



February 2015

Society of
Broadcast Engineers
Chapter 24
Newsletter
Madison, Wisconsin

 **Next Meeting**

Wednesday, February 11

**FIELD
REPAIRABLE
FIBER SPLICING**

&

FIRST CALL FOR NOMINATIONS

Chip Splon of **SplonCo, Inc.** will demonstrate a method for the field repair of fiber optic cables. Chip will show us the procedure and the equipment needed.

We will also take nominations for the office of Chair and Vice-Chair.

Come join us for Portillos Chicago Beef before the meeting, courtesy of Chuck Annella of Joseph Electronics.



Portillos Chicago Beef sandwiches serving at 6:00 PM
Courtesy of Joseph Electronics
501 Moravian Valley Road
Waunakee, WI

Meeting and Program at 7:00PM
Token Creek Mobile Television
501 Moravian Valley Road
Enter the door by the '501' address sign
Waunakee, WI



AWS-3 Auction Sets Record

>>> by Tom Smith

The FCC closed the AWS-3 auction on January 29th after 341 rounds of bidding covering 45 days with a break in the bidding over the holidays. The Auction grossed \$44,329,673,325 with net receipts of \$41,899,451,600 after bidding credits are applied for small business and other targeted entities. There were 31 eligible bidders bidding on 1611 licenses. The top bidder was AT&T with bids totaling \$18,189,285,000 for 251 licenses. The second highest bidder was Dish TV doing business under the names of two entities: Northstar Wireless LLC with a bid of \$7,845,059,400 for 345 licenses and SNR Wireless License LLC with a bid of \$5,482,364,300. The third highest bidder was Verizon under the name Cellco Partnership with a bid of \$10,430,017,000 for 181 licenses. T-Mobile bid \$1,774,023,000 for 151 licenses.

The reason for the difference in bid amounts and the number of licenses obtained has to do with the amount of spectrum and the size of market of licenses that were won.

There are 5 blocks of spectrum that are broken up into 176 geographic areas to be bid on called Economic Areas and one block of spectrum broken up into 734 smaller geographic areas called Cellular Market Areas.

The blocks of spectrum covering 176 Economic areas are broken up as follows. The 1695-1710 MHz band which is broken up into two unpaired blocks of 5 MHz from 1695-1700 MHz and 1700-1710 MHz. The 1755-1780 and 2155-2180 MHz blocks are paired into four groups which include three 10 MHz blocks starting with 1755-1760 and 2155-2160 as the first paired block followed by 1760-1765 and 2160-2165 MHz, and

>>> **Record** continued on page 3

NOMINEES NEEDED

>>> by Leonard Charles

Your help is needed to keep the future of Chapter 24 healthy. We are seeking nominations for this year's Officers Election and to date the response has been underwhelming.

Becoming a SBE Chapter Officer is a rewarding job. It's a career enhancing experience, one that could help you in your career goals. Whatever your expectations, one of the four officer positions in our Chapter will certainly match your anticipated level of involvement. It's not a tough job, just ask those who have done it.

We need the next generation of Chapter 24 leadership to step forward. This is an effort that cannot be solely left up to the nominations committee. Think it over and we hope you'll come to the conclusion; "Why not me?"

The nominations process for the 2015 slate of officers is now open. If you have never served the Chapter in an officer capacity, please don't wait for others to take a step back, instead you should take a step forward. The Chapter needs you. Contact myself or Steve Paugh for more information.

 **Coming Up**

- Thur., Mar. 12 WMSN Master Control Hubbing Project & Nominations
- Tues., April 7 IPv6 Tutorial & Elections
- Wed., May 6 NAB Wrap-Up

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Meeting Minutes

from the January 2015 Business Meeting

The January meeting of Chapter 24 of the Society of Broadcast Engineers was held Tuesday January 13th at 7:00pm at the Wisconsin Public Broadcasting Center in Madison, WI. Of 17 attendees, 14 were members and 12 were certified.

