



**Society of
Broadcast Engineers
Newsletter
Chapter 24
Madison, Wisconsin**

November 2007



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Next Meeting

**Wednesday, Nov. 14
Low-Cost Digital Audio
Consoles**

Frank Grundstein, director of sales for Logitek Electronic Systems, will give a presentation on a new method of designing low-cost audio consoles using a router-based topology and Shark DSP audio processing, which has allowed the introduction of full featured on-air and news production consoles at a significantly reduced cost to the station. We will be discussing the advantages of consoles with this architecture and the features that can be achieved while still maintaining affordable pricing for the local broadcaster. After the presentation, you can see one of these systems currently being installed at WISC.

Logitek is sponsoring the evening's pizza party

**Pizza Party, 6 p.m.
Meeting & Program, 7 p.m.**
WISC Conference Room B
7025 Raymond Rd., Madison

*Park in the front parking lot;
enter via the front lobby.*



Coming Up

- Thursday, Dec. 13:** Holiday Party, Fitzgerald's Middleton
- Tuesday, Jan. 15:** TBD
- Wednesday, Feb. 13:** TBD & Nominations

What's it Really Worth?

>>>By Tom Smith

FCC auction

On January 28, 2008, the FCC will start spectrum auction 73 and will auction off 62 megahertz of the 700 MHz band. This band currently contains UHF-TV channels 52-69. The FCC has reserved 24 Megahertz of this spectrum for public safety use and has already auctioned off 18 MHz of the band. This band of spectrum has been subject to controversy since the FCC announced the first DTV rules in 1996. Because the FCC allowed all TV stations the use of a second channel during the DTV transition period, many politicians, public interest groups and those seeking spectrum for other uses called it a great giveaway to broadcasters. Senator John McCain and others claimed that the broadcasters were getting free use of spectrum worth \$70 billion. With this auction, we will finally find out what the spectrum is worth, at least to those who bid for it.

The FCC has set starting bids and a reserve price for the spectrum. Each

block of frequencies has different amounts of licenses and spectrum. The number of licenses goes from one nationwide license to 734 local licenses. The bands range from 6 MHz to 22 MHz. For each band, the FCC has given an upfront payment amount to enter the auction, the amount for the minimum opening bids, and a total reserve amount for the final winning bids. Besides the total, the FCC has released a spreadsheet with the upfront payment, minimum opening bids, and reserve price for each license.

The various amounts that the FCC has set, see page 5.

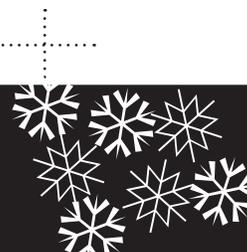
Bands A and B consists of two 6 MHz pairs, band E consists of a single 6 MHz channel, Band C consists of two pairs with all of channels 60 and 65 and 5 MHz of channels 61 and 66, and band D consists of 5 megahertz from each of channels 62 and 67. Band D will be operated as a combined commercial and public safety broadband system for the whole nation with commercial traffic limited

Worth? >>> continued pg. 5



save the date

**Holiday Party
Thursday, Dec. 13**



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**Meeting Minutes**

October 2007

On October 10, 2007, Chapter 24 of the Society of Broadcast Engineers met at the Marriott Hotel In Middleton, Wisconsin. This meeting was a regional meeting conducted by Chapter 24 as part of the Broadcaster's Clinic. There were 41 member of the SBE from all the chapters in Wisconsin and nearby states. Of these 41 members, 29 were certified. There were also four guests present.

Chapter 24 Chair Dennis Baldrige opened the meeting at 7 p.m. Because this was a regional meeting and part of the Broadcaster's Clinic program, Chapter 24 dispensed with its business meeting for the evening. Chair Dennis Baldrige welcomed all those from other chapters and asked for members of the various chapters present to acknowledge their presence. The meeting was then adjourned and Tom Smith introduced the evening's speaker. The speaker for the evening was Randall Davidson from Wisconsin Public Radio and author of 9XM Talking: WHA Radio and the Wisconsin Idea, which is a history of WHA radio and the Wisconsin Public Radio Network. Randall discussed the history of WHA and its place in the beginnings of broadcasting in the United States.

