



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

December 2007



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Next Meeting

**Thursday, Dec. 13
SBE Holiday
Celebration Dinner**

Join us for this month's meeting when we celebrate the Holidays and toast the New Year in a relaxing atmosphere at Fitzgerald's in Middleton. We'll gather in the bar area before heading to the dining area. You can sign-up for the dinner on the Chapter 24 Web site, www.sbe24.org, and follow the links to the December Holiday Party sign-up sheet.

Happy Hour, 6-7 p.m.

Dutch Treat Dinner, 7 p.m.
Fitzgerald's
3112 W. Beltline Highway, Middleton



Coming Up

- Tuesday, Jan. 15:** TBD
- Wednesday, Feb. 13:** TBD & Nominations
- Wednesday, March 9:** HD Captioning & Nominations

The Upcoming TV

>>>By Tom Weeden

DISRUPTION

On February 17, 2009 at 11:59 p.m., all full-power analog TV stations must permanently sign off. To help educate broadcasters on how to educate viewers, the National Association of Broadcasters held a meeting on November 28th in suburban Chicago to discuss research on over-the-air TV viewing and NAB's DTV education campaign.

Out of all US TV households, 17% are exclusively over-the-air (OTA), meaning they don't subscribe to cable, satellite or telephone-delivered TV. Wisconsin has one of the highest OTA shares in the nation: 23% or 504,760 homes use an antenna on their TVs exclusively. In Dane County, 25% of homes are antenna-only. Marquette County is at 39.1%!

If you add in all TVs that use antennas, even in cable- or satellite-connected homes, the number rises to 31% of all US TV households. This includes small sets in kitchens, basements, bedrooms and garages. The

kitchen TV won't be able to pick up the morning newscast after 2/17/09.

An estimated 69 million analog TV sets in the US will be affected by the analog broadcast shutdown. Research shows that over-the-air TV

households are older, and heads of households tend to be women, minorities (especially Hispanic, 22%) and located in rural areas. Only 38% of OTA households have internet access, so using the web to educate those viewers about action they need to take for continued TV



reception will not be as effective.

Even in demographics we concentrate on primarily for sales, for instance the 126,000 women aged 25-54 in our DMA, nearly 23,000 are antenna-only. If we don't educate those viewers that they have to take action to continue watching TV, when we shut off our transmitter, suddenly a 3 rating in that demo becomes a 2. A 12 rating becomes a 10. Right in the middle of February sweeps.

Disruption >>> continued pg. 6

**Happy Holidays
to you and yours!**



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**Meeting Minutes**

November 2007

Chapter 24 of the Society of Broadcast Engineers met on Wednesday, Nov. 14, 2007 at WISC-TV for its regular monthly meeting. There were 19 members, 14 of whom were certified, and 3 guests present. The meeting was called to order at 7:01 p.m. by President Dennis Baldrige.

Secretary Tom Smith is in the hospital. Vicki Kipp passed around a card for those present to sign for Tom. Due to no business being conducted at the October meeting held at the Broadcasters Clinic, the minutes of the September meeting had not been approved. A motion to approve both September and October meeting minutes as published in the newsletter was made by Garrett Marshall and seconded by Clif Groth. The motion was approved.

Treasurer Leslie Franzen reported that the chapter's bank balance was in the black.

There was no Sustaining Membership report.

Certification Chair Jim Hermanson was not present, but in his place Vicki Kipp reported that one certification exam was given last week. The next local exam session will be held February 8-18, 2008, with the deadline to apply on December 31, 2007. For re-certifications, all paperwork should be sent directly to the National SBE office. Mike Norton was recently recertified as CBT and CBNT.

National Liaison Leonard Charles reported that the National office has received an application from Chapter 24 to hold the national meeting in Madison in 2008. The SBE RF Safety course will be held February 7, 2008.

Program Committee Chair Steve Paugh reported that the December meeting will be the holiday party. Programs for January and February are still open. In March, Link Electronics will show HD captioning equipment and a voice-to-caption unit. Most of the remaining meetings for next year are still open for programs.

There was no old business and no new business.

There were announcements of Chapter 24 mentions in two recent publications, one in a national SBE article, and in a Broadcasters Clinic piece in *Radio World*.

The business meeting was adjourned at 7:10 p.m. Program Committee Chair Steve Paugh then introduced Frank Grundstein of Logitek who discussed TV on-air consoles using a modern console/routing system.

Respectfully submitted,
Tom Weeden
Acting Secretary

**January '08 SBE
Chapter 24 newsletter**

Copy deadline: Friday, January 4
Folding party: Wednesday, January 9



E-mail submissions to John Salzwedel
at tcp@tokencreek.com

From the Chair

Dennis Baldrige



Take Time

Broadcast engineers work hard, sometimes long hours, way into the night. Then there are always the late-night calls – “this does not work” or “we’re off the air.” The demands on the broadcast engineer’s time are ever-increasing.

