



The Society of Broadcast Engineers

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

January 2012

The next meeting of SBE Chapter 80 will be at the Out O' Town Club at noon. Our Speakers will be Don Heizen and John Purvey of Belden

Happy New Year

Our next meeting of Chapter 80 will be on Tuesday, January 17, 2012 at noon at the Out O' Town Club in Kaukauna. Don Heinzen and John Purvey of Belden will join us to discuss the Telecast products and present our January program. Please bring a friend or a co-worker and plan to join us.



Our last meeting was December 13, 2011, starting at 6:00 p.m at the Out 'O Town Club in Kaukauna for our annual Holiday gathering. We had nearly a dozen in attendance, including spouses and guests. The food was delicious and the fellowship with the engineers in the Chapter and guests made for a fun evening.

Upcoming events:

Tuesday, February 14, 2012 – SBE Chapter 80 - David Veldman of Harris to discuss video compression and wrappers.

Tuesday, March 20, 2012 – SBE Chapter 80 - Mary Ann Seidler of TieLine to discuss the changing nature of audio remotes.

Tuesday, April 24, 2012 – SBE Chapter 80 – NAB Review

I look forward to seeing you on Tuesday January 17, 2012 at our first Chapter 80 meeting for 2012 in Kaukauna.

Best wishes for a Healthy, Prosperous and Happy New Year!

Regards,

Timothy J. Laes


Still need to renew your SBE membership? Renew now using our easy [automated SBE renewal system](#).



Mark Bartolotta
Regional Sales Manager

Heartland Video Systems, Inc.
1311 Pilgrim Road
Plymouth, WI 53073
Tel: (800) 332-7088
(920) 893-4204
Cell: (920) 912-1054
Fax: (920) 893-3106
EMAIL: mbart@hvs-inc.com
www.hvs-inc.com

Broadcast & Professional Solutions
CONVERSION • ROUTING • DISTRIBUTION • TRANSMISSION



Clearly The Best.

Jim Lienau
Vice President of Corporate
Technical Services
920-617-7101
Cell: 920-639-0000
Fax: 920-617-7329
Pager: 920-613-0151

450 Security Blvd.
P.O. Box 19079
Green Bay, WI 54307-9079
Web: www.cellcom.com
E-mail: jim.lienau@cellcom.com

LeDuc Properties LLC
American Communications Co

(Jack) Jon Anthony LeDuc
Chairman-CEO

133 North Superior Street
DePere, WI 54115 USA

920.632.4364
Cell: 217.7598

Skyking_Concorde@hotmail.com

SBE Certification. If you would like to take an exam during the first part of 2012, you must first send in your application.

The application deadline for the February 3-13, 2012 exams was December 31, 2011.

If you are attending NAB and wish to take an exam in Las Vegas during the April show then you will need to send in your application before March 23, 2012. The exams being held during NAB will be on April 17th at the Las Vegas Hilton.

If you have a certification that is due to expire on January 1, 2012, please fill out the appropriate re-certification application and send that into the SBE National office by December 31, 2012. Your certification expiration date is located on the wallet card that you received when you were first certified or re-certified.

If you have any questions, please contact the Certification Director, Megan Clappe.

reviewed, including administrative and technical responsibilities, communication requirements and authenticating station records. Sample templates of required documents will be provided.

Presenting this program is Dennis Baldrige, CPBE, 8-VSB, AMD, DRB, CBNT, a Senior Member of the SBE who has worked in the field of broadcasting for over 30 years. As owner of Baldrige Communications, LLC, he provides contract engineering services to broadcast stations in the upper Midwest. Baldrige holds an FCC Lifetime General License (formerly a First Class FCC License) and Amateur Radio Extra Class License (K0DB). He also teaches science courses at Upper Iowa University, has authored several articles for Radio Guide magazine and is part of the SBE Technical Presenters Group.

SBE Members - \$49; Non-Members - \$69 (sbe.org)

FCC Chairman Julius Genachowski has issued the following statement on the **House passage of voluntary incentive auction legislation:** "House passage of incentive auction authority is a major achievement. The House legislation, like S. 911, which was approved by the Senate Commerce Committee, would authorize the Federal Communications Commission to conduct voluntary incentive auctions as recommended in the FCC's National Broadband Plan. This would free up new spectrum for mobile broadband, driving investment, innovation, and job creation; generating many billions of dollars of revenue; and helping foster U.S. leadership in mobile broadband. (fcc.gov)

Chapter 80 Certification news from Jim Sams:
Results of last exam.
Congratulations to Brad Jurrens as our newest Broadcast Television Engineer.

