



Society of  
Broadcast Engineers  
Newsletter  
Chapter 24  
Madison, Wisconsin

September 2007



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## Next Meeting

**Thursday, September 13**

Madison Fire Department  
HazMat Truck Tour

*Madison fire fighter Steve Dahlgren, formerly an engineer with WKOW-TV, will give us a tour of the Madison Fire Department HazMat truck. This sophisticated vehicle has on-board weather and chemical analysis equipment to provide current and predicted information on all types of hazardous events. Steve will also discuss some of the problems encountered by firefighters in today's high-technology environment.*

**Dutch Treat Dinner, 5:30 p.m.**

Perkins  
1410 Damon Rd., Madison  
*No reservation - just gather together*

**Meeting and Program, 7 p.m.**

Madison Fire Station #6  
825 W. Badger Rd., Madison  
*There is state-owned parking behind the fire station. Meeting entrance is on the east side of the station.*



## Coming Up

**Wednesday, Oct. 10:** Broadcast Clinic/History of WHA Radio  
**Wednesday, Nov. 14:** Low-Cost Digital Audio Consoles  
**Thursday, Dec. 13:** Holiday Party

# Next Generation EAS

*is coming!*

In July, the FCC released new EAS Rules, which will most likely mean new equipment at all broadcast stations and cable operations in the future.

This will revolutionize the way we receive EAS messages. Our Wisconsin EAS Committee Broadcast Chair, Gary Timm, who is also on the National SBE EAS Committee, advises that the national committee has posted an Interpretation and FAQ regarding the new rules on the national SBE Web site at [www.sbe.org/gov\\_eas.php](http://www.sbe.org/gov_eas.php). Check back to that page for frequent updates as we learn more.

In addition, Gary will be presenting a session at Broadcaster's Clinic in Madison on Wednesday, October 10, with all the latest details.



# save the date

**Broadcaster's Clinic, Madison**  
**Wednesday, Oct. 10**


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**Meeting Minutes****August 2007**

Chapter 24 of the Society of Broadcast Engineers met on July 17, 2007 at the BroChapter 24 of the Society of Broadcast Engineers met on August 15, 2007 at the studios of WISC-TV. There were 19 members present, of whom 15 were certified. There were four guests present.

Chair Dennis Baldrige called the meeting to order. Dennis opened the meeting by having the guests present introduce themselves. Minutes of the July meeting were approved on a motion by Gerrit Marshall and seconded by Steve Paugh.

Treasurer Leslie Franzen reported on the Chapter's current bank balance. Sustaining Membership Chair Fred Sperry reported that there were three renewals. They were WMSN-TV, Full Compass and Resonant Results, LTD. Frequency Coordinator Tom Smith reported that WSUM had sent out a Prior Coordination Notice and that the issue of a possible conflict had arisen and was being addressed by the parties involved. He also reported that Midwest Family Group had recently sent out a PCN for a transmitter replacement for the same path and frequency.

Certification Chair Jim Hermanson reported that the next local exam would be held during the period of November 9-19 with applications due by September 21. Program chair Steve Paugh reported that the September Program would be a tour of the Madison Fire Department HAZMAT Truck. The October meeting would be held as part of the Broadcasters Clinic and would be on the history of WHA radio. The November meeting would be a presentation by Logitek on low-cost digital consoles.

In other business, Chair Dennis Baldrige asked for ideas for the SBE booth at Broadcasters Clinic. National Liaison Leonard Charles reported that there was a frequently asked question page on the new EAS rules on the SBE Web site. He also noted that there would be a national SBE Web teleconference on October 9 on the new EAS rules.

In personal and station announcements, Paul Stoffel of WHA-TV announced that there was an opening for a limited-term employee to work on sports remotes.

The meeting was adjourned and Steve Paugh presented the evening's program, which was on loudspeaker design and theory.

Respectfully Submitted, Tom Smith, Secretary

## October SBE Chapter 24 newsletter

**Copy deadline: Friday, September 28**  
**Folding party: Wednesday, October 3**



E-mail submissions to John Salzwedel  
at tcp@tokencreek.com

Please submit articles as Word or text documents or by pasting copy into the body of an e-mail. Pdfs also accepted. For graphics, jpps preferred.

