The Society of Broadcast Engineers

Fox Valley Wisconsin SBE Chapter 80
PO Box 1519
Appleton, WI 54912-1519

February 2010

The next meeting of Chapter 80 SBE will be at the Out of Town Club on Tuesday February 16th at **Noon**. Our program will be by David Kieper entitled "Data Security Part 2".

Chairman's Corner

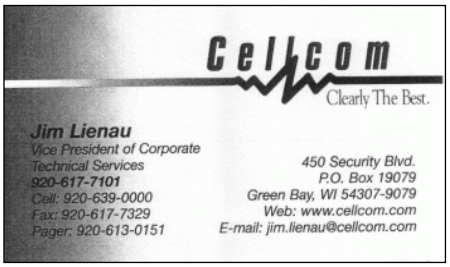
Welcome to our second eNewsletter!
Our next meeting of Chapter 80 will be on Tuesday, February 16, 2010 at noon at the Out O' Town Club in Kaukauna. David Kieper, Manager of Network and Infrastructure Services, UW-Green Bay, will bring us our second security presentation. Dave will focus on external threats to data networks from the firewall/switch point of view. This will be an excellent complement to our previous presentation on PC and server security from last fall. Bring along a friend and plan to join us!
Our last meeting was held on Tuesday, January 19, 2010 at noon at the Out O' Town Club in Kaukauna. Don Heinzien, Account Manager, Enterprise Solutions for Belden, gave a presentation on new services available from Belden, including fiber optic and wireless (yes, wireless!) systems and equipment. A special thanks to Don for an informative presentation.
The Newsletter is now switched over to an electronic version. We are still missing email addresses for a few of our members. We need your current email address if you wish to continue to receive our Newsletter. The Newsletter will be posted on our website, and archive copies, as well as other Chapter 80 and SBE information are available as well.

Upcoming events:
Tuesday, March 16, 2010 – SBE Chapter 80 – TBA
April 10-15, 2010 – NABShow 2010, Las Vegas, NV www.nabshow.com
Tuesday, April 20, 2010 – SBE Chapter 80 – TBA
Tuesday, May 18, 2010 – SBE Chapter 80 -- TBA

I look forward to seeing you on Tuesday February 16, 2010 at our February Chapter 80 meeting in Kaukauna!

Regards,
Keith M. Kintner

Contents



Upcoming Educational Opportunities brought to you by SBE

The Society of Broadcast Engineers is pleased to introduce Webinars by SBE. Webinars by SBE consists of at least one webinar a month on a specific subject of interest to broadcast engineers. Each webinar typically lasts 60-90 minutes. A presentation is shown over the Internet and audio is heard through VoIP on your computer or by telephone through a phone conference. Participants of a live webinar can pose questions to the instructor, either through a chat box or voice. Webinars are a good way to learn about something when you can't afford the cost of travel or time away from work or home. Here are details on three upcoming webinars, brought to you by SBE.

SBE RF Safety Course

Wednesday, February 24 · 2:30-5:45 p.m. Eastern
Instructor: Richard Strickland

The SBE RF Safety Course provides an overview of RF radiation issues and practices for broadcasters, including the biological effects of RF radiation and the distinct differences between RF radiation and ionizing radiation, FCC and OSHA regulations, workplace hazards, transmitter sites and more. Because there are a limited number of log-in ports, SBE chapters and companies are encouraged to consider identifying a site where local members or employees can come together to participate.
This course qualifies for SBE Recertification Credit (1 Credit, Category B).

Leadership Development Webinar Series

Wednesdays · March 10 · April 28 · May 26 · 2:00-3:15 p.m. Eastern
Instructor: Rodney Vandeveer

SBE is devoted to providing SBE members the opportunity to become outstanding leaders. This affordable webinar series provides an introduction to leadership, and explores basic principles of leadership (Webinar 1), how effective communication can dramatically increase efficiency and employee satisfaction (Webinar 2), and how motivation plays an essential part in employee commitment (Webinar 3).