Webinar by SBE - Chief Operator Responsibilities
Presented by Dennis Baldrige, CPBE, 8-VSB, AMD, DRB, CBNT
January 12

This webinar is intended to help stations comply with FCC regulations and instruct individuals on how to carry out the responsibilities of chief operator. The FCC requires each broadcast station to designate a chief operator. The responsibilities specific to each station's chief operator will be




Rick Thompson
Central Regional Manager

1770 Birchwood Avenue
Des Plaines, IL 60018-3006
Office: 847-795-9555 ext.21
Mobile: 847-942-7990
Fax: 847-795-8770
E-mail: rick.thompson@gepco.com
www.gepco.com



216 Green Bay Rd., Suite 105
Thiensville, WI 53092-1625
www.evansengsolutions.com

PROBLEM SOLVING BEYOND EXPECTATIONS

Ben Evans, P.E.
President
Ph. (262) 518-0002 • Cell (414) 530-8234
Email: ben@evansengsolutions.com

RENEWABLE ENERGY • WIRELESS COMMUNICATIONS • BROADCAST



Russ Prieve
Erection Manager/
Project Manager
Mobile: (608) 575-2888

PCS
Cellular
Erection
Two Way
Microwave

4587 Hwy. TT
Sun Prairie, Wisconsin 5359
www.wave-com.com

Phone 608-837-9050
Fax 608-825-9050

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

**Woodward
Communications, Inc.**
BROADCAST DIVISION

*A Dynamic, Employee Owned Media Company
Good People - Real Solutions - Shared Results*

P.O. Box 1519 • Appleton, WI 54912-1519
Fax 920-739-0494 • gbell@wcinet.com

GREG BELL
VP Broadcast / General Manager
Direct 920-831-5655
Mobile 920-570-2162

Joseph P. Kaufenberg
Account Manager
Broadcast & Production Systems Division

SONY

Sony Electronics Inc.
1422 138th Lane NW
Andover, Minnesota 55304
Telephone (763) 755-2501
Fax (763) 755-2495
Cellular (612) 237-3368
E-mail: joe.kaufenberg@am.sony.com

**ST. PAUL
TOWER**
Dedicated To Excellence

Tony Primavera
Office: 920.617.7100
Fax: 920.617.7021
1046 Gray Ct.
Green Bay, WI 54303

www.stpaultower.com

NAE
WST
SBS

CHAPTER 80 ELECTED AND APPOINTED OFFICERS 2011-2012

Chairman	Tim Laes	WGEE WIXX WNCY WROE	920-435-3771	tlaes@new.rr.com
Vice Chairman	Steve Konopka	WPNE TV/FM	920-336-3541	skonopka@ecb.org
Treasurer	Steve Brown	WHBY WAPL WKSZ WZOR	920-733-6639	sbrown@wcinet.com
Secretary	Keith Kintner	UWO	920-424-7357	kintner@uwosh.edu
Program Chairman	John Pfankuch	Heartland Video Systems	920-893-0204	jpgankuch@hvs-inc.com
Program Chairman	Bill Hubbard	UW Green Bay	920-465-2510	hubbardw@uwgb.edu
Membership Chairman	Al Kilgore	WRVM	920-842-2839	akilgore@wrvm.org
Sustaining Memberships	Greg Tadyshak		920-438-3258	gtadyshak@new.rr.com
Frequency Coord. < 1 GHz	Tim Laes	WGEE WIXX WNCY WROE	920-435-3771	tlaes@new.rr.com
Frequency Coord. > 1 GHz	Joe Kamenick	KAMENITECH, LLC	715-359-7088	jckamenick@peoplepc.com
Newsletter Editor	Bill Tessman	Heartland Video Systems	920-893-4204	btessman@hvs-inc.com
Newsletter Editor	Dave Driessen	WGBA WACY	920-494-2626	ddriessen@nbc26.com
Certification Chairman	Jim Sams	UWGB	920-465-2572	samsj@uwgb.edu
Chapter 80 Webmaster	Jim Jensen	Retired	920-850-2633	jim@bjensen.net
EAS Coordinator	Steve Konopka	WPNE TV/FM	920-336-3541	skonopka@ecb.org
Past Chairman	Keith Kintner	UWO	920-424-7357	kintner@uwosh.edu
Board of Dirs/SBE Liaison	Keith Kintner	UWO	920-424-7357	kintner@uwosh.edu

User Report ReeCom R1650 Weather Radio



Features:

- ⤴ S.A.M.E. (Specific Area Message Encoding) . It can be set to ignore alerts outside your county. You will need to look up the FIPS code on the internet for this. Can to set to monitor alerts for multiple counties also.