## From the Chair

Dennis Baldrige



### Who needs certification? You do.

Why the emphasis from the SBE on certification? After all, if I can do the work, isn't that all that matters? Why do I need to upgrade? These are common attitudes toward professional qualifications.

The SBE Program of Certification began in 1975. By 2003, it was recognized by the National Skill Standards Board. NSSB Certification Recognition promotes quality assurance in the marketplace and provides national recognition for those who meet the quality benchmarks. Industry standards are constantly changing, and the SBE-certified engineer must keep up with those changes.

There is a level of SBE Certification for almost every situation. If you're not sure which level is right for you, ask someone who is certified or contact the SBE National Office. SBE Certification is valid for five years and can be renewed by retaking the exam, applying for a higher level, or by earning recertification points and submitting an application.

You can learn more about the SBE Program of Certification at [www.sbe.org](http://www.sbe.org) or by talking to our local Certification Chair, Jim Hermanson. Jim does a tremendous job working with applicants and endeavors to further develop the program.

Certification is the broadcast industry standard of technical proficiency. It documents your knowledge to your employer. It can be used to affirm your expertise and indispensability in today's ever-changing marketplace. In addition, industry salary surveys show that SBE-certified people typically earn more than people who are not SBE-certified. Certification pays!



# Amateur Radio News

compiled by Tom Weeden, WJ9H

## Vanity fees up

The FCC will reduce the regulatory fee to obtain or renew an Amateur Radio vanity call sign by more than 40 percent starting September 17. In a Report & Order (R&O) released August 6, "Assessment and Collection of Regulatory Fees for Fiscal Year 2007," in MD Docket 07-81, the Commission will cut the

fee from its current \$20.80 to \$11.70. This marks the lowest fee in the history of the current vanity call sign program. The FCC is authorized by the Communications Act of 1934 (as amended) to collect vanity call sign fees to recover the costs associated with that program. The vanity call sign fee has fluctuated over the 11 years of the current program – from a low of \$12 to a high of \$50.

The FCC says it anticipates some 14,700 Amateur Radio vanity call sign "payment units" or applications during the next fiscal year, collecting \$171,990 in fees from the program.

## Repeater reductions begin

On August 13, the American Radio Relay League began sending "specific mitigation reduction numbers" to 122 repeater owners, recommending that they reduce their signal anywhere from 7 dB to 56 dB, according to ARRL Regulatory Information Branch Manager Dan Henderson, N1ND. These reductions, requested by the U.S. Air Force and the Department of Defense, only concern those repeaters identified by the DoD as affecting the PAVE PAWS radar system in Massachusetts and California.

"Some reductions are going to be attainable," Henderson said. "You can do 7 dB, but 54?" He said such a reduction would "not be realistic to achieve. While many of the affected repeater owners may not be able to achieve the required reductions, but

that doesn't mean they shouldn't try to meet the goal. Everyone involved needs to continue trying to meet the DoD's requirements. This gives us the best chance to keep as many of these machines as possible on the air."

Henderson stressed that any order to shut down a repeater will come from the Federal Communications Commission, at the request of the DoD. "This situation only affects those repeaters on the DoD's list in Massachusetts and California. It does not affect the everyday, casual user of 70 cm. This is not a wide-spread threat to the 70 cm band."

Citing an increasing number of interference complaints, the U.S. Air Force has asked the FCC to order dozens of repeater systems to either mitigate interference to the PAVE PAWS radars or shut down. The ARRL has been working with the DoD to develop a plan to mitigate alleged interference from 70 cm ham radio repeaters to this military radar system on both coasts. According to the DoD, the in-band interference from Amateur Radio fixed FM voice repeaters has increased to an unacceptable level. PAVE PAWS radars are used for national security functions, including early detection of water-launched missiles. They are critical to our national defense and are in use 24 hours per day, seven days per week.