Chair Kevin Trueblood called the meeting to order at 7:00pm. There was no formal business meeting at the December holiday party so there were no minutes to report.

The Treasurer Leonard Charles reported the chapter ended the year with a positive balance. He also added that any member in good standing wishing to see the annual report may e-mail him for that information.

There was nothing new to report from newsletter, frequency coordination or membership.

Fred Sperry reported 16 Sustaining Members, with the renewals of WMSN-TV, Heartland Video, WISC-TV and WKOW-TV.

Steve Paugh reported our next meeting will be Wednesday, February 11th at Token Creek Productions with a field repair fiber splice demonstration. Upcoming meetings will include a meeting at WMSN-TV on March 12th, an IT Version 6 Tutorial in April, NAB Wrap-up in May and our June Summer Picnic.

Jim Hermanson reported there was one successful local re-certification. The next National exam session will be at NAB April 14th, with a registration deadline of March 20th. Local testing will be June 5-15th, with a registration deadline of April 10th.

Leonard Charles gave a National report, including an announcement that SBE will be providing sbe.org forwarding e-mail addresses free to members in good-standing. A “ Yes! I would like a sbe.org forwarding address” check box and space for other pertinent information will be included on the SBE renewal form, coming in the mail the first week of February. The SBE webinar, “Chief Operator’s Responsibilities – What Should I be Doing?” will be conducted by Chapter 24’s own Dennis Baldrige January 15th. As of our meeting date, there was already 58 registrations.

There was no old business. Under new business, Steve Paugh reminded members that the first round of nominations for chapter officers will begin at the February meeting. Our current Chair & Vice-Chair have hit their term limits. The current Treasurer and Secretary may stand for another year.

The meeting was adjourned at 7:10pm and Richard Wood of Resonant Results presented a program on the replacement of the 60-year-old directional antenna system of KSJB-AM in North Dakota.

ML Deets, Sec’y.



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WISC-TV
MADISON 5

Another Auction Deadline Set

>>> by Tom Smith

On January 29th, the FCC set another deadline in the Incentive Auction process for the UHF TV band. The Commission is requiring all stations with outstanding construction permits to be licensed by May 29th in order to receive coverage protection during the repacking process.

As some stations may be increasing coverage or changing coverage areas due to new construction, they would want that new coverage to be protected in order to maintain their new service areas or maximize any possible offer from the government should they decide to give up their license in the auction. Part of the payment will be determined by the number of persons that a station serves.

All full-powered stations, including those that are covered under an exemption to the current application freeze that allowed stations moving from channel 51 to reduce interference to wireless stations in the 700 MHz band, will be required to be licensed by May 29th.

A station is licensed for any new facilities when construction is completed and a new application for licensing is filed. This would mean that all stations with outstanding construction permits would have to complete any construction now in progress. Stations that were on the World Trade Center would be exempted.

Class A low-power stations must have their digital facilities completed and licensed by May 29th, even though they have to September 15, 2015, and possibly longer with a pending rulemaking, to make the digital conversion. Stations that have not completed and licensed their digital facilities by May 29th will only be given protection based on their current analog coverage. The notice can be found at (http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0128/DA-15-116A1.pdf).

Failure of Streaming Radio During Protests in France

>>> submitted by Steve Johnston

An article written by Olivier Oddou in the French newspaper Lalettre last Wednesday outlined important shortcoming in internet distribution of ‘radio.’ Using Google translate, the headline, followed by the subtext, translate as follows: “GIANT FAILURE IP RADIO LAST SUNDAY. Unnoticed in the national emotion of last weekend, streaming radio was a giant failure last Sunday in Paris, in the heart of national solidarity demonstrations against terrorism.”