Event Frequency Coordination 2-part Webinar Series

Thursday, March 11 · Tuesday, March 30 · 2:00-3:30 p.m. Eastern
Instructor: Ralph Beaver

This two-part webinar series embarks on event frequency coordination from beginning to end. This includes understanding the importance of coordination, where to get wireless channels, and the spectrum of users. The FCC rules and regulations as they pertain to frequency coordination will also be reviewed. Details related to both technical and non-technical aspects of coordination are also examined, including how to communicate with the media, finding users, how to find a coordinator in other cities, and the step-by-step technical process of coordination.

More information:
http://www.sbe.org/edu_seminars.php#SBEUniversity

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CHAPTER 80 ELECTED AND APPOINTED OFFICERS 2009-2010

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Making a list… - New law amends the National Telecommunications and Information Administration Organization Act to require the National Telecommunications and Information Administration (NTIA) and the Federal Communications Commission (FCC) to create and maintain an inventory of each radio spectrum band of frequencies used in the United States Table of Frequency Allocations from 225 megahertz to 10 gigahertz and report to the Committee on Commerce, Science, and Transportation of the Senate and to the Committee on Energy and Commerce of the House of Representatives. Sets forth provisions concerning national security. (thomas.loc.gov)

The SBE Chapter 80 Newsletter is published monthly. Members are welcome to contribute articles or ideas. Please have your submissions in by the 4th of the month to Dave Driessen or Bill Tessman

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OPERATION OF WIRELESS MICROPHONES IN THE 700 MHZ BAND IS PROHIBITED AFTER JUNE 12, 2010

Under a new FCC rule, anyone who uses a wireless microphone that operates in the 700 MHz Band will have to stop operating their wireless microphone no later than June 12, 2010.

Why did the FCC make this rule?

Certain wireless microphones have operated in frequencies that are needed for public safety. When these microphones were first designed, the frequencies they used were in between the frequencies that television stations used to broadcast television programs. With the completion of the digital television (DTV) transition on June 12, 2009, television stations no longer use the frequencies between 698 and 806 MHz (the 700 MHz Band) for broadcast. These frequencies are now being used by public safety entities (such as police, fire and emergency services) and by commercial providers of wireless services (such as wireless broadband services).

The wireless microphones that had been operating in the old TV broadcast channels can cause harmful interference to these public safety and wireless consumer services. Therefore, all users of wireless microphones (or certain low power auxiliary stations) that operate on any of the frequencies in the 700 MHz band – including both licensed users (under Part 74) and unlicensed users – now have to stop operating in this band. http://www.fcc.gov/cgb/wirelessmicrophones/ fcc

FCC proposes to conduct national EAS every year.
Given the potential vulnerabilities of EAS in the absence of national testing, the above-described multi-agency initiative to begin a national test program, and the lack of specific provisions in our Part 11 rules relating to national tests, we propose to amend our Part 11 rules to expressly require all EAS Participants to participate in national testing and to provide test results to the Commission. Specifically, we propose to amend section 11.61(a)(3) of our rules to read as follows:

National Tests. All EAS Participants shall participate in national tests as scheduled by the Commission in consultation with the Federal Emergency Management Agency (FEMA). Such tests will consist of the delivery by FEMA to PEP/NP stations of a coded EAS message, including EAS header codes, Attention Signal, Test Script, and EOM code. The coded message shall utilize EAS test codes as designated by the Commission's rules or such other EAS codes as the agencies conducting the test deem appropriate. A national test shall replace the required monthly test for all EAS Participants in the month in which it occurs. Notice shall be provided to EAS Participants by the Commission at least two months prior to the conduct of any such national test. Test results as required by the Commission shall be logged by all EAS Participants and shall be provided to the Commission's Public Safety and Homeland Security Bureau within thirty (30) days following the test.

2. We seek comment on the specific language of our proposed rule and its sufficiency to ensure an adequate framework for the conduct of national tests implemented by this agency in collaboration with FEMA and our other Federal partners. We also seek comment on whether the specific rule that we propose is, on balance, the best way to implement national testing of the EAS, or whether different provisions should be adopted.

