



Society of Broadcast Engineers Chapter 24 Newsletter Madison, Wisconsin

February 2011

Next Meeting

Thursday, February 17



SYNCBAK & FIRST CALL FOR NOMINATIONS

Jillian Perry of Syncbak, Inc will describe a new system that allows viewers in your DMA to watch your station via the Internet while traveling outside your DMA.

The system restricts Internet viewing to only those viewers who live within your DMA. Jillian will describe how the system works and the equipment required will be shown in operation as installed at WISC-TV.

We will also have our first call for nominations for Chapter 24 officers.

Chapter 24 will provide Pizza & Soda - 6 PM
WISC Conference Room B
7025 Raymond Road
Madison, WI

Meeting and Program at 7:00PM
WISC Conference Room B
7025 Raymond Road
Madison, WI

Park in front parking lot; enter via front lobby entrance.

Guests are welcome to join us!

TVBD'S MOVE CLOSER TO REALITY >>> by Tom Smith

The FCC took two actions that move unlicensed TV broadband devices to reality. The first took place on December 6th when the final rules (<http://www.gpo.gov/fdsys/pkg/FR-2010-12-06/pdf/2010-30184.pdf>) were published in the Federal Register. In the notice in the Federal Register, the FCC set the date for the rules to take effect as January 5th. The rules were adopted last September (see October newsletter). The second action was on January 26th, when they adopted an order (http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0126/DA-11-131A1.pdf) that named the entities that would manage the databases to be used to protect both full and low power TV stations, TV translators, receive sights for cable and satellite providers and wireless mic users. The order named all nine applicants as database managers. They are Comsearch, Frequency Finder LLC, Google Inc, KB Enterprises LLC and LS Telcom, Key Bridge Global LLC, Neustar Inc, Spectrum Bridge Inc, Telecordia Technologies, And WSdb LLC.

Comsearch and Frequency Finder which includes RadioSoft, a radio spectrum database provider has experience in spectrum database management and Telcordia Technologies makes telecom software. KB Enterprises and LS Telecom include the developer of the FCC's Universal Licensing System. WSdb LLC and Key Bridge Global LLC are

creating new database systems for TVBD. Google was a major promoter of unlicensed TVBD's and Spectrum Bridge has developed a number of TVBD demonstration projects.

In the Order, the FCC noted that there were a number of comments questioning potential conflicts of interest raised both by the applicants in relation to the other applicants and by the Coalition of Wireless Mike Users. The FCC said that their oversight could lead to the suspension or termination of the database provider's authority. All of the database providers will have to attend a workshop conducted by the FCC on complying with and implementing the rules and each database will have a 45 day trial period before it can actually be used.

Additional Information from Television Broadcast Website (<http://www.televisionbroadcast.com/article/112834>)

Coming Up

- Tues., Mar 15 Broadband Plan & Wireless Mics – Chapter Nominations
- Weds., Apr 20 Low Cost Condenser Microphones – Chapter Nominations
- Tues., May 17 TBD / Elections

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Meeting Minutes

from the January 2011 Business Meeting

Chapter 24 of the Society of Broadcast Engineers held their monthly meeting at the Wisconsin Public Broadcasting Center in Madison, Wisconsin on Wednesday, January 19, 2011. There were 11 members present, 10 who were certified, and 1 guest.

Chairman Fred Sperry called the meeting to order at 7:04pm, then quickly had everyone introduce themselves. The brief secretary's report from December was approved on a motion by Tom Weeden and a second by Leonard Charles.

Treasurer Kevin Trueblood was not present but forwarded a report that Chapter 24's bank account is in the black. Acting as Sustaining Membership Chair, Fred Sperry announced that WISC-TV, WKOW-TV, and Sound Devices recently renewed their support.

Program Committee Chair Steve Paugh announced the next meeting will be at WISC-TV, and that Chapter 24 will provide pizza and soda for the Thursday, February 17th meeting. The program will be a first call for nominations and a presentation on Syncbak Systems. Following meetings will be on Tuesday, March 15th and Wednesday, April 20th.