Due to the sheer mass of protesters involved the listening normally provided via smartphones using the internet was completely unavailable. The author wrote, “Streaming radio, with all its diversity, was absent from what was probably the largest demonstration ever seen in our nation. At a time when radio is considering its technological future, this story is a very clear message to policy makers. Not the debate of FM against RNT (digital radio), but the future of traditional radio broadcasting versus streaming delivery. In online internet streaming, where each listener occupies an individual slice of bandwidth, the network can quickly become saturated in a crisis and fail.”

Traditional over-the-air broadcast radio and TV does not suffer from this limitation – there is no limit to the number of receivers that can pick-up the same signal.

Adapted from an article by Doug Irwin of Radio Magazine.

>>> **Record** continued from page 1

1765-1770 and 2165-2170 MHz blocks and one 20 MHz block covering 1770-1780 and 2170-2180 MHz. The two bands that were not paired were worth less than the blocks with uplink and downlink channels. The 1755-1760 and 2155-2160 bands are the block that is divided into the 734 Cellular Market Areas. The J band was worth the most as it was the 20 MHz block covering 1770-1780 and 2170-2180 MHz with 10 MHz in both the uplink and downlink channels.

Commissioner Ajit Pia is already rising concerns (http://transition.fcc.gov/Daily_Releases/Daily_Business/2015/db0202/DOC-331802A1.pdf) over the bidding credits that Northstar Wireless LLC and SNR Wireless License LLC are claiming. These credits are reserved for small businesses and with Dish TV’s 85% stake in the two companies. The Commissioner is questioning the validity of credits to companies owned by a corporation as large as Dish TV.

Information on the auction winners can be found on the FCC’s Auction page (http://wireless.fcc.gov/auctions/default.htm?job=auctions_home) and going to the summery link on the left side of the page and then clicking on Auction 97. View results will give a spread sheet of the results with winner and total bid for each block in a market. Sorting is limited to bidder and round totals. A PDF of the final round and the public notice are linked to on the right side of the Auction summary page or on the FCC home page under headlines.



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Amateur Radio News

compiled by Tom Weeden, WJ9H

- Starting on February 17, the FCC no longer will routinely issue paper license documents to Amateur Radio applicants and licensees. The Commission has maintained for some time now that the official Amateur Radio license authorization is the electronic record that exists in its Universal Licensing System (ULS) <<http://wireless.fcc.gov/uls/index.htm>>, although the FCC has routinely continued to print and mail hard copy licenses. That will stop next month.

The FCC will continue to provide paper license documents to all licensees who notify the Commission that they prefer to receive one. Licensees will also be able to print out an official authorization -- as well as an unofficial "reference copy" -- from the ULS License Manager.

"We find this electronic process will improve efficiency by simplifying access to official authorizations in ULS, shortening the time period between grant of an application and access to the official authorization, and reducing regulatory costs," the FCC Wireless Telecommunications Bureau (WTB) said. According to the WTB, the new procedures will save at least \$304,000 a year, including the cost of staff resources.

In comments filed November 5, the American Radio Relay League had strongly recommended that the FCC "give serious consideration to continuing a default provision for sending an initial paper license document to new licensees in the Amateur Radio Service, along with detailed, simple instructions for how to make the elections set forth in the notice relative to future modified or renewed licenses." The ARRL and other Amateur Radio commenters also worried that unless a license document is printed on distinctive paper stock, its authenticity could be questioned in such situations as obtaining vanity call sign license plates. To address this, the FCC said the watermark "Official Copy" will be printed on each page of an official authorization that a licensee prints out from the ULS.

- The FCC has ordered an unlicensed California religious broadcaster, who sometimes broadcast on a frequency in the 40 meter amateur phone band, to shut down his station. On December 31, the FCC's Los Angeles District Office issued a Notice of Unlicensed Operation to Martin K. Elliott of Inyokern, California. The FCC said it issued the Notice in response to a complaint of unlicensed operation on multiple HF frequencies, including some allocated to aeronautical stations. The FCC said its agents used radio direction-finding techniques to confirm that signals on 6280 kHz and 11,595 kHz were emanating from a residence located near Inyokern, and property records indicated that Elliott was the current owner and resident.