The Amateur Radio Service is a secondary user in the 420-450 MHz (70 cm) band, both by the Table of Frequency Allocations and the FCC Part 97 regulations. As such, Amateur Radio licensees, jointly and individually, bear the responsibility of mitigating or eliminating any harmful interference to the primary user, which in this case is the Government Radiolocation Service that includes the DoD PAVE PAWS systems.

*Excerpts from the American Radio Relay League's Web site, [arrl.org](http://arrl.org)*



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AUDIO VIDEO A/V LIGHTING

## SBE National elects 25th president

Barry Thomas, CPBE CBNT, of Atlanta, Georgia, has been elected the 25th president of the Society of Broadcast Engineers. Thomas serves as Vice President of Engineering – Radio for Lincoln Financial Media. Election results were announced August 31.

Thomas has been in the broadcast engineering field for more than 25 years and is a Senior member of SBE. He has most recently served SBE as Treasurer and chairs the Society's strategic planning committee. He has served at the chapter level in several markets and currently is active with Chapter 5 in Atlanta. Thomas has been a member of the Society since 1986. Thomas' one-year term will begin October 11, during the SBE's National Meeting in Pittsburgh, Pa.

Upon his election, Thomas said, "I'm excited about serving the Society and helping continue the excellent efforts the SBE has made in certifying, educating and networking broadcast engineers. It's our goal to concentrate our efforts on the core purposes of SBE, strengthen SBE chapters and facilitate our members' involvement

in creating the next innovations in broadcasting."

Elected as the Society's vice president was Vincent Lopez, CEV CBNT, of Syracuse, N.Y. Lopez is Director of Engineering for WSYT/WNYS TV/Sinclair Broadcast Group in Syracuse. He is a member and past chairman of Chapter 22 of Central New York and has been a member of the national SBE board of directors since 2000, most recently serving as national secretary. He has been a member of SBE since 1991. Lopez was elected a SBE Fellow in 2004.

Ted Hand, CPBE 8-VSB, of Charlotte, N. Car. was elected SBE secretary. Hand is Chief Engineer of WSOC-TV and WAXN-TV in Charlotte. He is a Senior member of SBE, joining in 1982 and has served as a member of the Board of Directors for four years and as a member of the Executive Committee. He currently serves as chairman of the Society's education committee.

Elected treasurer is Ralph Hogan, CPBE CBNT of Pullman, Washington. Hogan is Assistant General Manager, Engineering Services, Washington State University in Pullman. He's been a member of SBE since 1990 and is a Senior member. He has served six years on the SBE Board, including two as national Secretary and has been a member of SBE's certification committee since 1996.

Six members were elected to two-year terms on the Board of Directors. They include:

- Chris Alexander, CPBE AMD, Director of Engineering, Crawford Broadcasting Company, Denver
- Andrea B. Cummis, CBT CTO, Sr. Vice President, Engineering

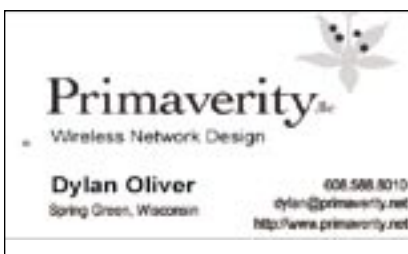
and Technology, American Desi TV, Roseland, N.J.

- Dane E. Ericksen, P.E., CSRTE 8-VSB CBNT, Senior Engineer, Hammett & Edison, Inc., San Francisco, Calif.
- Hal H. Hostetler, CPBE, Senior Engineer/I.T. Director, KVOA Television, Tucson, Ariz.
- Jerry Massey, CPBE CBNT 8-VSB AMD, Corporate Regional Engineer and Director, of Engineering, Entercom Communications, Greenville, S.Car.