Respectfully submitted by
Tom Smith, Secretary

For Sale

TEN-TEC OMNI VI, Model 563 HF Transceiver with mic, power supply and manual. Very good condition. Asking \$1,150

Contact: Gerrit Marshall, 608-273-4470
(mornings) or email gmarshall@wisctv.com

**December SBE
Chapter 24 newsletter**

Copy deadline: Friday, November 30
Folding party: Wednesday, December 5

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, jpgs preferred.

From the Chair

Dennis Baldrige



Thank You

November brings cold weather, the first snow, deer season, football and, of course, Thanksgiving.

Industry research indicates that one of the most frustrating aspects of the modern workplace is the impression that your boss or those under you do not appreciate your job or what you do for them. We tend to focus on the negative far too often rather than express gratefulness.

Gratefulness is letting others know by your words and actions how they have benefited your life. Employees who believe their superiors are grateful for their work have an improved sense of worth to the organization. This can lead to increased productivity, an obvious plus to the company. Further, expressions of gratitude encourage not only the recipient but the giver as well. Research has shown that persons who are genuinely grateful may be more optimistic, experience improved health, and perhaps even have extended life spans. All of these aspects profit the business for which that person works.

This month, in keeping with the spirit of Thanksgiving, say "thank you" every single day to someone. Tell your boss or employees how much their work has benefited the company and you personally. It will make a difference in both you and them.

In closing, I would be amiss if I did not express my gratefulness to all of the SBE Chapter 24 members in allowing me to serve as chair this term. It is not that I actually contribute very much, but that the members and officers of the group are seasoned professionals and conscientious in each of their assigned areas. The group is a credit to their dependability. I want to especially mention John Salzwedel, our newsletter editor. Each month he edits and produces a quality issue. Thank you to all who make our chapter one of the best!



Amateur Radio News

compiled by Tom Weeden, WJ9H

AARRL, FCC in Court of Appeals

On Tuesday, Oct. 23, the American Radio Relay League faced the Federal Communications Commission in the U.S. Court of Appeals over the continuing debate concerning harmful interference to licensed radio services from unlicensed Broadband over Powerline (BPL) systems. BPL is the delivery of broadband Internet communications using unshielded electrical wiring to conduct high-speed digital signals to homes and businesses. BPL systems are designed to conduct RF energy through unshielded, medium voltage power lines, using some or all the HF spectrum between 1.7-80 MHz. At those frequencies on unshielded overhead power lines, the electrical wiring not only conducts the signals, it radiates them very efficiently for very substantial distances from the power lines.

In October 2006, the League petitioned the United States Court of Appeals for the DC Circuit to review the FCC's October 2004 Report and Order (R&O) in ET Docket 04-37 and 2006 Memorandum Opinion and Order, which generally denied all 17 petitions for reconsideration. In its brief initially filed May 17, the ARRL contends, among other things, that the FCC's adoption of rules to govern unlicensed BPL systems fundamentally alter the longstanding rights of radio licensees, including Amateur Radio operators.

Specifically, the FCC order, while adopting rules that it claimed would minimize instances of harmful in-

terference to licensed services, eliminated a fundamental requirement for unlicensed devices, and held for the first time that BPL systems need not shut down in the case of unresolved instances of harmful interference to "mobile" stations.

ARRL President Joel Harrison, W5ZN, said it could be "three months or more" before the Court announces its decision.

Top Ham Cop Won't Stop

Riley Hollingsworth, Special Counsel for the FCC's Enforcement Bureau, has now decided not to retire, shortly after announcing his impending retirement. He had recently announced that he would leave the FCC in January 2008. Hollingsworth said, "After spending the entire weekend thinking about the decision [to retire], it became more and more clear to me that it just isn't the right decision for me right now. There are several issues on the table that I want to continue to work through with the amateur community."

