



# Society of Broadcast Engineers Newsletter Chapter 24 Madison, Wisconsin

March 2008



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## Next Meeting

### Wednesday, March 19 Content Management for Organizations & Nominations

*Matt Rockwell, Technical Director of UW-Madison Student Radio, WSUM, will give a presentation on content management systems (CMS) for organizations using free, public domain tools for information aggregation and communication of that information via the Internet. A CMS is proposed that would be an effective link between the technical support staff and the non-technical operations staff in your facility.*

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

Perkins  
1410 Damon Road, Madison  
(no reservation; just gather together)

#### Meeting & Program, 7 p.m.

Wisconsin Public Broadcasting Center  
3319 W. Beltline Highway, Madison



## Coming Up

- Tuesday, April 22:** TBD/Elections
- Wednesday, May 14:** Harris NET Vx
- Thursday, June 12:** SBE Summer Picnic

# HD Radio

>>>By Steve Johnston

*at WPR*

Wisconsin Public Radio is a partnership of the University of Wisconsin-Extension and the Wisconsin Educational Communications Board (ECB) which broadcasts three program services — the NPR News & Classical, the HD2 Classical, and the Ideas Networks — on 29 non-commercial AM and FM stations in our region. Since its

beginnings on experimental station 9XM in 1917, our organization has been an innovator in broadcast engineering.

In keeping with this tradition, Wisconsin Public Radio was proud to be among the first radio stations to implement the new “HD” digital radio service. The first WPR facilities to be equipped for HD Radio were WHA 970 AM and WERN 88.7 FM in Madison, as well as KUWS 91.3 FM in Superior and WHRM 90.9 FM Wausau. Since then, other WPR stations have been upgraded to “HD” service. (See Radio Projects.)



### WPR AM & FM HD Radio Projects

- |         |                 |
|---------|-----------------|
| Phase 1 | WHA Madison     |
| 2005    | KUWS Superior   |
|         | WERN Madison    |
|         | WHRM Wausau     |
| Phase 2 | WHID Green Bay  |
| 2006    | WUEC Eau Claire |
|         | WLSU La Crosse  |
|         | WVSS Menomonie  |
|         | WPNE Green Bay  |
|         | WHAD Delafield  |
| Phase 3 | WLBL Auburndale |
| 2008    | WHWC Menomonie  |
|         | WHBM Park Falls |
|         | WHLA La Crosse  |
|         | WHHI Highland   |
|         | WHID Green Bay  |

HD Radio is a new technology that allows AM/FM broadcasters to transmit digital quality audio alongside the existing analog-based broadcasts. These digital broadcasts provide listeners with improved audio quality and reception. Interference, such as static, hisses and pops, is eliminated. If you’ve got enough signal strength to decode the digital data stream, it will be a clean, accurate representation of the material being transmitted. Data services such as displayed song and artist information, weather and traffic alerts, and much more are now possible and will revolutionize the experience of AM and FM radio. And it’s free for the

WPR HD Radio >>> continued on page 6


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**Meeting Minutes**

February 2008

Chapter 24 of the Society of Broadcast Engineers met on February 13, 2008 at the Wisconsin Eye facility. There were nine members present and all were certified. There were also two guests present.

Chairman Dennis Baldrige called the meeting to order at 7:10 p.m. The guests who attended the meeting were introduced, and the minutes for the January meeting were accepted on a motion by Leonard Charles and seconded by Mike Kulis. There was no treasurer's report.

Leonard Charles reported that there was not anything new to report from the national SBE office. Chuck also reported on the 2 GHz timetable, and further meetings by the MSTV on 2 GHz and the DTV transition.

Jim Hermanson, certification chair, reported on the upcoming dates for certification tests. Tom Smith, frequency coordinator, reported that there were no coordination activities recently, but noted WWAZ-TV Channel 68 in Fond du Lac had ceased transmission on January 15.

Steve Paugh, program chair, announced that the March program would be given by Matt Rockwell on content management.

Chair Dennis Baldrige announced that WFXS in Wausau was looking for a chief engineer. Leonard Charles announced WBUW Channel 57 in Madison was also looking for a chief engineer, and Steve Paugh announced the date for Madison Hamfest.