According to the Families and Work Institute, many Americans don’t take all of their vacation time. Cell phones and laptops are packed before bathing suits and sunscreen. Long spells away from the office for any reason other than serious ill-health are unheard of. It’s little wonder that stress rates are elevated, and employees have a high burnout rate. It’s a vicious cycle. The harder you work, the more you need a break. Needless to say, an environment that emphasizes work without play is unhealthy. And anything that’s unhealthy is bad for business in the long run.

An old proverb puts it this way: “All work and no play makes Jack a dull boy.” I’ll take it one step further – all work and no play can destroy relationships. What have you gained if you install and operate the latest HDTV station and yet lose your family? What has it profited you if you set up multiple HD radio facilities and yet lose your closest friends? Indeed, our jobs and work are very important, but friends, family, relationships and devotion to God transcend to a higher level. Technology advances, equipment goes obsolete, but relationships are lifelong and too important to ignore. This Christmas season remember to take time for the truly important things in life: relationships.



FCC holds last ownership meeting

By Tom Smith

On November 9, the FCC held the sixth and last ownership hearing in Seattle, Washington. The hearing was announced on November 2, which immediately drew fire from the two Democratic members of the Commission, Michael Copps and Jonathon Adelstein. They had objections to the short notice which was only a week before the hearing. The hearing was scheduled from 4 to 11 p.m. with a break at 7:30 p.m. Each half of the hearing consisted of a panel followed by two hours of public comment. The first panel consisted mostly of representatives of the media establishment, with the second panel representing mostly those working in the media as the speakers were from artist unions and other non-broadcaster-programming representatives.

Four days after the hearing, on November 13 FCC Chairman Kevin Martin released a proposed revision to the newspaper/broadcast cross-ownership rule. The Chairman proposed that the FCC would allow cross-ownership of newspapers and broadcast facilities if they are located in the top 20 markets, the proposed merger would be between a major daily newspaper and one TV or radio station, and that eight independent voices would still exist in the market. An independent voice could be either a newspaper or a commercial TV station. An existing newspaper/TV combination or a TV duopoly would be one independent voice as would each independently owned newspaper or TV station.

And finally, the TV station in a newspaper/TV station combination could not be one of the top four ranked stations in the market.

The merger would also have to meet these four criteria:

- The level of concentration in the market
- The combined group would have to increase the amount of local news in the market
- The newspaper and TV station would have to provide news judgment independent of each other
- And if the newspaper is in financial distress, the merger would have to show the owners’ commitment to invest in newsroom operations.

The Chairman even issued the final rules as they would be published in the rules in his six-page release. He also placed a copy in the press release, a two-page op-ed piece he wrote for The New York Times, which was published on the day the proposed rules were released. The two Democratic members of the Commission released a statement objecting to the proposed rules and asking for a 90-day comment period on the proposed rules. A number of members of Congress also requested that the FCC hold a 90-day comment period before acting on the rulemaking. The two Democratic members also said they would vote on the Tribune Company’s request on a waiver within three working days after the Chairman released a draft decision. They feared that the Chairman was using the Tribune waiver as an excuse to changes the ownership rules.

The final ownership action for the month of November was the removal from the November 27 meeting’s agenda of a rulemaking to aid in minority and woman ownership in broadcasting.

From FCC Press Releases (www.fcc.gov)



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Amateur Radio News

compiled by Tom Weeden, WJ9H

Amateur Radio in Space

Columbus, the laboratory built by the European Space Agency (ESA), is now packed inside space shuttle Atlantis' payload bay. It is the culmination of years of design and engineering work aimed at creating Europe's primary component for the International Space Station (ISS). At 23 feet long and 15 feet in diameter, the cylindrical segment is designed to host specialized experiments examining how humans react to microgravity and the effect of space on various fluids and objects, such as crystals. Two Amateur Radios on the International Space Station (ARISS) antennas have been installed on the nadir (Earth-facing) side of Columbus. NASA is currently planning on a launch date of Thursday, Dec. 6 for Atlantis.

The mission, STS-122, will bring seven astronauts (two of which are licensed amateur radio operators) to the ISS: Commander Stephen N. Frick, KD5DZC; Pilot Alan G. Poindexter; Mission Specialist Rex J. Walheim; Mission Specialist Stanley G. Love; Mission Specialist Leland D. Melvin; Mission Specialist Hans Schlegel of Germany, and Mission Specialist/Expedition 16 Flight Engineer Léopold Eyharts, KE5FNO, of France.