They will be joined by six returning members of the Board and Christopher Scherer, CPBE CBNT, who, as immediate past president, will also serve on the Board. The six returning directors include:

- Ralph Beaver, CBT, President and CEO, Media Alert, Inc., Tampa
- James T. Bernier, Jr., CPBE CBNT, Director, Maintenance, Design and Engineering, Turner Entertainment Networks, TBS, Inc., Atlanta, Ga.
- Keith M. Kintner, CPBE CBNT, Radio-TV-Film Engineer, University of Wisconsin Oshkosh, Oshkosh, Wisc.
- Thomas R. Ray, III, CPBE, Vice President, Corporate Director of Engineering, Buckley Broadcasting/WOR Radio, New York, N.Y.
- Christopher D. Tarr, CBRE CBT CBNT, Director of Engineering, Entercom Milwaukee/Madison, Delafield, Wisc.
- Larry J. Wilkins, CPBE AMD CBNT, Assistant Director of Engineering, Cumulus Broadcasting, Prattville, Ala.

*From sbe.org Short Circuits*





# FCC Rulemakings

compiled by Tom Smith

## FINAL RULEMAKINGS

*MB Docket 87-268*

*Advanced Television Systems and Their Impact Upon Existing Television Broadcast Service*

On August 1, 2007, the FCC approved the Final Table of Allotments for all DTV stations going into the final transition date. They released the notice on August 6. After February 17, 2009, all stations will have to operate on these assignments in the digital mode. The final rulemaking was 131 pages, with about half of the text dedicated to descriptions of how they handled each of the stations that had requested a channel change or modification in their coverage area. This is the seventh report and order on the DTV transition. There are also a few proposed changes in the table to accommodate three stations that had recently received construction permits and some changes that were requested in late or reply comments to the DTV allotment rulemaking.

There was an accompanying spreadsheet that listed each station's analog channel, final DTV channel, population coverage and percentage of population that would receive interference from another DTV station, coordinates, DTV power and antenna heights. There were also spreadsheets for each category of changes, such as requests for channel changes, interference zone changes and coverage modifications.

Here is the list of final DTV allotments for Wisconsin and the markets that border Wisconsin. Note that any channel in bold is a change from the originally proposed table. Also, Wittenburg is in bold as it is a new DTV assignment for an existing NTSC channel that did not have a DTV channel assigned. An \* (asterisk) indicates a reserved non-commercial channel. There is only one low-band VHF channel in this list, which is in Calumet, Michigan, and there were less than 30 low-band V's on 20 states.

### WISCONSIN

Antigo	46
Appleton	27
Chippewa Falls	49
Crandon	12
Eagle River	28
Eau Claire	13, 15
Fond du Lac	44
Green Bay	11, 23, 39, 41, 42*

Janesville	32
Kenosha	40
La Crosse	8, 14, 17, 30*
Madison	11, 19, 20*, 26, 50
Mayville	43
Menomonie	27*
Milwaukee	8*, 18, 22, 25, 28, 33, 34, 35*, 46
Park Falls	36*
Racine	48
Rhineland	16
Superior	19
Suring	21
Wausau	7, 9, 24*
<b>Wittenburg</b>	<b>50</b>

### ILLINOIS

Aurora	50
Chicago	7, <b>12</b> , 19, 21*, 27, 29, 31, 43, 45, 47*
Freeport	23
Joliet	38
LaSalle	10
Rockford	13, 16, 42

### INDIANA

Gary	17*, 51
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### IOWA

Cedar Rapids	9, 27, 47, 51
Dubuque	43
Waterloo	7, 22, *35

### MICHIGAN

Calumet	5
Escanaba	48
Iron Mountain	8
Ishpeming	10
Marquette	13*, 19, 35

### MINNESOTA

Duluth	8*, 10, 17, <b>27</b> , 33
Minneapolis	9, 11, 22, 29, 32, 45
Rochester	10, 46
St. Cloud	40
St. Paul	26*, 34*, 35

FCC Rulemakings >>> continued

**MM Docket 99-325; FCC 07-33  
Digital Audio Broadcasting Systems and their Impact on the Terrestrial Radio Broadcast System**

On August 15, the FCC published the final rules for digital transmission (IBOC) in the Federal Register. With that publication date, it started a 30-day countdown to the effective date for digital or HD radio by broadcasters. On September 14, the biggest change is that AM broadcasters will be able to broadcast HD radio at night. During the daytime hours, FM stations and AM stations have already been allowed to broadcast HD radio under an interim basis.