Nomination Chair Steve Paugh asked for a third member of the nomination committee, and Mike Kulis volunteered. Term limit changes for secretary and treasurer were discussed, including changing them to reflect the term limits for National SBE officers.

Bill Hamilton of Wisconsin Eye then conducted a tour of the Wisconsin Eye facility.

Respectfully submitted by  
Tom Smith, Secretary

## April '08 SBE Chapter 24 newsletter

**Copy deadline: Friday, April 11**  
**Folding party: Wednesday, April 16**



E-mail submissions to John Salzwedel  
at [john@tokencreek.com](mailto:john@tokencreek.com).

# 700 MHz auction continues

By Tom Smith

The auction for 62 megahertz of spectrum from TV Channels 52-69 started on January 24 and as of the afternoon of Friday, March 7, the auction was still on. So far the auction is on day 31, and there have been 182 rounds of bidding. The bids totals have reached \$19,587,719,300, which is nearly double the amount the FCC set for the minimum reserve totals. Some individual licenses may still need to be rebid, because they did not meet the minimum reserve price.

Because there are fewer bidders in each round, the Commission is now conducting 10 rounds of bidding each day. How much longer the bidding will continue will be determined by how long the remaining bidders decide to hang on before deciding that the spectrum will cost more than it is worth.

From FCC Releases ([www.fcc.gov](http://www.fcc.gov))

# The Truth, the Whole Truth & Nothing But the Truth

## From the Chair

Dennis Baldrige



### “Half a truth is often a great lie.”

—Benjamin Franklin

Communicating correctly with the public is one of the key aspects addressed in the SBE’s “Canon of Ethics.” The second main area of our code of ethics, Relations with the Public, encompasses five sections:

*Section 3. The Broadcast Engineer will endeavor to extend public knowledge of broadcast engineering and will discourage the spreading of untrue, unfair, and exaggerated statements.*

*Section 4. The Broadcast Engineer will have due regard for the safety of life and health of the public and employees who may be affected by the work for which he or she is responsible.*

*Section 5. The Broadcast Engineer will express an opinion when it is founded on adequate knowledge and honest conviction while he or she is serving as a witness before a court, commission or other tribunal.*

*Section 6. The Broadcast Engineer will not issue ex parte statements, criticisms or arguments on matters connected with the public policy which are inspired or paid for by private interests, unless he or she indicates on whose behalf he or she is making the statement.*

*Section 7. The Broadcast Engineer will refrain from expressing publicly an opinion on an engineering subject unless he or she is informed as to the facts relating hereto.*

Correct communication clears confusion. We all know this by experience. How many times have we addressed a technical problem or issue only to discover an unrealized fact which redirected our entire focus? The same is true with our communication to the public. When we have all of the facts, we should not be afraid to speak out. When in doubt, it is best to defer to someone with more experience. Regrettably, it is difficult to admit we don’t know everything. Socrates once said, “The only true wisdom is in knowing you know nothing.” Having a realistic view of what we do and do not know is crucial to clear communication.

Be informed, know your facts, share your knowledge and communicate goodwill to all in a professional manner. This will foster an excellent rapport and relationship with the public. We earn future trust by accurately reporting past facts.

Let us all work to practice the SBE’s “Canon of Ethics,” particularly in our relations with the public by educating and communicating accurately.

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## WWAZ-TV goes dark

By Tom Smith

In last month's newsletter, it was reported that WWAZ-TV licensed to Fond du Lac had applied for permission from the FCC to turn off its Channel 68 analog transmitter and operate on its digital Channel 44 only. TV Technology reported in both its online and print additions that on January 15, the same date it filed its request with the FCC, Pappas Broadcasting shut off the analog transmitter. At that time the FCC had not made a decision on Pappas's request; as of the time this article is written, the FCC has not issued a public notice on that decision. In a search of WWAZ-TV's authorizations on the FCC Web site, both WWAZ-TV's analog and digital channels are listed as silent.

On March 6, the FCC issued the 8th Report and Order on the DTV allocation table and in the notice; the FCC rejected a request by WWAZ-TV to change its DTV channel from channel 44 to channel 9.