The Enforcement Bureau is the primary organizational unit within the Federal Communications Commission that is responsible for enforcement of provisions of the Communications Act, the Commission's rules, Commission orders, and terms and conditions of station authorizations, as well as enforcement of Amateur Radio rules (Part 97).

Excerpts from the American Radio Relay League's Web site, arrl.org.



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Ownership Limits Heat Up

By Tom Smith

The Commission held the sixth and last hearing on ownership limits and localism in broadcasting at its October 31 regular meeting in Washington, D.C. This hearing was not without controversy. A number of publications had reported that Chairman Kevin Martin was planning to release new rules concerning ownership limits before the end of the year. One rumored rule change would allow broadcast-newspaper cross-ownership. Senators Bryon Dorgan (D-ND) and Trent Lott (R-Miss.) along with others in Congress said that the Commission should release the proposed rules and take public comments for at least 90 days before acting on them.

Another controversy was settled when the Inspector General of the FCC announced on October 5 that senior managers had not suppressed or were ordered to destroy two reports, "Do Local Owners Deliver More Localism" and "Review of the Radio Industry, 2003." These reports came to light originally when Senator Barbara Boxer (D-CA) presented these reports along with a number of others to Chairman Martin at a hearing last year. The FCC released the reports a couple of days later posting them on the front page of their Web site with an apology.

To further the controversy, the Chairman announced the hearing for the October 31 meeting on October 24. The two Democratic FCC Commissioners, Michael Copps and Jonathan Adelstein, issued a press release objecting to the short notice for the hearing. The hearing was also different from the previous hearings as only one panel was to speak and no public comment session was scheduled. The members of the panel were:

Marcellus Alexander, Executive Vice President for NAB Television,
President of NAB Education Foundation

Mark Cooper, Director of Research, Consumer Federation of America

Bob Edwards, National First Vice President of AFTRA; Host, The Bob Edwards Show, XM Satellite Radio; and Former Host, NPR's "Morning Edition"

Kim Gandy, President, National Organization for Women

Jim Goodmon, President & CEO, Capital Broadcasting

Wade Henderson, President & CEO, Leadership Conference on Civil Rights

Reverend Jesse L. Jackson, Sr., President and Founder, Rainbow PUSH Coalition

Andrew Jay Schwartzman, President & CEO, Media Access Project

Christopher Sterling, Professor of Media and Public Affairs/Public Policy/
Public Administration, George Washington University

S. Derek Turner, Research Director, Free Press

They followed opening comments made by each of the Commissioners.

The Chairman stated how successful the hearing process and the research papers have been while Commissioner Adelstein stated just the opposite. Commissioners Adelstein and Copps both called for the release of a notice of proposed rulemaking and public comments before any new rules are adopted. Commissioners Robert McDowell and Deborah Tate both issued short comments saying how nice it was for everyone to be there. Chairman Martin also announced that he would start rulemakings to reinstate programs to aid minorities in gaining broadcast ownership with tax credits and expansion of low-power FM. Commissioner Adelstein asked Media Bureau Chief Monica Desai how many witnesses during all of the hearings had said consolidation was good for localism. She did not have an answer, but the Chairman said it was only a handful.

Ownership >>> continued pg. 5

Unlicensed devices action

By Tom Smith

On October 5, the FCC's Office of Engineering and Technology announced that it would accept additional devices for testing in its inquiry concerning the use of such devices for unlicensed use in the TV broadcast band. This is after devices submitted in earlier testing either failed or operated with marginal results.

In other action, Broadcasting and Cable reported that at least 31 members of Congress have sent letters to FCC Chairman Kevin Martin concerning possible FCC action that would allow the use of unlicensed devices in the TV band. They printed part of a letter to the Chairman from Maine Senator Olympia Snow urging the FCC to conduct further tests and not rush to create rules to allow such use. While supporting the expansion of broadband service that the use of TV white space could allow, she noted that she was troubled by the current state of the DTV transition and

The actions of these Congress members place them at odds with several members who have signed onto bills to force the FCC to adopt rules for unlicensed devices in the TV bands.

did not wish to have that transition undermined by the premature use of these devices. She stated that the growth of one technology should not be "at the expense of other critical technologies and services."