The most interesting comment in this rulemaking concerns nighttime AM operation. The FCC is allowing AM nighttime operation because interference from digital transmissions between stations is on the

edges of their coverage areas and because there was already interference there at night already – a slight increase would outweigh the benefits of full-time digital service.

The full report and order was published on May 31 and is on the FCC Web site. An article in the July 7 issue of Radio World had a part-by-part breakdown of the rulemaking. It is titled “New Rules Provide IBOC Certainty” and can be found online at [www.rwonline.com](http://www.rwonline.com) under the Digital Radio link.

**PROPOSED  
RULEMAKING**

**MB Docket No. 07-173; RM-11338  
Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations**

In response to a petition by the National Association of Broadcasters, the FCC has started a rulemaking to allow AM stations

to use FM translators. The notice of rulemaking is rather short and asked for comments on a few issues. They are:

- Should AM stations be allowed to use FM translators?
- Should the 788 daytime-only and 1,125 limited-powered AM stations be allowed to operate FM translators at night when they are off-the-air or their coverage is severely limited?

The FCC also would like to know in what area the translators should be restricted to. The FCC is proposing they be limited to the 2 mv/m contour or 25 miles from the AM transmitter; others are proposing the 1 mv/m or .5 mv/m contour or 35 miles from the AM transmitter. The use of translators by FM stations in the commercial band are limited to within the 1 mv contour. FM translators can operate with up to 250 watts.

This proposal was introduced in 1981 and 1990 and was rejected by the FCC. It may pass at this time because of the support of the NAB. The notice was adopted on August 6 and released on August 15. The comments period will last for 60 days after publication in the Federal Register, with replies for another 30 days.

**Green Bay Flight  
Service Station closed**

The FAA has closed the Green Bay Flight Service Station, which was the FAA notification point for all tower light outages and restoration reports.

For all Wisconsin-based towers, the new reporting number for tower light outages now changes to 877-487-6867. Stations with current open notifications to the Green Bay FSS will need to call this new number when the notification can be cleared.

**new number  
877-487-6867**

*From FCC Releases ([www.fcc.gov](http://www.fcc.gov)) and  
the Federal Register ([www.gpo.gov](http://www.gpo.gov))*

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# SBE Chapter of the Air

HamNet meets the second Sunday of each month at 0000 GMT on 14.205 MHz. Hal Hostetler WA7BGX is the Control Station. Any amateur operator is welcome and encouraged to participate.

## Using the SBE logo

SBE chapters and members may use the SBE logo on business cards, letterhead and chapter newsletters. When referring to a chapter, it must be used with that chapter's name or number adjacent to the logo. Members must put "Member of" or "Certified by" adjacent to the logo.

The proper logo must be used in any case. The correct logo can be obtained only through the SBE National Office. Send your request to Angel Bates at abates@sbe.org.

## Certification Exam Session Dates

The SBE National Certification Committee has announced exam session dates. Check the list below for the exam period that is best for you. For more information about SBE Certification, see your Chapter Certification Chair or contact Megan Clappe, Certification Director at the SBE National Office at (317) 846-9000, or mclappe@sbe.org.

Exam Dates	Location Application	Application Deadline
November 9-19, 2007	Local Chapters	September 21, 2007



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- Ross Video
- Scharch Electronics
- Sound Devices, LLC
- Token Creek Mobile TV
- Wisconsin Public Television
- WISC-TV 3
- WKOW-TV 27
- WMSN-TV 47
- WMTV-TV 15

Thanks to WISC-TV for maintaining the Web server for the Chapter 24 Web page.

Thanks to WKOW-TV for providing copying and folding facilities for the Chapter 24 newsletter.

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Contributors this month: Tom Smith, Tom Weeden, Steve Paugh and Dennis Baldrige. Thanks to Leonard Charles for his work on the Chapter 24 Web page.

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FIRST CLASS MAIL





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