*From TV Technology and FCC Web site  
([www.fcc.gov](http://www.fcc.gov))*



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## Amateur Radio News

compiled by Tom Weeden, WJ9H

### FCC denies return to Morse code requirement

In a "Memorandum Opinion and Order" (MOO) released February 28, the FCC denied two petitions calling for General or Amateur Extra license applicants to demonstrate proficiency in Morse code. In December 2006, the FCC released a "Report and Order" (R&O) in the "Morse code proceeding," WT Docket 05-235, that eliminated Morse code testing as of February 23, 2007.

In reaching this decision, the FCC noted in the R&O that "one of the fundamental purposes underlying our Part 97 rules is to accommodate amateur radio operators' ability to contribute to the advancement of the radio art, and that the Commission had previously concluded that an individual's ability to demonstrate Morse code proficiency is not necessarily indicative of his or her ability to contribute to the advancement of the radio art."

The FCC also noted that another fundamental purpose underlying Part 97 rules is "to enhance the value of the amateur service to the public, particularly with respect to emergency communications, and that the Commission had previously concluded that most emergency communication today is performed using voice, data, or video modes, because information can be exchanged much faster using modes of communication other than telegraphy."

In the wake of the FCC's actions, two amateurs submitted separate petitions to the FCC, asking them to bring back the testing. Anthony R. Gordon, KG6EQM, of West Covina, California, objected to the FCC eliminating the telegraphy examination element as an examination requirement for the Amateur Extra Class operator license. Russell D. Ward, W4NI, of Nashville, Tennessee, requested the FCC reconsider their decision for "strictly procedural" reasons.

The FCC reiterated their prior conclusion that "an individual's ability to demonstrate Morse code proficiency does not further the underlying purposes of the Part 97 rules, i.e., to accommodate individual contributions to the advancement of the radio art and to enhance the value of

the amateur service to the public. Accordingly, we deny the petition."

In summary, the FCC said neither petition asserted "any grounds for reconsidering" the decision in the Report and Order. "We believe that the actions taken therein will allow amateur service licensees to better fulfill the purpose of the amateur service, and will enhance the usefulness of the amateur service to the public and licensees."

### Local ham aids in rescue of accident victim

On Wednesday, Feb. 27, Brian Sprecher, KC9LCC, of Prairie Du Sac, received a radio call on the 147.150 Madison repeater requesting emergency help. Robert Stout, WB9ECK, of Monticello, told Sprecher that a vehicle had gone off the road through a guard rail, stopping short of a creek. The driver was injured and trapped in his vehicle and an ambulance was needed at the scene. Sprecher called the Dane County sheriff's office to relay the information. Stout, via the repeater, kept Sprecher apprised of the driver's injuries; Sprecher, in turn, updated the sheriff's dispatch with the information. Stout remained at the scene providing aid until local police arrived.

Sprecher relayed all information to the dispatcher until local authorities arrived and assumed control. "It sounds like the guy drove off the road through a guard rail and may have not been found had it not been for WB9ECK. It was also unknown how long the driver had been over the embankment before being found. This could have been a lot worse had WB9ECK not become involved," Sprecher said.

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



# FCC Rulemakings

compiled by Tom Smith

## PROPOSED RULEMAKINGS

*MB Docket No. 04-233: FCC 07-218  
Report on Broadcasting Localism  
and Notice of Proposed Rulemaking*

On December 18, 2007, the FCC adopted a Report and a Notice of Proposed Rulemaking on Localism in Broadcasting. This report is based on comments from a previous inquiry and comments from the public at meetings the FCC conducted around the country on the subject of localism and broadcast ownership. In the report, the FCC provided an analysis and potential areas that may need rule changes. The areas include communication between licenses and their communities, nature and amount of community responsive programming, political programming, underserved audiences, disaster warnings, network affiliation rules, payola and sponsorship identification, license renewal procedures, and additional spectrum allocations.

The report directs the Media Bureau to update the publication, *The Public and Broadcasting*; establish a contact at the Commission to provide the public with information on becoming involved with the FCC processes; create a FM frequency search program; address EAS issues; and require cable and satellite providers to carry in-state stations in markets where all the stations are from out of state.