The actions of these Congress members place them at odds with several members who have signed onto bills to force the FCC to adopt rules for unlicensed devices in the TV bands.

*From FCC Releases (www.fcc.gov) and
Broadcasting and Cable
(www.broadcastingcable.com)*

Worth? >>> continued

or ceasing when needed for public safety use. The bidder will be required to construct a nationwide network that can be used by public safety providers and themselves.

The number of licenses in each band corresponds to the size of the market area they cover. Bands A and E are EA or Economic Areas and cover large parts of a state that are influenced by a major city in the area such as Milwaukee and the surrounding counties in Southeast Wisconsin. Band B is more local and is based on the areas that were used when the first cellular licenses were granted. Band C is divided into 12 regions around the nation and may cover several states. Band D is one nationwide license.

The minimum bid is based on the population in the license area at a rate of 1 to 3 cents per POP or person. The rest of the numbers come from various formulas the FCC uses and are described in the rulemaking notice. The bidding is conducted in a multi-round fashion until there are no increases in the bidding. The bids must be raised by an amount based on a complex formula the FCC has developed. The rulemaking that sets the rules for the auction is 122 pages long and contains nothing but information on the conduct of the auction. There is none of the normal legal information that normally follows a rulemaking notice. The spreadsheet listing the upfront payments, minimum bids and reserve prices is another 31 pages. One of the

rules that are different in this auction than those in the past is that the bidding is blind.

In past auctions, the FCC announced the bids for the last round and who placed what bids. This time the FCC will only announce the amounts bid. This will prevent the bidders from changing their plans on who bid what amount.

In previous auctions in the 700 MHz band, two one megahertz pair of bands that separate bands C and D and the public safety bands went for \$532.8 million, and TV channels 54/59 and channel 55 went for \$ 145.5 million. The total for all the auctions the FCC has conducted since the first one in July of 1994 is \$58.9988 billion. A total of \$334.1 million has been paid for 765 broadcast licenses with the bulk being for FM stations. After this auction, there is one auction for spectrum between 218-219 MHz and FM translators, AM and LPTV stations.

How high the bidding may go in this auction is unknown, but expect most of the major phone providers to be involved, with the possibility of companies such as Google and Apple joining the fray. This could be the FCC's biggest auction yet and because the FCC has auctioned off much prime spectrum already, it may determine the final total the government may add to reducing the debt from the FCC auctions. When all is said and done, it still won't be much considering that the debt is nearly \$10 trillion.

From FCC Releases (www.fcc.gov)

Channels	Band	# Licenses	Upfront Payment	Minimum Bid	Reserve Price
52/57	A	176	\$153,861,000	\$394,632,800	\$1,867,380,000
53/58	B	734	\$153,212,200	\$350,482,000	\$1,374,426,000
56	E	176	\$76,835,400	\$195,315,400	\$903,690,000
60-61/65-66	C	12	\$287,062,000	\$1,038,494,000	\$4,637,854,000
62/67	D	1	\$128,210,000	\$472,042,000	\$1,330,000,000
Totals		1099	\$794,001,400	\$2,452,966,200	\$10,053,350,000

Ownership >>> continued

The representatives of the various public interest groups all stated their opposition to consolidation, loss of local ownership, loss of hard news and local programming. The NAB representative, Marcellus Alexander, argued that local broadcasters were doing their job better than ever and that they would never be able to please everyone. And the other broadcaster on the panel, Jim Goodmon of Capital Broadcasting, said that the FCC should wait until the digital transition is completed before changing the ownership rules and to look at them in total rather than piecemeal and consider that many owners hold both radio and TV stations.

Before the hearing, a group of about 100 met in front of the FCC with the Rev. Jesse Jackson and Commissioners Adelstein and Copps speaking.