"The Commission's records show that no license was issued for operation of a station on either the frequencies of 6280 kHz or 11,595 kHz at this location," the FCC wrote. "Unlicensed operation of this radio station must be discontinued immediately."

The pirate station, which identified itself as "YHWH," was not cited for operating on Amateur Radio frequencies, although ARRL Official Observers had monitored the station in the past on 7185 kHz LSB. One short-wave listener said the operator of YHWH changed frequencies regularly.

The FCC warned Elliott that operation of radio transmitting equipment without valid authorization violates federal law and could subject the operator to severe penalties including, but not limited to, substantial monetary forfeitures, equipment seizure, and criminal sanctions.

The Commission gave him 10 days to respond. The FCC said its Notice "does not preclude this office from pursuing additional sanctions based upon our investigation of this incident."

- A foil "party balloon" released in late December from Melbourne, Australia, carrying an HF Amateur Radio payload, ended its journey on January 16 off the

east coast of Africa near Madagascar. Andy Nguyen, VK3YT, of Kensington, Victoria, Australia, released his PS-30 "pico balloon" on December 27, hoping that it might circle the globe. Its 13-gram Amateur Radio payload included a solar-powered 25 mW transmitter, sending telemetry on 30 and 20 meters using WSPR and JT9 digital modes. Many radio amateurs tracked the balloon's progress during its 20-day flight.

"There was some bad weather in the region, but speculations also include the possibility it was brought down (attacked) by the naughty penguins on the Island," Nguyen quipped, referring to the 2014 animated movie comedy, "Penguins of Madagascar." Several radio amateurs in South Africa reported that PS-30 was down. Following its launch, the balloon had traveled east across the southern tip of New Zealand, across the Pacific Ocean to South America and then to southern Africa. To return home, PS-30 would have had to cross Madagascar, the Indian Ocean, and part of Australia.

"The level of interest from all around the world has been amazing," Nguyen said. "The trip would not have been so successful without the collective effort of the like-minded community built up along the way."

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



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AM Station Goes Dark

>>> by Tom Smith

On January 26th, the FCC canceled the license of AM station WZRK in Lake Geneva, WI. The station's attorney sent a letter (http://licensing.fcc.gov/cgi-bin/prod/cdbs/forms/prod/getimportletter_exh.cgi?import_letter_id=55964) to the FCC requesting the cancellation of its license. The FCC took action on January 26th.

The station had been silent for periods of time over the last several years under various owners. The station was a daytime station with a directional antenna operating with one kilowatt on 1550 KHz.

The station was owned by WGLB, LLC which operates WGLB-AM Elm Grove, WI. WGLB operates on 1560 KHz with 190 watts directional during the day. WGLB has an application (https://licensing.fcc.gov/cgi-bin/ws.exe/prod/cdbs/forms/prod/cdbsmenu.htm?context=25&appn=101657334&formid=301&fac_num=73050) with the FCC to increase daytime power to 2.5 kW with a directional pattern that increases coverage in the direction of Lake Geneva, which would have been restricted with operation of WZRK.

ATSC 3.0 SBE Webinar

ATSC 3.0 is a suite of new standards and practices for the next generation of broadcast television - a system that will provide even more services to viewers, but will also require a clean break from the technologies of earlier-generation DTV systems.

Dr. Richard Chernock, chief science officer at Triveni Digital, will present an SBE webinar about ATSC 3.0 on Thursday, February 19 at 1 pm CST. The presentation will provide an overview of the status of the ATSC 3.0 activity from a technical point of view as well as the anticipated time schedule.

The system requirements include a call for a flexible and more efficient physical layer, mobility, Ultra-High Definition (UHD) images, new solutions for audio, incorporation of new user technologies such as second screen, and incorporation of broadband connectivity. ATSC 3.0 represents a cooperative effort between all segments of the industry and many parts of the world.