The FCC is also opening an inquiry on a number of proposals and issues. Many of the proposals could reinstate rules and regulations that were done away with 20 years ago when de-regulation was instituted. Among the proposals include changes in the pre- and post-renewal application notices, including posting the notices on the station's Web site. Another proposal goes back to the old rules requiring ascertainment of the community and its leaders. The FCC is proposing that stations have a community advisory board made up of community leaders and officials. The Commission is also proposing that renewal be based on local programming performance and set specific guidelines to determine localism performance guidelines. The FCC is also proposing that stations be

manned whenever they are on the air, that the main studio be located in the community of license, and if the FCC should take steps to limit the practice of voice tracking or require disclosure of the practice. The Commission is seeking comment on requiring the networks to allow local stations to review network programming before it airs to determine if it is appropriate for their community. The final program issue is whether stations should be required to provide the FCC with data on their music playlists concerning the airing of music and performances by local artists.

The Commission is seeking comment on allowing more LPTV stations to upgrade to Class A status and receive the addition protections that that status allows.

The FCC had set a comment deadline of March 14, having published the notice in the Federal Register on February 12. On March 6, the FCC extended the comment deadline to April 28, with replies due June 11. This action was due to motion filed with the FCC by the NAB; Association of Public Television Stations; PBS; NPR; and state broadcast associations.

*MM Docket 99-25  
Creation of a Low Power Radio  
Service*

On March 7, the FCC set comment and reply dates the Third Report and Order on LPFM that was adopted on November 27, 2007. Comments are due on April 7; replies are due April 21.

## FINAL RULEMAKINGS

*MB Docket No. 07-148  
DTV Consumer Education Initiative*

On February 19, the FCC adopted a number of rules for broadcasters and others that would help educate the public on the DTV transition. For broadcasters, the FCC gave three options to provide information on the DTV transition. These contain different time options to air PSAs and crawl to inform the public.

Option #1 would require a station to air a crawl and a minimum of one 15-second PSA during every quarter of

the day which would be 12 a.m.-6 a.m., 6 a.m.-12 p.m., 12 p.m.-6 p.m. and 6 p.m.-12 p.m. Starting April 1, 2008, two PSAs and crawls would be required during each six-hour period. One PSA and crawl must run in prime time. The crawls must last 60 seconds and include the normal information concerning the date of the analog shutdown.

Option #2 would require 16 PSAs and crawls per week between 5 a.m. and 1 a.m., with one-fourth between 6 and 11:35 p.m. in the Eastern and Pacific time zones and 5 and 10:35 p.m. in the Central and Mountain time zones. The crawls must be 60 seconds, and the PSAs must be 30 seconds. Stations taking option #2 must also provide a 100-day countdown starting in November of 2008.

Option #3 is for non-commercial stations. They must provide 60 seconds of DTV transition information daily with 7.5 minutes between 6 and 12 p.m. a month. The amount doubles on May 1, 2008 and triples on November 1. In November, they must provide 22.5 minutes a month in primetime.

All stations doing options #2 and #3 will be required to air a half-hour program on the analog shutdown one day before February 17, 2009. All stations must file electronically and place on their Web site and in the public file a quarterly report using form 388.

Cable, DBS and lifeline telephone consumers will receive a notice in their bill concerning the analog shutdown. Consumer electronic manufacturers will be required to label TV-related products with notices on the analog shutdown and the winners in the 700 MHz auctions will be required to report on any consumer education they do.

*MB Docket No. 87-268  
Advanced Television Systems and  
Their Impact Upon the Existing Tele-  
vision Broadcast System*

The FCC in the 8th Report and Order on the subject of DTV rules and allotments adopted the Final Table of Allotments for DTV stations. The action was taken by the Commission on March 3 and released on March 6. This should

*Rulemakings >>> continued on page 6*

Rulemakings >>> continued from page 5

be the final action on the DTV table of allotments until after the transition day of February 18, 2009.

There were only three requests for changes that would affect Wisconsin stations. WVAZ-TV in Fond du Lac had a request to move from Channel 44 to Channel 9 rejected; WBBM in Chicago had a request for a power increase on Channel 12 rejected. The FCC also rejected a request for KAAL in Austin, Minn. to operate from the transmitter plant of KTTC in Rochester. This move would increase interference to two stations including WLEF in Park Falls.