From FCC Releases (www.fcc.gov) and Broadcasting and Cable (www.broadcastingcable.com), The Washington Post (www.washingtonpost.com) and Radio World (www.rwonline.com)



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5 Tips to Keep Your Laptop Safe

1 Common sense and a locked cabinet

Don't leave laptops unattended. Lock them in cupboards or other secure places. If a vehicle is your only option, cover up the laptop or lock it in the trunk. Avoid tell-tale laptop bags and opt for a backpack or tote bag to keep laptops more inconspicuous.

2 Locks and cables

Don't make it easy for someone to steal your laptop — a cable lock or other locking mechanism can act as a visual deterrent to would-be criminals. Although they can be ripped off the exterior of a laptop with a strong tug, they do force some thieves to waver before taking the risk.

3 Laptop tracking & recovery software

One laptop is stolen every 53 seconds. With laptop tracking and recovery software, you can fight these odds and get your gear back. This stealthy software also helps law enforcement catch thieves red-handed.

4 Passwords and backing up

Laptops are appealing for black-market sale but, for most of us, the personal information they contain is just as valuable. Don't use simple passwords; always combine numbers and letters. Never leave passwords in obvious places on or near the computer. Change passwords regularly as well. And remember to back up! Some things are simply irreplaceable if lost.

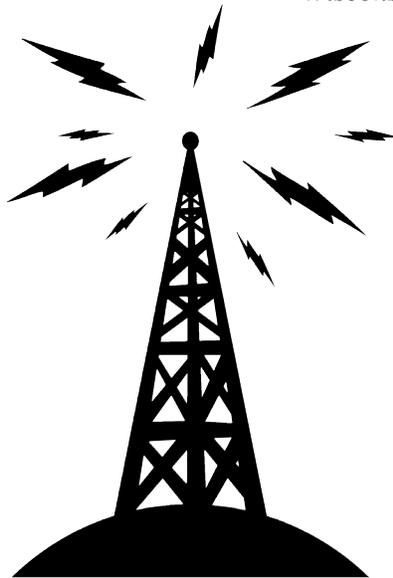
5 Additional security software tools

For increased security, use a number of different software applications, including anti-virus software, encryption solutions, anti-spyware and firewalls. Prevent unauthorized access and spyware from ransacking your computer and protect valuable information from pillaging with data encryption software.

-ARA Content

Register on DIRS ASAP

By Gary Timm, Broadcast Chair
Wisconsin EAS Committee



The FCC recently launched a new program called DIRS, the Disaster Information Reporting System. DIRS has been created to allow communications companies to report the status and needs of their operations to the FCC during times of crisis. All broadcasters and cable operators should register on the DIRS Web site now.

During a disaster, you will be contacted by the FCC if DIRS is activated in your area. At that point, stations and cable operators will be requested to report their on-air/off-air status on a daily basis, as well as any needs they have.

We had been waiting for the FCC to correct some errors and omissions in their User Manual, but it appears those corrections will not be made any time soon. In order to have the correct information, please access the page below on the Wisconsin EAS Web site. There you will find a two-page Guidance Document, which will aid you in registering on the site and will outline the shortcomings of the current FCC User Manual.

If you have previously registered on the beta version of DIRS, you will need to access the new, final Production version of the site to obtain a new password. Note that it is critically important that you now access only the new Production site, not the original beta site. Visit the site, address below, for details.

www.sbe24.org/eas/dirs.asp

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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.

<u>Exam Dates</u>	<u>Location Application</u>	<u>Application Deadline</u>
February 8-18, 2008	Local Chapters	December 31, 2007
April 15, 2008	NAB	February 29, 2008
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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WMTV-TV 15

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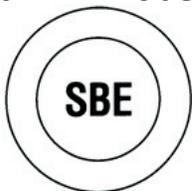
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Contributors this month: Tom Smith, Tom Weeden, Gary Timm, Steve Paugh and Dennis Baldridge. Thanks to Leonard Charles for his work on the Chapter 24 Web page.

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