3. We also propose implementing the national test on a yearly basis. We seek specific comment on this proposal. We believe that regular testing of the EAS is necessary to ensure that it can function properly during emergencies. We also believe that testing the EAS nationally at least once a year may be

necessary to produce reliable results regarding the on-going operational readiness of the EAS. On the other hand, we do not propose to require national testing more frequently than once a year, because we are concerned that more frequent testing could cause unnecessary disruption of regular broadcasting and other service transmission to the public. We also wish to minimize attendant costs. We seek comment on this analysis.

4.We do not propose to specify a set time each year for the national EAS test to occur. We believe that avoiding a set date will yield more realistic data about EAS reliability and performance, and will discourage complacency. On the other hand, we believe it is essential to provide sufficient notice of such tests to EAS Participants so that they can prepare for the test and alert the public that a national-level EAS test is pending. We believe that two months notice provides enough preparation time for EAS Participants. We seek comment on the sufficiency of a two-month notice period..

9.Finally, it has been brought to our attention that different ENDEC manufacturers may have programmed their devices to receive and transmit EANs in different ways, which may affect the ability of some ENDECs to properly relay an EAN. In its 2008 Closed Circuit Test Report, the Primary Entry Point Administrative Council noted that, many ENDECs process EAN messages by a ignoring FIPS, i.e. location codes for national level messages on the assumption that a national message is intended for the entire nation.1 Accordingly, they transmit the message whether or not an EAN contains a FIPS code. At least one ENDEC manufacturer, however, has devices which require a FIPS code match.2 Thus in order to properly forward an EAN, the devices must receive a message that contains an appropriate FIPS code as authorized by Commission rules. As a result, there is some concern that such devices may not properly transmit an EAN message nationwide. We seek comment on this situation. Could the difference in how these ENDECs are programmed result in breaks in the "EAS chain"?3 Could this impact the relay of an EAN test message during a national EAS test? If so, how? We also seek comment on what actions the Commission should take to address this problem prior to a national test? Should the Commission, for example, adopt a requirement that all ENDECs relay an EAN message irrespective of any FIPs code? What would be the cost of implementing such a requirement prior to a national test? Alternatively, are there non-regulatory actions the Commission should take? Should the Commission designate a national-level FIPS code and, if so, what would the impact of the ENDEC manufacturers be?

CONCLUSION

10.The EAS is intended to provide a reliable mechanism for the President to communicate with the country during emergencies. Yet the EAS has never been tested nationally in a systematic way, i.e., by use of a test methodology that can identify system flaws and failures comprehensively and on a nationwide basis. We believe that development of such a test methodology is critically important to ensuring that the EAS works as intended, now and in the future. We solicit comment on all issues, analysis, and proposals set out in this Notice, including our proposed rule. We intend to move quickly to adopt any and all necessary rule changes to ensure that the Commission and other federal, state, local, and non-governmental EAS stakeholders have the necessary diagnostic tools to evaluate EAS performance and readiness nationwide. (for complete text see Fcc.gov)

FCC approves HD power increase

73.404 Interim Hybrid IBOC DAB Operation.
(a) The licensee of an AM or FM station, or the permittee of a new AM or FM station which has commenced program test operation pursuant to § 73.1620, may commence interim hybrid IBOC DAB operation with digital facilities which conform to the technical specifications specified for hybrid DAB operation in the *First Report and Order* in MM Docket No. 99-325, as revised in the Media Bureau's subsequent *Order* in MM Docket No. 99-325.

AM stations are permitted to operate with hybrid digital nominal power equal to one percent of authorized analog nominal power (20 decibels below carrier (-20 dBc)).

FM stations are permitted to operate with hybrid digital effective radiated power equal to one percent (-20 dBc) of authorized analog effective radiated power and may operate with up to ten percent (-10 dBc) of authorized analog effective radiated power in accordance with the procedures set forth in the Media Bureau's *Order* in MM Docket No 99-325.

