



# Society of Broadcast Engineers Chapter 24 Newsletter Madison, Wisconsin

February 2013



## Next Meeting

WEDNESDAY, FEBRUARY 13

### UNDERSTANDING MPEG ENCODER SETTINGS

& FIRST CALL FOR  
NOMINATIONS



If you have ever been confused about all the menu choices available on an MPEG encoder now is your chance to talk to an expert. Mike Schmidt of Heartland Video Systems will share his knowledge on choosing settings to get the best QOS in the assigned bit rate balanced against allowable latency.

We will also announce the current slate of members running for chapter office for the 2013-2014 term.

Chapter 24 will provide Pizza & Soda  
- 6:00 PM

WISC-TV Conference Room B  
7025 Raymond Road  
Madison, WI

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

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

Visitors & guests are welcome to join us!

## INCENTIVE AUCTION RULEMAKING UPDATE

>>> by Tom Smith

As the FCC moves forward with its plan to repack the UHF-TV band to free more spectrum for wireless broadband use, the Commission passed the first step, as the comment period for the new rules ended on January 25th. Over 200 comments were received from the wireless industry, broadcasters, those interested in unlicensed white space devices and the general public. A number of broadcasters commented on the effect the repacking could have on their coverage due to increased interference. Those interested in unlicensed white space devices feared that they may be unable to find little open spectrum available to use as the bands may be packed with commercial broadband services and the remaining TV stations.

Wireless microphone users also expressed the same fears. There were many one-page informal comments from individuals that expressed fear of losing service from their local TV stations, particularly LPTV stations. The wireless industry asked that the Commission not proceed with its proposal to create a split wireless band with uplink part of the band starting at channel 51 and going down and the downlink part of the band starting at channel 36 and going on down. They ask that the two bands be adjacent to each other with a 10 MHz guard band between them and the spectrum for both bands start at channel 51 and go on down from there. They also said to preserve the channel 37 radio astronomy and medical band.

One of the issues they cited was the difficulty with using large antennas at the lower frequencies. Another was the cost to the medical users to move to another band. AT&T, Verizon, Qualcomm, T-Mobile, Intel and the National Association of Broadcasters filed a letter with the FCC on January 24th making these and other points concerning the proposed band plan. The letter can be found at (<http://apps.fcc.gov/ecfs/document/view?id=7022111151>). To read the rest of the comments on the Incentive Auctions go to ([http://apps.fcc.gov/ecfs/comment\\_search/input?z=oyq8k](http://apps.fcc.gov/ecfs/comment_search/input?z=oyq8k)) and type the docket number 12-268 in the top box marked Proceeding Number

In other action, the Wireless Bureau published a FCC Staff Summary that explains the incentive auction process in plain English format. It can be found at ([http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2013/db0116/DOC-318455A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0116/DOC-318455A1.pdf)). It may help in understanding the proposed process for conducting the Incentive Auction and the repacking of the TV band.

*(Note: The author did file comments in this rulemaking.)*



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## Coming Up

Thur., Mar 14	TBD – final call for nominations
Tues., April 16	TBD – Elections
Wed., May 15	TBD



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### Chapter Leadership

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*Volunteer for the  
program committee!*

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## Meeting Minutes

from the January 2013 Business Meeting

On Tuesday, January 15, Chapter 24 of the Society of Broadcast Engineers met for their monthly meeting at the Wisconsin Educational Communications Board building on the Beltline. Vice Chair Kevin Trueblood called the meeting to order at approximately 7:10 PM. Trueblood called for committee reports.

National Liaison Leonard Charles had nothing to report. Frequency Coordinator Tom Smith reported that the FCC has started the White Space Database and was beginning to use it on the east coast. Tom recommended that all eligible organizations get their wireless mics licensed so that they will be in the database and, hopefully, avoid interference. Certification Chair Jim Hermanson was not in attendance, but reports that the next exams will be given at the NAB convention. Newsletter editor Paul Stoffel could not attend the meeting, but reported that the newsletter deadline is February 3.

In professional business, Leonard Charles did a brief report on his observations of the Consumer Electronics Show. The meeting was adjourned at 7:20 PM. Steve Paugh then introduced Richard Wood of Resonant Results who presented a program on how he uses his Network Analyzer in his business of providing broadcasters with antenna and transmission line maintenance.

Fifteen members were in attendance, 9 of which are certified. 2 guests were also in attendance.

