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Next Meeting

Thursday, Sept. 11
Trends in Nuclear Energy
Paul Wilson, Associate Professor, UW-Madison will give us a presentation describing how nuclear energy is in the middle of a renaissance driven by more than a decade of improved performance and a growing demand for low-emission electricity generation.

See Meeting Insert for full description of this month’s program.

Dutch Treat Dinner, 5:30 p.m.
Lucky’s Bar & Grill
1421 Regent St., Madison
(no reservation; just gather together)

Meeting & Program, 7 p.m.
UW Engineering Campus
Engineering Research Building
Room 414
1500 Engineering Drive, Madison

Parking available in Lot 17-Engineering Parking Ramp. See map on page 6.

Coming Up

Wednesday, Oct. 15: Broadcast Clinic/SBE National Meeting
Wednesday, Nov. 12: Charter Communications Tour
Thursday, Dec. 12: Holiday Party at Fitzgerald’s

Wireless Mics Under Attack

>>> By Tom Smith

On July 16, a group of public interest and consumer groups called the Public Interest Spectrum Coalition (PISC) filed an Informal Complaint and Petition for Rulemaking concerning the sale and use of wireless mics by ineligible users. The PISC consists of the New America Foundation, which is a leading proponent of the use of TV white space for unlicensed use; the CUWin Foundation; Consumer Federation of America; Consumers Union; EDUCAUSE; Free Press; Media Access Project; the National Hispanic Media Coalition; Open Source Wireless Coalition; Public Knowledge; and U.S. PIRG.

In the petition, the group asked the FCC to investigate Shure and other manufacturers listed in the complaint for willfully and knowingly marketing and selling wireless mics to unauthorized users in violation of Part 74 and for engaging in deceptive advertising to ineligible users such as churches, theaters, event venues and the public. They included over 170 pages of brochures and manuals from Shure and other manufacturers.

In the petition, the groups asked the FCC to grant amnesty to all unauthorized users of wireless mics; reclassify all licensed wireless mics as secondary to all services in the channel 52-69 band after the DTV transition; order the manufacture and sale of wireless mics operating on channels 52-69 to cease immediately; and create a new “General Wireless Microphone Service” licensed under Section 307(e) to operate on vacant UHF channels below Channel 52 on a secondary basis and create a licensed band in the 2020-
Chapter 24 of the Society of Broadcast Engineers met on Wednesday, Aug.13, 2008 at the studios of Wisconsin Public Radio. Chairman Dennis Baldridge called the meeting to order at 7:07pm. There were 11 members present, of whom 10 were certified. Five guests introduced themselves.

Steve Paugh made a motion to accept the July minutes as published in the Chapter newsletter. The motion was seconded by Bill Hamilton.

The treasurer's report from Leslie Franzen was read by Dennis Baldridge. The current bank balance in the Chapter's checking account was reported.

The frequency coordinator report from Tom Smith was read by Dennis Baldridge: There is no local news; nationally the FCC is doing more testing on unlicensed devices in the TV band focusing on wireless mike detection. There has been some complaints filed about unlicensed wireless mikes filed with the FCC, and they will take up the issue at the August 22nd meeting of the Commission. More information in the next newsletter.

Certification Chair Jim Hermanson reported that the application date for the next certification test at the National meeting to be held in Madison has closed; the application deadline for the next test period from November 7-17 will be September 19. The next local chapter exam date is February 6-16, 2009, with an application deadline of December 31, 2008. Chairman Dennis Baldridge reported that Chapter 24 received an SBE National Award for Highest Member Attendance.

National Liaison Leonard Charles reported that volunteers are needed to help with the National SBE satellite and Web teleconference on Monday, Oct. 13, to be produced out of the Wisconsin Public Television studios in Madison. Camera operators and telephone & e-mail help is needed. Contact Charles or Paul Stoffel if you are interested in volunteering. This teleconference precedes the Society of Broadcast Engineers 2008 National Meeting in Madison on October 14-15.

