments and field strength measurements as a means of performance verification ("proof"). This alternative has the potential in many cases of saving a tremendous amount of time and expense, allowing the licensee of an AM station using a directional antenna to tune up and proof the antenna system for a fixed and greatly reduced cost.

Modeling of AM antenna systems, while not particularly difficult, does require some specific steps and proper model calibration in order to be valid and acceptable to the FCC. This course will take the student through the modeling and measurement process specifically for AM broadcast antennas, providing a general understanding of the process and procedures as well as operation of the recommended software.

The course syllabus includes:  
Broadcast Moment Method Modeling

- \* Overview
- \* Limitations of Traditional Field Strength Measurements
- \* Method of Moments Basics
- \* FCC Modeling Rules
- \* Using Moment Method Modeling for Directional Antenna Proofs
- \* A Step-by-Step Modeling Example
- \* A Loop Sampling Example
- \* Analyzing Potential Reradiators

Measurements for AM Antenna Computer Modeling

- \* Field Measurement Overview
- \* Impedance Matrix Measurements
- \* Antenna Monitor Sampling Systems for Moment Method Proofs

SBE members receive a discount on the course fee. SBE recertification credit can also be earned by completing this course.

For complete information about the course and to enroll, visit the Education/Seminars page of the SBE website. [Sbe.org](http://Sbe.org)



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**SBE's new on-line, on-demand series of educational courses, the "SBE University," opens** with its first course offering, AM Antenna Computer Modeling. [You can read more about the course in this newsletter]. Two more courses, "FM Transmission Systems" and "Matching Networks and Phasing," will be available soon. These are the first of many courses SBE plans to offer in the future, which will help make SBE your primary source for broadcast technical training.

Barry Thomas, CPBE, CBNT  
President SBE

The SBE Chapter 80 Newsletter is published monthly. Members are welcome to contribute articles or ideas. Please have your submissions in by the 4<sup>th</sup> of the month to Dave Driessen or Bill Tessman.

<p style="text-align: center;"><b>GEMCOM</b> <i>Communications Consultant</i> <i>Broadcast, Sound, Voice &amp; Data</i></p> <p><b>GARY W. MACH</b> 1511 Biemeret St. Green Bay, WI 54304 (920) 499-4637</p>
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