Earlier this year, the ARISS antennas successfully passed electrical and SWR tests, with one of the two antennas, Antenna 42, going through a final test — a thermal test under vacuum. Based on modeling, engineers believe the antenna will pass with flying colors. Columbus will house an additional Amateur Radio station, including the first digital Amateur Radio TV (DATV) station in space, as well as a ham radio transponder. The yet-to-be-built Columbus amateur gear will facilitate operation on new frequencies that will make it possible for ARISS to establish wideband and video operations for the first time and allow continuous transponder operation.

At the ARISS International conference last year in San Francisco, Graham

Shirville, G3VZV, speaking on behalf of ARISS-Europe, outlined plans for a mode L/S ham radio transponder as well as a DATV downlink on S1 band (2.4 GHz). "So, future ARISS contacts could have pictures as well as sound," Shirville told the delegates. ARISS-Europe is looking at a 10 W transmitter and a signal bandwidth of from 4 to 8 MHz. Since the Columbus module will be some distance from the other two ARISS stations, parallel operation will be possible.

Funding to finish and install ham radio antennas on Columbus has been uncertain; however. ARISS Vice Chairman Gaston Bertels, ON4WF, says donations from various sources covered a payment of 9000 Euros (approximately \$12,000) in March. There is still a funding shortfall of 14,000 Euros (approximately \$20,000). To help out, PayPal donations are being accepted.

SKYWARN Recognition Day

The Ninth Annual SKYWARN Recognition Day recognized Amateur Radio operators for their commitment to help keep communities safe. Co-sponsored by the American Radio Relay League and the National Weather Service, the event was held Saturday, Dec. 1. During this 24-hour special event, Amateur Radio operators, working together with their local NWS offices, activate Amateur Radio stations and work as a team to contact other hams across the world.

"For 364 days of the year, hams aid in providing the NWS offices with real-time information on severe weather when people and property are at risk," said ARRL Media and Public Relations Manager Allen Pitts, W1AGP. "But this one day is for fun, friendship and recognition of the critical services given to communities by the hams."

Scott Mentzer, N0QE, organizer of the event and Meteorologist-In-Charge at the NWS office in Goodland, Kansas, concurred. "Radio amateurs are a tremendous resource for the National

Weather Service. These folks are dedicated, and the assistance they provide throughout the year is invaluable. SKYWARN Recognition Day is our way of saying thank you."

In 2006, 90 NWS offices across the country participated and logged more than 16,000 radio contacts, according to Goodland's Warning Coordination Meteorologist David Floyd, N5DBZ. In typical SKYWARN operations during severe weather, direct communication between mobile spotters and local NWS offices provides critical "ground truth" information for forecasters. In summer, spotter reports of hail size, wind damage and storm rotation in real time greatly assist the radar warning operator, since that information can be correlated with Doppler radar displays. In winter, snow nets are held, where reports of snow totals, ice accumulations and whiteout conditions in blowing snow help NWS forecasters assess the extent and severity of winter storms. In recent years during wildfire situations, Amateur Radio operators have reported the precise locations of thick smoke and zero visibility, allowing forecasters to provide crucial weather updates to firefighters.

Excerpts from the American Radio Relay League's site at arrl.org and NASA.gov

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FCC Rulemakings

compiled by Tom Smith

FINAL RULEMAKINGS

MM Docket No. 00-168

Standardized and Enhanced Disclosure Requirements for Television Broadcast Public Interest Obligation

MM Docket No. 00-44

Extension of the Filing Requirements for Children's Television Programming Report

At the November 27 meeting of the FCC, rules were adopted that would require TV stations to file a standardized form quarterly on their programming efforts. The form will require the station to list various types of programming including local civic, electoral affairs programming, public service announcements and independently produced programming. This form will also include information on ascertainment of programming needs of the various segments of the community and information on closed captioning and descriptive video content. This form will replace the current issues/program list that broadcasters were required to be placed in the public file.

The form will be available online and filed with the FCC. Stations will be required to make their public inspection file available online if they have a Web site and notify their audiences twice daily about the location of the station's public file. The political file will not be needed to be posted.

The full detail on these rules will

become available when the FCC publishes the full report and order. From the description in the press release, the new programming report will be similar to the system currently used for reporting children's programming efforts to the FCC.

MB Docket No. 99-25

In the Matter of Creation of a Low Power Service, Third Report and Order and Second Further Notice of Proposed Rulemaking

The Commission has issued a number of rules concerning LPFM stations and also issued a notice of rulemaking concerning a number of proposed rules concerning LPFM.

