

February Meeting
 Tuesday, February 23rd, 1998
 12:00 Noon
 Rosie's Rib Joint
 8125 E. 49th Street
 Tulsa, OK

SOCIETY OF BROADCAST ENGINEERS OF NORTHEASTERN OKLAHOMA

Volume 2, Issue 2

February 1999

February Chairman's Report By Don Dobbs

I would like to recognize all the hard work by Roger Herring coordinating the SBE technical seminars at the OAB conventions over that past two years. He and his committee has done a wonderful job putting together excellent programs.

The Harris DTV Express tour rolled into Oklahoma City this month. Frankly, it was one of the best continuing education opportunities I have seen. The objective of the three day seminar was to provide information we could use to implement our DTV plants and to help identify potential problems and cost effective solutions. The first day focused on transmission systems, day two addressed studio and distribution methods and day three was a practical demonstration and testing with the equipment. I highly recommend the DTV seminars to anyone who wants to stay prepared for the future.

Time is approaching for Chapter elections. We will be naming a Nominating Committee at the meeting. If you are interested in participating, contact any one of the nominating committee members and make your wishes known. The Committee will present a slate of nominees at the next chapter meeting. ~

EAS Equipment Year 2000 Readiness
 E-mail Larry Wilkins
 SBE EAS Committee Chairman

In August of 1998, the SBE EAS Committee sent inquiry letters to all EAS equipment manufacturers asking them to forward information on the readiness of their equipment for the Year 2000. What follows are the responses from those manufacturers.

HOLLY ANNE CORPORATION
 June 30, 1998

Per your inquiry, the HOLLY ANNE Corporation EAS equipment is year 2000 compliant. This includes equipment built or distributed by HOLLY ANNE Corporation.

The method of testing followed the guidelines of Y2K compliance analysis including "leap and non-leap" year functionality. The day tracking analysis was also completed successfully. Additionally the "9999" September 9, 1999 data failure analysis was completed successfully.

The EAS products compliance list includes, but is not limited to, Altronix "Envoy" messaging equipment and software; MIP 921 encoder/decoder and software; HC 971 hub controller; and CEMS 1000 character generator.

What is Grey Market Product?

In the realm of VideoTape it is similar product used in the USA bought over seas and imported into the states. An example is product sold through manufactures' corporate office in the US would not be Grey market. Product bought in the European or Asian markets imported not through US corporate offices would be Grey market. This product is bought and imported in at a lower price then sold with in the US. The price varies depending on how well the dollar is against European Currency, Asian currency and or the stability of their markets. The Grey market product sold with in the US is not honored nor guaranteed by the manufactures. So any damages caused to machines using this product are with out support from the tape manufacture.

Corinne Dalby
 Media Specialists

A reminder to all SBE Chapter 56 members. I appreciate any articles that you would care to write for the newsletter. You can e-mail articles to me at willilee@oru.edu. Or mail a disk to me at KWMJ, PO Box 3286 Tulsa, OK 74101-3286. If your local or national chapter dues are set to renew, please renew today.

Sincerely,
 Marty Callahan
 President

MTS COMMUNICATIONS
 September 15, 1998

This letter is in response to your questions *Cont'd page 3* about MTS EAS products' year 2000 readiness. The MTS System 3000D is ready for year 2000 with no hardware or software modifications. Because the System 3000D is based on a PC platform, however, it will be necessary to reset the clock and calendar shortly after midnight on Saturday, January 1, 2000. This reset is accomplished via the front panel keypad and display. Once set, all date, time and julian calculations are performed correctly. The system 3000D requires nothing more than this simple clock-setting to be completely Y2K compliant.

MTS will issue a service bulletin to all System 3000D owners to remind them to reset the calendar, and we will cheerfully assist any owners via phone, e-mail, fax or postal mail should they have any questions.

The MTS ENCODER II product, an FCC certified, *Cont'd page 4*

www.broadcast.net/~sbe56

Don Dobbs Chairman

KOTV Channel 6
Voice (918) 582-6666
Fax (918) 581-8616

Roger Herring Vice Chairman

KTUL Channel 8
Voice (918) 445-8888
Fax (918) 445-9512

Jim Hobbs Secretary

TCI
Voice (918) 669-4730

Jim Hicks Treasurer

KBEZ/KHTT
Voice (918) 492-2020

**Richard Hardy, CBRE Frequency
Coordination**

Richardy Productions
Voice (918) 627-4607
FAX (918) 627-2328 7am-11pm

Meeting Information

Chapter meetings are held at 12:00noon on the fourth Tuesday of each month, except December, at Rosie's Rib Joint, 8125 E. 49th Street, Tulsa OK

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SBE Jobline Information

If you have a job opening you wish to place on the SBE JobLine, please fax, e-mail, or mail the job description, along with the contact information, to Teresa Randsell at the SBE National Office in Indianapolis at transdell@sbe.org or fax at (317) 253-0418.