Certification and Education Chair Jim Hermanson indicated that there was one recent re-certification exam given. The next exam session opportunity will be during the NAB conference in April. A local exam opportunity occurs June 3 – 13th, with an application deadline on April 15th.

Chapter Frequency Coordinator Tom Smith had nothing to report.

National Liaison Leonard Charles said that the SBE would be rolling out a new look on the SBE.org web site next week. He also reminded everyone that an SBE webinar titled Mathematics of Reliability would be happening on Thursday January 20th, and that registration was available online.

Fred Sperry covered an old business item by reviewing proposed changes to the Chapter bylaws. These changes had been published in the January Newsletter. A quorum of members was present and a vote was called. All proposed changes were approved on a voice vote, and will be incorporated into the bylaws.

In new business, Leonard Charles announced that both Dielectric and Joe Zuba of Dielectric donated funds to the Don Borchert Fellowship. These checks will be added to the amounts pledged by the Wisconsin SBE Chapters.

Questions and a brief discussion happened regarding a recent Charter digital cable channel realignment earlier in the week on the Madison and Baraboo systems. This affected the location of channels when tuned in with clear-QAM tuners in TV sets. In addition, a card was circulated for chapter members to express condolences to Cliff Groth on the passing of his son. There were no tech tips or professional or general announcements, and the meeting was adjourned at 7:29pm.

Leonard Charles introduced Mark Hile from CommConnect. Mr Hile presented a talk on microwave systems to transport IP data for studio-transmitter links.

Submitted by Mike Norton, Secretary

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COMMENT PERIOD STARTS ON TV SPECTRUM

>>> by Tom Smith

On February 1st, the FCC published the Notice of Proposed Rulemaking (<http://www.gpo.gov/fdsys/pkg/FR-2011-02-01/pdf/2011-2102.pdf>) on the future of the use of TV spectrum for broadband use in the Federal Register. The FCC adopted the Proposed Rulemaking at its November 30th meeting and publication in the Federal Register Starts the official comment period. Comments are due on March 18th and replies are due on April 18th.

Comments and Ex Parte Meetings with the FCC have already been made even before the comment period started.

Most of the comments have been from the general public and the Ex Parte meetings with the FCC have been from the broadcast community. Considering the importance of this Notice on the future of broadcast TV, expect a large number of comments from broadcasters.

FCC SETS PUBLIC SAFETY RADIO STANDARDS

>>> by Tom Smith

Nearly two years after the DTV transition, the FCC has proposed standards for public safety radios in part of the 24 MHz that was allotted for public safety use from the channels reallocated from TV use. The FCC issued a Notice of Rulemaking (http://www.fcc.gov/Daily_Releases/Daily_Business/2011/db0126/FCC-11-6A1.pdf) on January 25th asking for comment on proposed rules on standards for the public safety band. The proposed rules pertain to the 10 MHz in the 763-768 and 793-798 bands that the FCC would like to be shared between public safety users

and commercial users. The FCC tried to auction the commercial use of the band, but had no takers. There is still discussions on the possibility of auctioning the spectrum or if public safety will retain sole use of the spectrum.

The proposed standard would designate the band for broadband use which would allow public safety users to access databases in their systems and the Internet using computers and smart phone type of devices. The standard the FCC has proposed to use it the Long Term Evolution standard (LTE). This is the same standard which cell carriers are going to in their new networks and would make the public safety network compatible with any possible commercial network that shares the band. That commercial network could be the backbone of the safety network and foot the bill for the construction of the public safety network. That is part of the idea of auctioning the spectrum for commercial use on a secondary basis. The commercial network would share the use the network most of the time with public safety users getting priority for emergency use.

The rest of the Notice deals with network architecture, and connectivity between users including roaming between jurisdictions which is important when different public safety entities must provide aid in times of emergencies such as in New York on September 11, 2001 and during Hurricane Katrina in New Orleans. Lack of compatibility of systems during those disasters is what is driving these proposed rules.