#### MB Docket 07-299

#### *In the Matter of Promoting Diversification of Ownership in the Broadcasting Service*

On December 18, 2007, the FCC adopted a report proposing a number of actions to allow a greater participation of small business entities in broadcast station ownership. The proposed program is not to be based on race or gender as previous programs for increasing the diversity of broadcast ownership, but will be aimed at businesses that qualify as a small business under the Small Business Administration guidelines.

The FCC is proposing a number of actions to allow small businesses to gain ownership. The proposed rules would allow the deadlines for construction permits to be extended so that a small business could buy an expiring CP and then build it. Stations that are subject to revocation or renewal hearings could sell the station to an eligible small business before the hearing starts as a distress sale. Rules concerning the sale of grandfathered radio combinations would be revised for eligible entities to purchase such combinations.

The FCC would also take a zero-tolerance stand on ownership fraud. The Commission also proposes a number of financial programs, including encouraging banks to participate in SBA loan programs. One proposal for existing broadcast stations is that they would be required to certify that they don't discriminate on time sales on the basis of race or gender. Finally the FCC will create a guidebook on diversity of ownership.

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

## WPR HD Radio >>> from cover

listeners, just like today's analog AM and FM radio.

Little or no change in listener behavior will be required since all local radio station frequencies remain the same. Listeners will simply tune to their favorite programs and stations and receive them in either a digital or analog format depending on their radio. Because stations begin digital broadcasting using a "hybrid mode," transmitting digital and analog signals simultaneously, listeners with existing receivers are still able to pick up the broadcast and can choose to upgrade to digital at their own pace.

One of the most interesting new features of HD service is called "multicasting." This technology allows FM HD stations to divide the available digital bandwidth into additional program channels. WPR's first multicast offering is our new 24-hour "HD2 Classical" service, and several of our stations are carrying other specialized feeds. More stations may be added to this list of stations carrying these new services in the future as we continue to add HD Radio transmission equipment to our stations. (See HD Radio Programming.)

If you'd like to hear what our new service sounds like, but you don't yet own an HD Radio, visit our Live Web Streams page at [wpr.org/webcasting](http://wpr.org/webcasting) and listen in on our HD2 Classical stream.

HD radio technology was developed by iBiquity Digital Corporation and approved for use on-air in October 2002 by the Federal Communications Commission. The WPR HD radio stations are being upgraded with contributions from the public radio members, funds from the State of Wisconsin Building Commission, as well as grant support from the Corporation for Public Broadcasting.

## WPR HD Radio Programming

- WHA AM 970 Madison  
News/Talk "The Ideas Network" on analog and HD
- WERN 88.7 FM Madison  
NPR News and Classical Music on analog and HD1  
HD-2 Channel carries WPR's new 24-hour classical music service
- KUWS 91.3 FM Superior  
News/Talk "The Ideas Network" on analog and HD1  
HD2 channel carries experimental student programming
- WHRM 90.9 FM Wausau  
NPR News and Classical Music on analog and HD1.  
HD2 carries News/Talk "The Ideas Network"
- WHAD 90.7 FM Delafield/Milwaukee  
News/Talk "The Ideas Network" on analog and HD1  
HD-2 Channel carries WPR's new 24-hour classical music service
- WPNE 89.3 FM Green Bay  
NPR News and Classical Music on analog and HD1  
HD-2 Channel carries WPR's new 24-hour classical music service
- WLSU 88.9 FM La Crosse  
NPR News and Classical Music on analog and HD1.  
HD-2 not active yet

*Steve Johnston is Director of Engineering and Operations for Wisconsin Public Radio based in Madison. His e-mail is [johnston@wpr.org](mailto:johnston@wpr.org).*



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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
June 6-16, 2008	Local Chapters	April 18, 2008
August 8-18, 2008	Local Chapters	June 6, 2008
November 7-17, 2008	Local Chapters	September 19, 2008



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## CHAPTER 24 SUSTAINING MEMBERS RECENT RENEWALS

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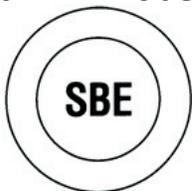
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