Society of Broadcast Engineers Chapter 56, Inc.
January Meeting Minutes

A regular meeting of SBE Chapter 56 was held on Tuesday, January 26, 1998 at Rosie's Rib Joint in Tulsa, Oklahoma. The meeting was called to order at noon by Roger Herring, vice-chairman.

Minutes

No minutes were read.

Treasurers Report

No change since last meeting.

Newsletter

Bill Lee reported the newsletter went out.

Nominating Committee

The nominating committee needs to look at replacing the Chapter Chairman.

Certification Report

No report this month.

Frequency Coordination

Several stations requested wireless mic data.

Web Site Report

The web site has had 1511 hits, the newsletter is on the web and OAB Conference needs to be put on web.

Internship Committee Report

Roger Herring reported that both KOTV and TCI each have an intern.

EAS Report

Roger Herring reported that the FCC would start inspections Feb 1st paying attention to EAS. Those who participated with OAB will be exempt from inspections.

Today's Program

Chris Noland of Tektronix brought a program on "Measuring and Monitoring for the Future".

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SBE's Short Circuits February 1999
MILLENNIUM PROJECT OFFERS OPPORTUNITY TO
GET LAPSED CERTIFICATION BACK

SBE will offer a limited time opportunity to those who have let their SBE Certification drop. Dubbed, the Millennium Certification Project," because it will continue from now until December 31, 1999, the program will allow anyone who has let his or her SBE Certification drop to apply for certification reinstatement without taking another exam. Applicants are required to complete a two-page application and submit it to the National Certification Committee explaining how they have maintained their knowledge and enhanced their experience in broadcast technology over the past several years. Applications will be reviewed by members of the National Certification Committee, who will apply essentially the same recertification criteria that would be applied to non-lapsed certification holders.

Past holders of Certified Broadcast Technologist, Certified Broadcast Engineer and Certified Senior Broadcast Engineer certifications are eligible. Past holders of Certified Professional Broadcast Engineer may also apply but will recertify at the Senior level. Following recertification at the Senior level, former CPBE's may apply for certification at the CPBE level. A flat \$99 fee is required with the application. It does not include membership in SBE, which is optional, though very much encouraged. Non-members wishing to become a member of SBE should include an additional \$55 (one year's membership dues) with their application. To get a Millennium Certification Project application, see your Chapter Certification Chairman or contact Linda Godby-Emerick, Certification Director at the SBE National Office, at (317) 253-1640 or lgodby@sbe.org.

ENNES WORKSHOPS PART OF NAB BROADCAST
ENGINEERING CONFERENCE

For the third year, the Ennes Workshops will be part of the NAB Broadcast Engineering Conference, held in Las Vegas as a part of the NAB '99 Spring Convention. This year, the Workshops will be held on Wednesday, April 21, and will be the "radio/audio" track for that day. Admission to the Workshops is included with Full Conference Registration. Ennes Education Committee chairman, Richard A. Farquhar, CPBE, will moderate the sessions. Sessions will run from 9:00 am to 4:00 pm, with a break at noon for the annual NAB Technology Luncheon.

Session topics will include, "The 2000 Engineer" by Paul McLane, editor of "Radio World," "AES Audio for Broadcast Systems," by Gary Stephens of Leitch, Inc.; "Computers-The Radio Connection," by Chriss Scherer, editor of "BE Radio". Scherer will also present, "Technology in Transition," which will be followed by "Building a Digital Station," by David Baden, Director of Technical Operations for Radio Free Asia. *Cont'd page 5*

Feeding A Vertical Tower
By Glenn Thomas

A friend here in Tulsa purchased a used seventy foot Rohn 25 tower complete with tri-bander and rotator. He needed fifty feet for his tower and didn't need the AR 22 rotator. So K5KW other-wise known as Killer Whale made me a present of two tower sections and the rotator. All I needed to do was come and pick it up. Needless to say we made a quick trip to his house to pick up the loot.

While looking around the place for a spot to erect a tower we found the only logical place was where a three band vertical was standing. The only other place was at the end of the house in the back yard where a new air conditioner was firmly entrenched. Anyway the XYL was not to thrilled with the idea of bolting the tower to the eaves of the house. With regret we took down the vertical and started digging a three by three foot hole for a cubic yard of cement to anchor the tower.