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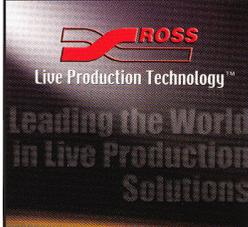
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WISC-TV
MADISON



Amateur Radio News

compiled by Tom Weeden, WJ9H

● On Wednesday, January 26, Senator Joe Lieberman (ID-CT), along with Senator Susan Collins (R-ME), introduced Senate Bill 191, The Amateur Radio Emergency Communications Enhancement Act of 2011. Similar to HR 81 — also called The Amateur Radio Emergency Communications Enhancement Act of 2011 — that was introduced by Representative Sheila Jackson Lee (D-TX-18) on January 5, the bill, if passed, would direct the Department of Homeland Security (DHS) to undertake a study on emergency communications. S 191 has been referred to the Committee on Homeland Security and Governmental Affairs. Lieberman is the Chairman of the committee, while Collins is the Ranking Member.

The objective of the bill is for the Secretary of Homeland Security to study the uses and capabilities of Amateur Radio communications in emergencies and disaster relief and to identify and make recommendations regarding impediments to Amateur Radio communications, such as the effects of private land use regulations on residential antenna installations.

In April 2009, Representative Jackson Lee introduced HR 2160 in the House, The Amateur Radio Emergency Communications Enhancement Act of 2009. The bill gained an additional 41 cosponsors, but did not progress out of the committee of jurisdiction. In October 2009, Senators Lieberman and Collins introduced the Senate version of the bill — S 1755 — in that chamber. That bill made it all the way through the Senate in December 2009, but likewise was not taken up by the House.

Like HR 81, S 191 calls on DHS to undertake a study on the uses and capabilities of Amateur Radio Service communications in emergencies and disaster relief and then to submit a report to Congress no more than 180 days after the bill becomes law.

● When General Motors, the world's

second largest auto maker, encountered a problem with the AM/FM antenna on its 2011 Chevrolet Camaro convertible, it was at a loss as to what to do. Spy photographs showed a pre-production version of the car with a long whip-style antenna on its rear fender. After what GM called “an outcry among Camaro enthusiasts,” the company decided to rethink the antenna. But how?

On hardtop Camaros, the antenna is integrated into the rear windshield, but



given the disappearing nature of this car's roof, that wasn't possible on the convertible. So GM turned to two antenna engineers — Don Hibbard, W8DBH, and Gregg Kittinger — who were tasked with doing what some thought was impossible: concealing the AM/FM antenna without sacrificing radio reception, while not putting it inside the Camaro's windows.

Hibbard and Kittinger managed to find a way to bury the AM/FM antenna inside the svelte spoiler perched on the car's rear deck lid. All that is visible is a shark fin antenna (used for satellite radio, OnStar and cellular signals), while the separate whip antenna — built into the spoiler — is used to receive AM and FM radio signals. He and Kittinger knew they had to find a way to preserve the vertical polarization of an AM/FM antenna, so they tried a few possibilities before coming up with the idea of placing the half-wavelength horizontal antenna in the spoiler. According to GM, this is a first.

A ham since 1977, Hibbard — the holder of an Advanced class license — is a self-described antenna nut, crediting his Amateur Radio background as a precursor for his love for antennas.

The spoiler AM/FM antenna is an active antenna module that does all its

impedance matching and amplification before sending back to the receiver.

Hibbard said that the unorthodox placement of the antenna within the body of the vehicle created a number of technical challenges, such as balancing form by preserving the car's styling and maintaining unimpeded radio reception. “Where other automakers have tried and failed, Chevy succeeded,” said Hibbard. “We hope to take what we've learned with the Camaro convertible, build on it and apply it to future vehicles.”

For more information on the spoiler antenna, check out this video <http://reviews.cnet.com/8301-13746_7-20026067-48.html> of Hibbard and Kittinger. The 2011 Chevrolet Camaro goes on the market in February 2011.