Cost for the webinar is \$49 for members of the SBE. The fee for non-members is \$80. **Registration** may be made online or by calling the SBE national office at 317-846-9000. Completion of this webinar qualifies for one credit, identified under Category I of the Recertification Schedule for SBE Certifications.

Society of Broadcast Engineers



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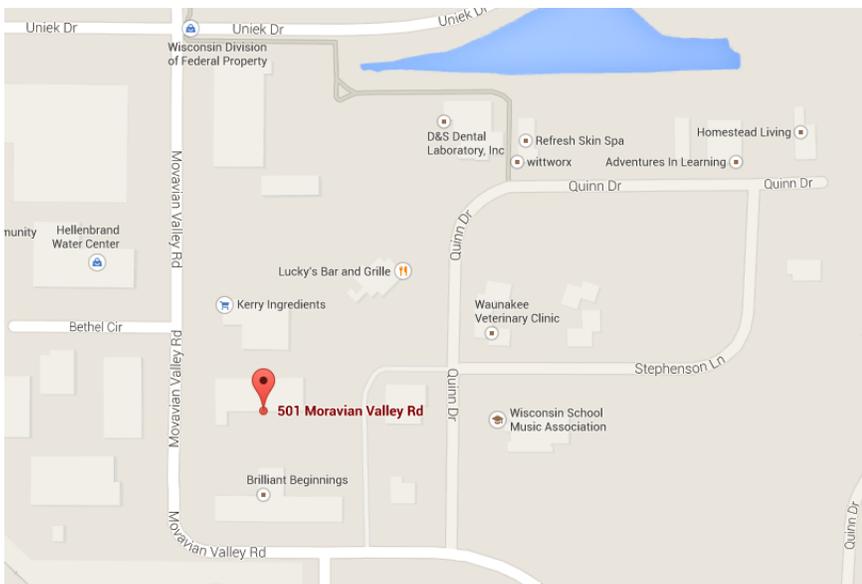
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Detailed map of February meeting location:

Token Creek Mobile Television 501 Moravian Valley Road, Waunakee



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

March 2015 Chapter 24 Newsletter Deadline: Tuesday, March 3, midnight paul.stoffel@wpt.org edited using Adobe InDesign 2014



CHAPTER 24 SUSTAINING MEMBERS

SBE Certification

The SBE Certification Committee has established the following exam dates. Choose the exam period that is best for you.

<u>Exam Dates</u>	<u>Location</u>	<u>Application Deadline</u>
April 14, 2015	Exams at the NAB Show	March 20, 2015
June 5-15, 2015	Local Chapters	April 10, 2015
August 7-17, 2015	Local Chapters	June 5, 2015
November 6-16, 2015	Local Chapters	October 2, 2015

You may mail, email or fax your applications to:

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9102 N. Meridian St. Suite 150
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Upon passing an SBE Certification Exam, you will be authorized to display the SBE Certified logo on your business cards, letterhead, resume, website or email signature. For proper use of this logo and to download, visit the Logo Requests page on the SBE website.

Jim Hermanson, CPBE, CBNT
SBE Chapter 24 Certification/Education Chair

Recent Renewal:

Scharch Electronics

Thanks to all our Sustaining Members:

- Alpha Video
- AVI Systems
- Belden, Inc.
- Clark Wire and Cable
- Full Compass Systems
- GEPCO International, Inc.
- Heartland Video Systems
- Resonant Results, Ltd.
- Ross Video
- Sound Devices, LLC
- Token Creek Productions
- WISC-TV 3
- WMTV-TV 15
- WKOW-TV 27
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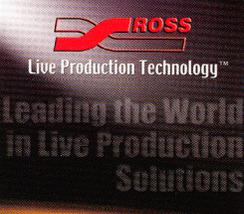
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