An AM **or** FM station may transmit IBOC signals during all hours for which the station is licensed to broadcast.

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

Exam Dates	Location	Application Deadline
April 13, 2010	NAB Convention	March 26, 2010
June 4-14, 2010	Local Chapters	April 16, 2010
August 6-16, 2010	Local Chapters	June 4, 2010
November 5-15, 2010	Local Chapters	September 17, 2010

Click here for more information about SBE Certification..

Job Posting:
Broadcast/Telecommunications Regional Technical Manager
ECB Northern Region, Wisconsin Public Broadcasting
Green Bay, WI

The State of Wisconsin Educational Communications Board (ECB) is seeking a skilled and seasoned broadcast/telecommunications engineer and manager to lead our Northern Wisconsin Regional Engineering Team from a position based in Green Bay. The Northern Region encompasses Wisconsin Public Television's largest TV audience, as well as Wisconsin Public Radio's second largest radio audience. ECB, in partnership with Wisconsin Public Television and Wisconsin Public Radio, provides interconnect and transmission facilities for these important services throughout the state.

The civil service classification for this position is Media Supervisor – Advanced, which is assigned to Broadband Pay Schedule/Pay Range 81-03. The salary range for this position is between $45,088 and $65,000 annually depending upon qualifications. The position also offers excellent benefits.

Duties: The Regional Technical Manager is charged with providing the highest standards of operation and engineering performance from the multiple radio, television, and public safety services within the Northern region, and directly supervises existing field engineering staff and Chief Operators in three locations. This individual plans and directs the work of field engineers and private contractors in maintaining and expanding broadcast and public safety services in the area and

serves as Engineering Manager for the region, reporting directly to the ECB Administrator of Engineering and Operations. The specific region encompasses Northern Wisconsin from Green Bay to Superior and includes two full power WPT transmitter sites, two TV translators, six WPR radio transmitter sites, multiple Weather Service transmitters, the Wisconsin EAS and Amber Alert Systems, and related data and program links. The RTM performs regional payroll approvals, files administrative and work progress reports as requested, and performs other duties as assigned from time to time by the Administrator of Engineering.

Knowledge, Skills and Abilities: Progressive employment in broadcast or telecommunications along with a demonstrated track record of successful project completion in a diverse environment. Extensive knowledge of current broadcast transmission and telecommunications technologies, understanding of FCC rules and regulations, familiarity with workplace safety, and a strong commitment to the consistent, reliable delivery of our quality broadcast and telecommunications services throughout the Region.

Well-qualified candidates will possess a Bachelor's degree in electrical engineering or a related broadcast or technical field, a history of successful management and team-building of technical personnel at multiple locations, familiarity with ATSC video and IBOC radio, high speed IP delivery, routing systems, microwave radio and television relays, and hold SBE Certification at the Senior level or higher.

Special Notes: May require lifting up to 50 lbs. This position requires some in-state travel and possession of a valid Wisconsin Driver License upon appointment. The 24x7 nature of broadcasting may occasionally require weekend/evening work or emergency response during non-standard work hours.

How To Apply: Candidates are asked to submit a cover letter, your detailed resume, and a paper limited to two pages which specifically describes how your work experience will contribute to Wisconsin Public Broadcasting by meeting or exceeding the minimum knowledge, skills and abilities outlined in this position announcement. ***These required materials are considered an examination and will be used to determine your eligibility for this position.***

Please submit the aforementioned required materials to: Terry Wm. Kraus; Human Resources Specialist – Senior; Department of Administration; P. O. Box 7869; Madison, WI 53707-7869. The required materials may also be faxed to Terry Wm. Kraus at 608-264-7648 or sent via e-mail to: terry.kraus@wisconsin.gov

To be included in the initial review process, the required application materials must be received in the Department of Administration Bureau of Personnel no later than Monday, March 1, 2010. Materials received after March 1, 2010 will be held and reviewed only if the needs of the agency are not met by those applications received by March 1, 2010.