The new rules concerning LPFM stations include new rules that will allow for transfer of LPFM licenses with significant limitations. The rules will allow for a LPFM license to be transferred in limited circumstances, but will not allow for any transfer of a construction permit.

The action also reinstates the rules that all LPFM licensees are local to the community and limits ownership to one LPFM station.

The Commission also clarifies the rules that repetitious automated programming does not meet the local origination requirement.

The Commission imposed an application cap on the 2003 FM translator window files. They will be limited to filing for 10 translators no matter how many translators they may have filed for in 2003. This action is to prevent translators from precluding LPFM stations in many markets. There were 13,000 applications for translators filed during the 2003 filing window.

The Commission also limited the responsibility of LPFM stations to resolved interference caused to subsequently authorize full-service stations. This action lessens the secondary status of LPFM station to full-power stations. The new rule also establishes a framework for considering short-spacing waivers and going-forward displacement policies for LPFM stations.

In the Second Notice of Proposed rulemaking, the Commission will be asking for comment on technical rules that could potentially expand LPFM opportunities, including asking Congress that they remove the third adjacent protection to full power stations.

The Commission is also proposing that full power stations must provide technical and financial assistance to LPFM stations when a new or upgraded full power station would cause interference to an LPFM station. These proposals would also lessen the secondary status of an LPFM station. In other proposals, the FCC will seek comment on adopting contour-based protections to expend LPFM station opportunities instead of the current mileage-based system.

The FCC intends to address these issues in a Notice of Further Proposed Rulemaking within the next six months and that the next filing window for non-tabled aural licensed service will be for LPFM.

Many of the details in this notice will become clearer, particularly those concerning the secondary status of LPFM versus full power stations, when the full report and order of rulemaking are published.

From FCC Press Releases (www.fcc.gov)

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Disruption >>> from cover

What do antenna-only viewers have to do to not lose local stations? They have three options:

1. Buy a new TV set with a built-in digital tuner. This does not necessarily have to be an HDTV set. Several stores now carry standard definition digital sets in the \$100 range.
2. Subscribe to cable, satellite or telephone-company delivered subscription TV.
3. Buy a digital converter box for their existing analog TV set. This box will receive digital signals and convert them to a regular channel 3 or 4 analog signal for their TV.

Fortunately, 17% of OTA homes have HDTV sets, so the transition has begun. For the rest who don't want to spend money on pay TV, several manufacturers are gearing up to sell digital converter boxes costing between \$50-\$70 beginning early next year.

To assist consumers in making this transition, the federal government has contracted two private companies, IBM and Ketchum Communications, to administer a coupon program which will distribute two \$40 coupons to each household which can be used toward the purchase of digital converter boxes for their analog TV sets.

IBM will certify retailers, certify set-top boxes, set up a toll-free call center, and handle coupon applications, distribution and redemption. Ketchum will handle public relations and consumer education to seniors, minorities, low income and the disabled.

Coupon distribution is scheduled to begin on January 1, 2008. There will be no means testing, and the coupons will expire 90 days after receipt. There is enough federal money budgeted to fund 37 million coupons. Of the \$1.5 billion available, the first \$990 million will go to any household applying for coupons. The last \$510 million will go to broadcast-only households. Applications can be made by mail, Web or phone.

It's supposed to take two weeks to process applications. The consumer will receive a list of retailers with the coupons. Coupons won't be distributed in a particular area until retailers in the area begin participating. Four digital TV converter boxes have been certified to date, two from Digital Stream and two from LG. No big box stores have been certified as of yet, although some smaller stores have. Best Buy has stated they will begin selling converters in April 2008. Radio Shack has not committed, and Wal-Mart is rumored to begin selling them on 2/17/08.

The National Association of Broadcasters will distribute spots to TV stations explaining coupons beginning in February 2008. The NAB education campaign is planning for 98 billion impressions through "DTV Action Spots" (note, they're not calling them PSAs), crawls/snipes/tickers, a 30-minute TV program, 100-day countdown clock and grassroots initiatives. The 98 billion impressions does not count news coverage.

HELPFUL LINKS

Applying for converter box coupons:

Web: www.mydvtv2009.com

Phone: 800-DTV-2009

Stations needing DTV education graphics for their Web site:

www.dtvanswers.com/graphicelements

PowerPoint presentations from NAB's November 28 meeting:

www.dtvanswers.com/powerpoint



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The NAB suggests that the best information to convey to viewers includes

- Date of transition
- How to get coupons
- Costs of DTV sets
- List of stations that will broadcast DTV
- Where to get boxes

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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- Token Creek Mobile TV
- Wisconsin Public Television
- WISC-TV 3
- WKOW-TV 27
- WMSN-TV 47
- WMTV-TV 15

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

FIRST CLASS MAIL




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