The National Meeting will be held in conjunction with the annual Broadcasters Clinic, a three-day event that features broadcast technical presentations for radio and television engineers and a broadcast equipment expo. There is a fee to attend the Broadcasters Clinic. Hosts for the SBE National Meeting will be SBE Chapter 24 of Madison and the Wisconsin Broadcasters Association (WBA). The event will take place at the Madison Marriott West Hotel, located in Middleton, on Madison's west side. Events held during the SBE National Meeting include the fall meeting of the national Board of Directors, the annual SBE Fellows Breakfast, the Annual Membership Meeting and the 2008 SBE National Awards Reception and Dinner. The fee to attend the Broadcasters Clinic does not include a ticket to the SBE Awards Reception and Dinner; they are available for $14 per person. The WBA is handling registration for the Broadcasters Clinic and the SBE National Awards Reception and Dinner.

Charles also reported that SBE National is working on the 2009 NAB Engineering Conference.

Steve Paugh, Program Committee, reported on upcoming meetings: September 11, Nuclear Energy; October 15, Broadcasters Clinic & SBE National meeting; and November 12, Charter Communications tour.

No report given on Sustaining Membership.

Other business: DirecTV is now receiving Madison's off-air DTV signals, instead of the analog channels, except for Wisconsin Public Television.

By common consent, the meeting was adjourned.

The evening’s program was a tour of Wisconsin Public Radio’s studios given by Steve Johnston, Director of Engineering and Operations of Wisconsin Public Radio.

Respectfully submitted by
Paul Stoffel, Acting Secretary
White space tests continue
By Tom Smith

In mid-July, the FCC started to conduct more tests on devices that would use the TV white spaces. The first round of tests was in residential and rural areas and tested the ability of the devices to detect TV transmissions, so not to operate on TV channels in use by broadcasters. The second round of tests was to determine the ability of these devices to detect wireless mikes. This testing occurred during a Washington Redskins preseason game and at a Broadway theater production in New York. The outcome of the tests depends on which side the press talked to, with Shure and the broadcasters saying that the tests failed and Motorola, Philips and others saying that the tests were a success. For broadcast TV signals, Motorola provided a device that relied on a database of users and Philips provided a device that sensed off-the-air signals. All systems depended on carrier sensing for wireless mics. Google and Microsoft did not send equipment to be tested this round. All devices were prototypes with laptops used for computing power, which would not be installed in an unlicensed personal router or WiMax relay on a light post.

Meanwhile Verizon, Qualcomm and Aloha have asked that the white spectrum be auctioned. There are a number of Web sites sponsored by public interest groups and the computer industry, including one by Google that looks like a public interest site call FreeTheAirwaves.com. This site allows users to send a one-page form letter to the FCC comment site. On August 28 and 29, the site generated nearly 10,000 copies of the form letter as comments to Docket 04-186, which is the docket number for the white space rulemaking.

Small Office?
Make the paperless dream a reality

The ideal of a “paperless office” is still more fantasy than reality for many of us — whether we’re working for someone else or running our own business. In fact, since the arrival of the Internet and e-mail — the two vehicles that were supposed to make the paperless dream a reality — paper use in offices has actually increased.

In The Myth of the Paperless Office, authors Richard Harper of Surrey University and Abigail Sellen of Hewlett-Packard report that offices are now using 40-percent more paper than before the Internet. Even so, large companies do recognize the value of less paper, as evidenced by the millions they pour into document management systems.

Smaller offices, however, have been slower to pursue the dream, in part because the technology to reduce paper has been costly and geared for use by large companies. Yet small offices would seem poised to reap the most benefits from document management. Organization expert Eileen Roth, author of Organizing for Dummies, has said 80 percent of the papers people file is things they’ll never use again.

Small companies can save time and money with digital document management. And new software makes it easier than ever for a small office to

paperless office >>> continued on page 5
The PISC gave two reasons for the petition. The first was potential interference to new public safety and advanced wireless services in the channel 52-69 band and by having the unlicensed wireless mic users “come to light” in order to assist the FCC in resolving the pending issues in Docket No. 04-186 to allow the use of TV white space for broadband use. The latter reason is probably the main reason for this petition as, it was mostly written by the New America Foundation, which is the leading public interest proponent of white space use.

On August 15, the FCC adopted a Notice of Proposed Rulemaking in response to the PISC’s petition. In the notice, the FCC issued a freeze on accepting any applications for licenses for new wireless mic systems on channels 52-69 and granting any authorizations on certifying equipment to operate on that band. The FCC asked for comment on a number of points raised in the petition. The Commission proposed to prohibit manufacture or sale of any devices that would operate as low-power auxiliary devices on channels 52-69. They went one step further than the PISC petition and proposed to prohibit the use of existing devices after February 17, 2009 on channels 52-69. When the FCC authorized the Wireless Assist Video Devices in 2002 for the film industry in the UHF TV band, operation was prohibited on channels 52-69.