*Submitted by Chapter 24 secretary, Kevin Ruppert*



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# Amateur Radio News

compiled by Tom Weeden, WJ9H

• The Boy Scouts of America (BSA) has approved an Amateur Radio Operator rating strip for Scouts and Scouters to wear on their uniforms. According to BSA Communication Services Director Jim Wilson, K5ND, the strip recognizes the Scout or Scouter's availability as an Amateur Radio operator for communication services for events and activities, as well as emergencies. All registered youth members and adult leaders who also hold a valid FCC-issued Amateur Radio license of any class are eligible to wear the rating strip.



"Last year, the BSA Awards and Insignia Committee introduced the Morse Code Interpreter Strip upon the recommendation of the BSA's National Radio Scouting Committee," Wilson told the American Radio Relay League. "We are always looking for ways to promote Amateur Radio, both within Scouting and to the world. The National Radio Scouting Committee thought this new Amateur Radio rating strip was a wonderful way to do exactly that, as it readily identifies to everyone that the wearer is a licensed radio amateur, prepared to be useful and to help others."

• The number of radio amateurs in the US has reached an all-time high of almost 710,000. "2012 was definitely a banner year for the number of Amateur Radio operators here in the US," ARRL Volunteer Examiner Coordinator Manager Maria Somma, AB1FM, said. "It is amazing to see these new numbers and to know that Amateur Radio is experiencing such a healthy trend."

Somma explained that the total number of US amateurs in the FCC database also continues to grow each year: "As of December 31, 2012, the number of licensees reached an all-time high of 709,575; year-end totals were 702,056 for 2011 and 696,041 for 2010. The number of licensees increased at an average rate of 21 per day, while the number of US licensees has increased by 7 percent since 2008!" More than 3000 new licenses were issued in 2012 than in 2011, while upgraded license activity remained steady in 2012.

COMPARE AMATEURS PER FCC CALL SIGN REGION		
CALL SIGN REGION	2008	2012
1	33,000	35,000
2	39,000	42,000
3	34,000	36,500
4	130,000	140,000
5	80,000	86,000
6	93,000	100,000
7	88,000	93,500
8	53,000	57,000
9	44,500	47,500
0	56,000	60,000
KL7 - Alaska	3,100	3,500
KP4 - Caribbean	4,200	4,000
KH6 - Pacific	4,200	4,500
<b>Total US Amateurs</b>	<b>662,000</b>	<b>709,500</b>

This chart shows the distribution of license holders by call sign region, comparing 2008 to 2012. Wisconsin is in the 9th call district.

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



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## TV MICROWAVE SHARING DATE SET

>>> by Tom Smith

On January 30th, the FCC published in the Federal Register (<http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01863.pdf>) the date the new rules will take effect that will allow the sharing of the 7 and 13 GHz TV microwave band with fixed microwave links to be used by broadband providers and other point-to-point microwave users. The date the new rules become effective is April 1, 2013. In order for TV broadcaster to receive protection for both their fixed (STL) and remote ENG operations from interference from these new fixed links, TV broadcasters need to update their licenses and register their receiver sites. The SBE published a regulatory update on the subject in an e-mail newsletter sent out on February 1st. That update is printed below.

### SBE Regulatory Update

**February 1, 2013** - On Wednesday, January 30, a notice was published in the Federal Register stating that Part 74.605 of the FCC Rules will become effective on April 1, 2013. This rule requires that licensees of TV pickup stations in the 6875-7125 MHz and 12700-13200 MHz bands register their stationary receive sites. This rule is an outcome of the FCC allowing Part 101 users to share these BAS bands with broadcasters. SBE has been following this closely and recently learned that the FCC has worked out an arrangement under which broadcasters who modify their licenses for the sole purpose of registering 7 or 13 GHz receive sites will be eligible for fee waivers until April 1. A Public Notice will be released that will provide detailed filing instructions and additional information on the fee waiver.

SBE notes that there will not be much time between the issuing of the Public Notice and the deadline of April 1 for broadcasters to file an application to register their stationary receive sites in ULS without having to pay the typical filing fee.

With its longstanding efforts of Frequency Coordination, the SBE encourages broadcasters to register any fixed TV pick up receive sites to ensure protection from interference by others seeking to operate in BAS bands. By failing to register a fixed receive site a broadcaster could potentially forfeit any rights pertaining to interference protection from new entrants coming into the band, and now, failing to register receive sites is a violation of FCC rules, with attendant sanctions possible.

We will keep you apprised when the Public Notice is released.