- ⤴ Can be set to ignore individual alert types. I set mine to ignore severe thunderstorm warnings as the NWS frequently sends them in the middle of the night in the summer.
- ⤴ Sensitivity. With just the whip antenna on the second floor of a house I was able to receive both Green Bay and New London as well as a weak signal from Fond du Lac
- ⤴ Back panel connections include Audio Out, Alarm Out voltage, External antenna and external power
- ⤴ The model R1630 version is not equipped with an AM FM tuner.
- ⤴ Alert log. Mine has a log of all tests and alerts from last summer. It indicates if it has not received any messages since power up.
- ⤴ Can be set to skip the siren and unmute the speaker when an alert is received. Will mute the speaker when the EOM code is received

Summary: Buy this one if you need a weather radio (DaveD)

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

Panasonic
ideas for life

Panasonic Broadcast & Television Systems Company
Unit of Panasonic Corporation of North America

3910 Orleans Lane North
Plymouth, MN 55441
Tel: 763.545.0157
Fax: 763.542.6011

Steve Johnson
District Sales Manager

Johnsons@us.panasonic.com

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

STEVE BROWN, CPBE, CBNT
Director of Broadcast Engineering
Direct 920-831-5659
W9APL Amateur Call Sign

**Woodward
Communications, Inc.**
BROADCAST DIVISION

*A Dynamic, Employee Owned Media Company
Good People - Real Solutions - Shared Results*

P.O. Box 1519 • Appleton, WI 54912-1519
Fax 920-739-0494 • sbrown@wcinet.com

Jim Pianowski
Sales Representative

**Media &
Information
Technologies**

ROSCOR

ROSCOR CORPORATION
1061 Feehanville Drive
Mount Prospect, IL 60056
1-847-299-8080 x1343
1-800-843-3679
fax: 1-847-299-4206
jpianowski@roscor.com
www.roscor.com

ISO 9001:2000 CERTIFIED

Upcoming Live Webinars

[Chief Operator Responsibilities - What should I be doing?](#) - Jan 12 - 2 p.m. ET
with Dennis Baldrige, CPBE, 8-VSB,
AMD, DRB, CBNT

SBE Members - \$49; Non-Members - \$69

This webinar reviews the duties to be performed by each station's Chief Operator. Many chief operators come to this position with limited technical background; others are proficient with the technical aspects but are unfamiliar with all the requirements.




[Click here for descriptions and pricing of all webinars](#)

[The Nuts and Bolts of the FCC FM Allocation Procedures](#) - Feb 16 - 2 p.m. ET
with Doug Vernier, CPBE

SBE Members - \$49; Non-Members - \$69

This webinar will be useful to station engineers and managers in the process of understanding FM allocation and why their licenses limit transmission power and tower height, and what they can do to improve coverage over the population they reach.

[Springtime Maintenance to Keep You on the Air](#) - Mar 15 - 2 p.m. ET
with John Bisset

SBE Members - **FREE**, thanks to ; Non-Members - \$39

Drawing from his experience as a chief engineer, and in writing Radio World's popular Benchmark column, John Bisset will lead engineers through a series of inspections and tasks to prepare your site for warmer weather. Along the way, he will offer some engineering tips to improve maintenance efficiency as well.

Webinars Available On-Demand

New! [Streaming Radio: a Tutorial for Broadcast Engineers](#)

[Networking Technology for Broadcast Engineers, 2 part](#) (beginning to intermediate level)
[Networking Technology for the Broadcast Engineer - Routing and Switching](#) (intermediate level)
[Managing a Project and Outside Contractors for Success](#)
[Creative Strategies for Translators and Boosters](#)
[KREX - The Real World of Disaster Recovery](#) - **FREE**, thanks to [Harris Corporation](#)

[Mathematics of Reliability](#)
[FCC Self-Inspection Checklist](#)
[Event Frequency Coordination](#)

[Leadership Development Webinar Series, 3 part](#)
[Maximizing HD and 1080p/60 Cable Performance](#)
[Human Factors in Broadcasting](#)

SBE University - online self study courses available on-demand



[Click here for descriptions and pricing for all courses](#)