The Commission also asked for comment on the PISC’s proposal for General Wireless Microphone Service and on the investigation of the various manufacturers of wireless mics, which the FCC has already started to do. The rulemaking is WT Docket No.08-166; Revisions to the Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Band and WT Docket No. 08-167; Public Interest Spectrum Coalition, Petition for Rulemaking Regarding Low Power Auxiliary Stations Including Wireless Microphones, and the Digital transition. Comments are due 30 days after publication in the Federal Register, with replies due 15 days after the comment period ends.

From release by the FCC (www.fcc.gov) and the New America Foundation

How to Clean a Flat-screen TV

The next time you walk into the room where your new flat-screen TV is on display, take a good look around. Is it starting to look dirty? Between all the dust and lint that flies around the average room and the dirty fingers used to turn the TV on its mount, it doesn’t take long before the set needs a good cleaning.

But don’t be tempted to use the same methods you would to clean your tube TV. Flat-screen television sets require more specialized care. Here are a few “don’ts” to keep in mind:

DON’T reach for strong chemical cleaners like alcohol, ammonia-based cleaners or window cleaners. They can damage the screen’s special coating.

DON’T spray a liquid cleaner on the screen, as it can leak into the TV casing and damage the circuitry.

DON’T use paper towels or newspapers to wipe off the screen. These will scratch the screen.

Instead, look for a solution specially labeled “safe for laptop screens” or “LCD and plasma screens” and wipe it on with a soft cloth, preferably one made of chamois, microfiber or 100-percent cotton.

Cleaner in hand, here are the quick-and-easy steps to follow:
1. Disconnect the power to your TV before you clean it each time. This is much safer, and it will allow you to see the smudges and dirt better.
2. Use either lukewarm water or a cleaning solution to clean your TV, and wipe it on to the screen with a damp, soft cloth. Just a gentle wiping is enough. Rubbing, scrubbing and hard pressure can damage the screen.

Between cleanings, a little preventative maintenance will go a long way. Remember, it’s important to dust your TV and its screen on a regular basis. Excessive dust will damage any electronic device.

Courtesy of ARAcontent
Do what is right because it is the right thing to do!

Our discussion of the SBE’s Canons of Ethics began in January of this year and will be concluded and summarized this month. We discovered that honesty, justice and courtesy form a moral philosophy when associated with mutual interest between human beings: this constitutes the foundation of ethics. I contend that at the heart of this foundation is our character.

Character has been described in a variety of ways: The inward motivation to do what is right; or who you are, even when no one is watching. Character can be defined as the qualities built into an individual’s life which determines his or her response regardless of circumstances.

Therefore, we need to guard ourselves against unprofessional attitudes and actions. Someone once wrote, Watch your thoughts; they become words. Watch your words; they become actions. Watch your actions; they become habits. Watch your habits; they become character. Watch your character; it becomes your destiny. As Aristotle said, “We are what we repeatedly do. Excellence then, is not an act, but a habit.”

Establishing a standard of excellence requires a desire to improve ourselves. One significant opportunity for self-development and to practice our relationships with other professionals is before us. October 14-16, 2008, the SBE’s National Meeting will be held in conjunction with the annual Broadcasters Clinic, a three-day event that features broadcast technical presentations for radio and television engineers and a broadcast equipment expo.

I would encourage everyone to become involved with this event as it represents a great opportunity for professional development. Simply put, it is the right thing to do. The clinic is just around the corner. Put the SBE’s Canon of Ethics into practice, mark your calendar, make your reservations and join the activities at the 2008 SBE National Meeting and Broadcasters Clinic. You can sign up online today at www.wi-broadcasters.org/events/Broadcasters%20Clinic/broadcastclinic.htm

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gogo digital, even if they don't have a document management expert or IT specialist on staff.”