For those who need to add or update a receive site, here is a link to a FCC webpage explaining the process. The link is ([http://wireless.fcc.gov/services/index.htm?job=filing\\_1&id=broadcast\\_auxiliary](http://wireless.fcc.gov/services/index.htm?job=filing_1&id=broadcast_auxiliary)) and is from the SBE coordinator e-mail list, courtesy of Eric Bergman who passed the link on.

## MORE LPFM ACTION

>>> by Tom Smith

The FCC has made the new low-power FM rules official by publishing them on January 9th in the Federal Register (<http://www.gpo.gov/fdsys/pkg/FR-2013-01-09/pdf/2012-30975.pdf>). The rules were published in a separate section which is 33 pages long. For those who may be interested in LPFM, this could be an easier read than the full Report and Order as some discussion and all of the footnotes are left out of this publication. Also the final rules are published just as they will be in the FCC rule book. As a further aid in understanding some of the rules pertaining to the application process for translators, which is also covered under this rulemaking, the FCC published on January 8th a five-page paper ([http://transition.fcc.gov/Daily\\_Releases/](http://transition.fcc.gov/Daily_Releases/)

Daily\_Business/2013/db0108/DA-13-18A1.pdf) giving examples and explanations to various issues and rules for filing applications for the upcoming FM translator auction. This auction is Auction Number 83 and the filing window was opened from January 10th to January 25th. This auction and its rules will affect the number of possible LPFM stations that will be available in many large markets and in some mid-sized markets with little open FM spectrum.

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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 2013-2014 terms. All interested members of Chapter 24 who are current in their dues are eligible to run for elected office. The nominations committee has accepted the following members for nomination. Our current slate of officers for the 2013-2014 period is:

Chair-	Kevin Trueblood	has accepted the nomination
Vice Chair-	Kevin Ruppert	has accepted the nomination
Treasurer-	Matt Glissendorf	has accepted the nomination
Secretary-	Pete Deets	has accepted the nomination

## Call For Nominations

During the February 13th 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 Bill Hamilton. 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, we have two vacancies on the Program Committee, Newsletter Editor- Paul Stoffel, Membership- Paul Stoffel, Sustaining Membership- Fred Sperry, Certification and Education- Jim Hermanson, Frequency Coordination- Tom Smith, Webmaster- Leonard Charles and National Liaison- Leonard Charles.

## Ballots


Thanks to the efforts of nominations committee member Leonard Charles, we will again have on-line voting! We will also publish the ballot in the April on-line newsletter. You can either vote on-line or print the on-line ballot and mail it in to the Nominations Chair. Ballots will also be available at the April meeting for on-site voting. The deadline for nominations and the submission of biographies will be March 29th, 2013.

## GOVERNMENT SPECTRUM PANEL RULES ISSUED

>>> by Tom Smith

On January 25th, the National Telecommunications and Information Administration (NTIA), which is the agency that manages spectrum that is used by the Federal Government, published rules in the Federal Register ([http://www.ntia.doc.gov/files/ntia/publications/spectrum\\_relocation\\_final\\_rule\\_01252013.pdf](http://www.ntia.doc.gov/files/ntia/publications/spectrum_relocation_final_rule_01252013.pdf)) that set up a panel to settle conflicts in the reallocating of government held spectrum between government agencies and the allocating or sharing of government held spectrum to non-federal users.

The panel will consist of three persons; one appointed from each of three government agencies or departments: the Federal Communications Commission, the Office of Management and Budget and the Commerce Department. Each member must be a Federal employee, have the appropriate security clearances and be a radio engineer or technical expert. They will serve one 18-month term and will receive no payment above their regular salary. They may continue to serve after their term ends until a replacement is appointed. This action is part of the plan to reallocate and auction a portion of government spectrum for wireless broadband use.



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*edited using Adobe InDesign CS4*

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

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## CHAPTER 24 SUSTAINING MEMBERS

### Recent Renewals

Clark Wire and Cable  
Scharch Electronics

### Thanks to all our Sustaining Members:

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## Certification Exam Session Dates

For more information about SBE Certification, contact Jim Hermanson, [jim.hermanson@wpt.org](mailto:jim.hermanson@wpt.org), Chapter 24 Certification Chair, or contact Megan Clappe, Certification Director at the SBE National Office at (317) 846-9000, or [mclappe@sbe.org](mailto:mclappe@sbe.org).

EXAM DATES	LOCATION	APPLICATION DEADLINE
April 9, 2013	NAB Convention	March 22, 2013
June 7-17, 2013	Local Chapters	April 12, 2013
August 9-19, 2013	Local Chapters	June 1, 2013
November 1-11, 2013	Local Chapters	September 13, 2013