Featured Course - 8-VSB

SBE Members - \$99; Non-Members - \$139

Author: Doug Garlinger, CPBE, 8-VSB, CBNT

This course provides a complete overview of the 8-VSB system. At the completion of this course, students can expect to have all the basic information needed to understand the nature of 8-VSB modulation and to recognize deficiencies in the transmitted signal. The information provided in this course will prove to be invaluable in installing, maintaining and operating a digital television transmitter facility. Todd Creamer, SBE Member in Marion, Illinois, said of the course, "After going through several other interactive courses since the SBE 8-VSB course, I can honestly say it is top notch in its course presentation. I do look forward to taking other courses as well."

Other SBE University Courses Available

[AM Antenna Computer Modeling](#)
[AM Antenna Systems](#)
[Broadcast Audio Processing](#)

[Computer Networking for Broadcast Engineers](#)
[FM Transmission Systems](#)
[Matching Networks and Phasing](#)
[Television Video and Audio - a Ready Reference for Engineers](#)
[The New Lifecycle of Media - IP and File Based Architecture and Workflows](#)
[Voice Telco Networks and Studio Interface Systems](#)

WEAU Tower Work is progressing on replacing the WEAU tower in Fairchild. The replacement tower is planned to be completed in November. WEAU is once again broadcasting on their own channel from their tower in Eau Claire, too. Their coverage does not, however, come close to duplicating the coverage that they had from the Fairchild tower. WEAU will remain on WQOW 18.3 and WLAX 25.2 until the tower is completed in November. WEAU will also be relocating from RF channel 13 to UHF channel 38 when they move back to the Fairchild transmitter. (Sbe chapter 112)

WISCONSIN PUBLIC RADIO'S 2012 EAS SCHEDULE

DAY/DATE TIME

COMMENT.....

W 4 Jan 0850 Routine Monthly Test initiated by NOAA

R 12 Jan 1259

M 16 Jan 1459

T 24 Jan 1059

W 1 Feb 2350 Routine Monthly Test initiated by WEM

R 9 Feb 1459

M 13 Feb 1059

T 21 Feb 1259

W 29 Feb 1459

W 7 Mar 0850 Routine Monthly Test initiated by NOAA

R 15 Mar 1059

M 19 Mar 1459

T 27 Mar 1259

W 4 Apr 2350 Routine Monthly Test initiated by ECB

R 12 Apr 1059

M 16 Apr 1459

T 24 Apr 1259

W 2 May 0850 Routine Monthly Test initiated by NOAA

R 10 May 1059

M 14 May 1259

T 22 May 1459

W 30 May 1059

W 6 Jun 2350 Routine Monthly Test initiated by WEM

R 14 Jun 1459

M 18 Jun 1259

T 26 Jun 1059

⚡ [Current Wisconsin EAS Plan](#)

<http://www.wpr.org/eas/>

FCC CHAIRMAN GENACHOWSKI ANNOUNCES APPROVAL OF FIRST TELEVISION WHITE SPACES DATABASE AND DEVICE

FCC's Office of Engineering and Technology Issues Public Notice to Start Operation of Spectrum Bridge's TV White Spaces Database System and Authorization of a TV White Spaces Device . – the Federal Communications Commission issued a Public Notice announcing that the Office of Engineering and Technology (OET) has approved Spectrum Bridge Inc.'s television white spaces database system, which may provide service to devices beginning January 26, 2012. OET has also approved a device by Koos Technical Services, Inc. (KTS) as the first product allowed to operate on an unlicensed basis on unused frequencies in the TV bands. The KTS device will operate in conjunction with the Spectrum Bridge TV band database.

FCC Chairman Julius Genachowski said, "With today's approval of the first TV white spaces database and device, we are taking an important step towards enabling a new wave of wireless innovation. Unleashing white spaces spectrum has the potential to exceed even the many billions of dollars in economic benefit from Wi-Fi, the last significant release of unlicensed spectrum, and drive private investment and job creation." Unused spectrum between TV stations – known as "white spaces" - represents a valuable opportunity for provision of broadband data services in our changing wireless landscape. This unused TV spectrum provides a major new platform for innovation and delivery of service, with potential for both research and commercial applications. Development of unlicensed radio transmitting devices has already led to a wave of new consumer technologies, including Wi-Fi and other innovations like digital cordless phones and in-home video distribution systems that have generated billions of dollars of economic growth. This new technology will build on that track record and provide even more benefits to the U.S. economy.