(Excerpts from the American Radio Relay League's <arrl.org> web site)



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Notice of Elections



by Steve Paugh, Nominations Chair

In April we will hold elections for Chapter 24 offices of Chair, Vice-Chair, Secretary and Treasurer for the 2011-2012 term. All interested members of Chapter 24 who are current in their dues are eligible to run for elected office. The nominations committee is now accepting nominations for all four offices. Our current officers and their status is:

Chair-	Fred Sperry	2 year term limit reached *
Vice Chair-	Bill Hamilton	2 year term limit reached *
Treasurer-	Kevin Trueblood	can run again for same office
Secretary-	Mike Norton	can run again for same office

* can be nominated for a different office

Call For Nominations

During the February 17th meeting, the nominations committee will solicit the members present for additional nominations. If you would like to run for an office, or know someone who wishes to run, please bring it to the attention of the nominations committee. All nominees are requested to submit a short biography for publishing with the ballot. The nominations committee consists of Steve Paugh (Chair), Mike Kulis and Leonard Charles.

Appointed Officers

The appointed offices do not fall under the jurisdiction of the nominations committee and are appointed by the Chair of Chapter 24. Traditionally, the existing appointed officers continue for another term automatically. If you are a current appointed officer and would like to step down, please contact the current Chair Fred Sperry. If you would like to serve as an appointed officer please make your desire known to the Chair.

The current appointed offices are Program Committee Chair- Steve Paugh, Program Committee Members- Steve Zimmerman & one vacancy, Newsletter Editor- Paul Stoffel, Membership- Paul Stoffel, Sustaining Membership- Fred Sperry, Certification and Education- Jim Hermanson, Frequency Coordination- Tom Smith and National Liaison- Leonard Charles.

Ballots

The election ballot will be mailed in early April and will be published in the April on-line newsletter. You can either use the mailed ballot or print the on-line ballot and mail it in to the Nominations Chair. The deadline for nominations and the submission of biographies will be March 31st, 2011. At this time we have no procedure for on-line voting but are exploring the possibility.



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NAB RELEASES REPORT ON HANDHELD TV ANTENNAS

>>> by Tom Smith

The NAB Has released a report on antennas designed for TV reception in handheld devices. There is a 15 page executive summary (http://www.nabfastroad.org/Antennas_Handsets_ExecSummary.pdf) and a 47 page full report (http://www.nabfastroad.org/EmbeddedFM_TVAntennaFinal.pdf). Either paper will give a good insight into the proposed technology. The UHF antenna consists of a metal strip type antenna with a gain of a negative number of less than 5 at most UHF frequencies. The VHF antenna is a wound coil around a ferrite core similar to an AM radio. The gain of the VHF antenna is between a negative 25 to a negative 30. This report makes the differences of using UHF vs. VHF for mobile handheld very apparent and highlights the difficulty that VHF stations will have in providing mobile TV service to handheld devices.

Thanks to Leonard Charles for maintaining the Chapter 24 web site and to Steve Paugh for mailing the meeting reminder postcards.



http://www.sbe.org/sections/cert_exam_prep.php



http://www.sbe.org/sections/cert_index.php



<http://www.sbe.org/sections/SBEUniversity.php>

March 2011 Chapter 24
Newsletter Deadline:
Tuesday, March 1
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edited using Adobe InDesign CS4

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CHAPTER 24 SUSTAINING MEMBERS

Recent Renewals

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Sound Devices, LLC

Thanks to all our Sustaining Members

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Scharch Electronics
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WISC-TV 3
WMTV-TV 15
WKOW-TV 27
WMSN-TV 47
Wisconsin Public Television

Certification Exam Session Dates

For more information about SBE Certification, contact Jim Hermanson, services@jimhermanson.com, Chapter 24 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 DEADLINE
April 12, 2011	NAB Convention	March 25, 2011
June 3-13, 2011	Local Chapters	April 15, 2011
August 5-15, 2011	Local Chapters	June 3, 2011
November 4-14, 2011	Local Chapters	September 16, 2011