If you’re not sure that digital document management will work for you, consider this:

- Every man, woman and child in the United States uses 700 pounds of paper per year.
- Paper documents can be hard to find when needed.
- Paper documents require storage space. Digital document management eliminates the need for filing cabinets, boxes or any other filing system that takes up physical space in your office.
- Disaster recovery for paper documents can be difficult. If your office experiences a fire or flood and your paper documents are destroyed, you’ll have little recourse for recovering them. Digital documents, when backed up properly on a regular basis, allow for much quicker, more reliable recovery.
- Sharing paper documents with clients or vendors via fax or courier can be costly and cumbersome. Digital documents can be shared and sent via e-mail for no cost.
- It’s difficult to protect the privacy and security of paper documents. Digital files can be protected with passwords and security software.

If you’re ready to go digital, here’s some advice:

- Don’t go completely paperless right away. Start out with the documents that are most critical to your business.
- Establish who will control the digital process. One person should lead the process and train others.
- Review your equipment. You’ll want to be sure you choose software that is compatible with the software and equipment you already have.
- Consider software that will allow you to back up your software quickly and easily.

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Courtesy of ARAcontent
ARRL looking to expand experimental license

On August 22, the American Radio Relay League applied to the FCC for expansion of its 500-kHz experimental license WD2XSH. If approved, this application will raise the total number of stations participating from 20 to 40. This will provide greater geographic coverage, including Alaska and Hawaii, and will provide more opportunities for ground-wave testing. Also included are requests for an expanded frequency band (495-510 kHz) and portable operation within 50 km. Amateur radio operators currently have no permanent allocation below the AM broadcast band.

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

Hurricane Watch Net activated

The National Hurricane Center’s Amateur Radio Hurricane Watch Net activated Sunday afternoon, August 31st for the purpose of establishing a list of available reporting stations along the northern Gulf of Mexico shores beginning Monday morning as hurricane Gustav was forecast to make landfall in that area.

The Hurricane Watch Net has been using these frequencies during the Hurricane Gustav emergency:

- 20 meters: 14.325 MHz USB
- Main frequency during hurricanes — 40 meters: 7.268 MHz LSB
- Water Way Net (secondary frequency) Maritime Mobiles Net -- 80 meters: 3.815 MHz
- Caribbean Net (alternates: 3.950 North Florida / 3.940 South Florida)

The Hurricane Watch Net www.hwn.org is also monitoring upcoming storms Hanna, Ike and Josephine.

Map to September Meeting

Office Ergonomics

Is your job causing you pain? Maybe it’s not the work itself but your office environment. While you’re hard at work burning the midnight oil, poor daily habits may be taking a serious toll on your well-being.

While office injuries have become more common, many can be minimized or prevented entirely through the principles of ergonomics. Incorporating the following techniques at work to stay comfortable and healthy from head to toe:

EYES Sit approximately an arm’s length away from your monitor and position the top of the monitor screen at, or slightly below, eye level. Take mini-breaks every 10 to 20 minutes to rest the eyes from the glare of the monitor.

SHOULDERS Keep your shoulders relaxed and in a neutral position as you type. Keep your elbows close to your sides as you use the keyboard and mouse. Take a moment every so often to roll your shoulders up and back to alleviate tension.

HANDS & WRISTS Keep your wrists straight and in a neutral position. Keep the bottom of your elbows even with the keyboard height, not below. Use minimum force while striking the keys and utilize your chair arms for support.

BACK & LEGS Adjust your chair so your thighs are parallel to the floor. Sit back in the seat so that your lower back is supported firmly by the chair or a support cushion. Place your feet on a footrest to relieve “pull” on the lower back. Make sure to get up and stretch your back and legs every hour.

Courtesy of ARcontent
SBE Chapter of the Air

HamNet meets the second Sunday of each month at 0000 GMT on 14.205 MHz. Hal Hostetter 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 Holly Essex at hessex@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.

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<td>Local Chapters</td>
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CHAPTER 24
SUSTAINING MEMBERS
RECENT RENEWALS
Full Compass Systems

THANKS TO OUR SUSTAINING MEMBERS
Alpha Video
Belden-Electronics Division
Belden-Networking Division
Broadcast Richardson
Clark Wire and Cable
Entercom Madison
Heartland Video Systems
Madison Video Repair
money-logic
Midwest Media Group
Resonant Results Ltd.
Roscor Wisconsin
Ross Video
Scharch Electronics
Sound Devices, LLC
Token Creek Mobile TV
WISC-TV 3
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Thanks to WISC-TV for maintaining the Web server for the Chapter 24 Web page and for providing copying and folding facilities for the newsletter.
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