Commission rules require that unlicensed TV band devices contact an authorized database system to obtain a list of channels that are available for their operation (i.e., channels not occupied by authorized radio services) at their individual locations and must operate only on those channels. (fcc.gov)

The Federal Communications Commission (FCC) took a major step toward eliminating one of the most persistent problems of the television age – **loud commercials**. The

Commission adopted a Report and Order that implements the 2010 Commercial Advertisement Loudness Mitigation Act (the CALM Act), in which Congress gave the Commission, for the first time, authority to address the problem of excessive commercial loudness.

The rules adopted today require that commercials have the same average volume as the programs they accompany. The rules also establish simple, practical ways for stations and MVPDs to demonstrate their compliance with the rules. They carry out Congress' mandate to give viewers relief from overloud commercials while avoiding unnecessary burdens on television stations and MVPDs.

As the CALM Act requires, the rules will become effective one year after the date of their adoption, or December 13, 2012. This gives stations and MVPDs until this date to be in full compliance. Equally important, it provides ample time for programmers and networks to provide their distributors with certifications stating the commercials that accompany their programming are fully compliant with these rules. These certifications, though not mandatory, will simplify the safe harbor process for all stations and MVPDs. While consumer complaints about loud commercials have diminished since 2009, we expect that these new rules will reduce loudness complaints still further. (fcc.gov)

BROADCAST STATION TOTALS AS OF DECEMBER 31, 2011

The Commission has announced the following totals for broadcast stations licensed as of December 31, 2011:

AM STATIONS 4766
FM COMMERCIAL 6542
FM EDUCATIONAL 3644
TOTAL 14,952
UHF COMMERCIAL TV 1027
VHF COMMERCIAL TV 360
UHF EDUCATIONAL TV 289
VHF EDUCATIONAL TV 107
TOTAL 1,783
CLASS A UHF STATIONS 413
CLASS A VHF STATIONS 68

TOTAL 481
FM TRANSLATORS & BOOSTERS 6099
UHF TRANSLATORS 2997
VHF TRANSLATORS 1214
TOTAL 10,310
UHF LOW POWER TV 1644
VHF LOW POWER TV 403
TOTAL 2,047
LOW POWER FM 838 838
TOTAL BROADCAST STATIONS 30,411
(fcc.gov)

New FCC EAS CAP Rules: Yes to Converters, No to Governor Message

by Gary Timm

On January 10, 2012, the FCC released its long-awaited Emergency Alert System (EAS) rules addressing Common Alerting Protocol (CAP) messaging. There are several blockbuster decisions in this 130-page EAS Fifth Report and Order (R&O); the highlights are below. We will provide more in-depth analysis on AWARE in the coming days. Although these rules are final with no further comment being solicited by the Commission, Petitions for Reconsideration can be filed on any part of the ruling within 30 days of its publishing in the Federal Register. Major FCC decisions in the R&O:

- Amends section 11.55 of the Commission's rules to eliminate the requirement that EAS Participants receive and transmit CAP-formatted messages initiated by state governors.
- EAS Participants are permitted to use intermediary devices to meet their CAP-related obligations, provided that all intermediary devices must provide that capability of utilizing the enhanced text in a CAP message to meet the visual display requirements in section 11.51(d), (g)(3), (h)(3), and (j)(2) of the Commission's rules, as set forth in section 3.6 of the ECIG Implementation Guide, by June 30, 2015.
- The EAS CAP Industry Group (ECIG) Implementation Guide (I.G.) is accepted as the method to convert CAP-formatted messages into legacy EAS format, and incorporates the ECIG I.G. into the

Commission's existing certification scheme.

- EAS Participants are required to monitor FEMA's Integrated Public Alert and Warning System (IPAWS) for federal CAP-formatted alert messages.
- Further on the IPAWS monitoring requirement, the R&O clarifies that it would be inappropriate to adopt any form of blanket exemption from the basic obligations of monitoring for, receiving, and processing CAP-formatted messages, but concludes that the physical unavailability of broadband Internet service offers a presumption in favor of a waiver.
- The Non-Participating National (NN) EAS Station Designation is eliminated.
- Action is deferred on revising the EAS Operating Handbook until after results of the November 9, 2011 Nationwide EAS Test are analyzed.
- Revises section 11.32(a)(9)(iv) of the Commission's rules to limit the duration of the Attention Signal to no more than eight seconds.
(<http://www.awareforum.org>)