Thanks to Don, K5KW we only needed to purchase a concrete base section and a top section to complete the thirty foot tower. A five foot 2 inch pipe was added above the rotator which was mounted in the tower. In to this was fitted a six foot section of 1-1/4 inch aluminum tubing from the vertical. We had been wanting to try two meter FM so a Ringo two meter antenna was placed at the top.

We now had a tower with total height of about thirty-nine feet. We had several antennas for the low bands that worked fine but still didn't have what I considered a DX antenna for forty. The first step to correct this state of affairs was to add eight more radials to the ground system left from the previous vertical for a total of eleven radials from twenty to sixty feet in length. There were two ground rods at the base of the tower and one at the operating position.

A piece of RG8 using the shield and center conductor together connected the tower base and ground system to the ground system at the operating position. Out

**"Out came the trusty RF bridge to
measure imprdence"**

came the trusty RF bridge to measure the impedance at the base of a ten foot TV mast mounted a foot away from one leg at the base of the tower. The bridge indicated low reactance but very low impedance less then five ohms. I considered this to low for a good match across the phone band.

Being a little lazy we tried to feed the vertical with coax without any matching network. This method of feeding a vertical has been published by Ed Noll in his book "Vertical, Beams, and Triangle Antennas". It worked but for some reason the received signal was never as good as the reports we received.

Using a T network at the transmitter it could be loaded up on seventy five, forty and twenty. It didn't work all that well on 75 but did work on forty *Cont'd page 5*

Cont'd from page 1 software-based, stand-alone encode-only product, is also compliant with year 2000 requirements. ENCODER II runs on a PC under Windows 95, Windows 98, and Windows NT. Full compliance is assured provided the host platform is also ready for year 2000, a determination which only the end user of the product can make.

Please feel free to contact me if you require further information.

Sincerely,
Skip White
VP, Software Engineering
Skip@MTS-Comm.com

Gorman-Redlich
October 21, 1998

A Gorman-Redlich EAS1 unit containing software version v6.4 or higher is totally year 2000 ready. The current version of EAS1 software is v8.1 which, in addition to Year 2000 readiness, overcomes the problem of weather service excessive delay between end of FSK header and beginning of 1050 cycle tone. It also successfully deals with the wide variation in the time interval between the end of FSK header and beginning of dual tone attention signal on EAS units of other manufacturers.

A Gorman-Redlich EAS1 unit containing software version 6.3 or earlier is not completely Year 2000 ready. The extent of the problem in those earlier versions will only affect messages that originate on December 31, 1999 and expire on January 1, 2000.

Messages that originate and expire on December 31, 1999 or originate and expire on January 1, 2000 or later will not be affected.

EAS1 version 8.1 software is available now but will only run on Revision E boards or modified Revision C boards. Any customer can request a free replacement-board compatible EPROM from the company and if the request is accompanied by a current printout of the setup sheet from the customers EAS1 unit, a floppy disk will be sent with the new EPROM containing an upload ready setup file. Once the EPROM is installed and the file uploaded from a computer into the EAS1, all station pre-programmed setups will be restored. The customer is asked to return the old EPROM.

Any unit that has not been modified will have installed a V6.4 or earlier version of the firmware. All Revision E and modified Revision C boards will have firmware versions higher than revision V6.4. There is a charge of \$150 to return Revision C boards to be modified to accommodate the latest version of firmware.

SAGE

October 1998

Y2K Statement of Compliance

The Sage EAS Endec Max 1822 will continue to receive and transmit properly encoded EAS alerts through the year 2000 with the current firmware version 5.88 as pursuant to current FCC part 11 rules.

EAS alerts as specified in the current FCC Part 11.31(3)(c) do not include the year. The protocol requires that all EAS alerts be encoded with only the Julian day, hour and minute.

The Sage Endec displays the year information for user convenience. When viewing the "menu.alerts.view" alert log function, an anomaly will occur for the display of years 2000 [will be 100], 2001 [will be 101], 2002 [will be 102], etc. for firmware versions lower than 5.103, including 5.88. Firmware version 5.103 is available for \$50.00 from our Sales Office at 1-800-622-0022. Order

SAGY2KEPROM.

Robert E. Halpern, Broadcast Systems Year 2000 Compliance Team
SAGE Alerting Y2K

Burk Technology
BURK Technology Year 2000 page
TFT
Year 2000 Statement of Compliance
June 9, 1998

Santa Clara, California - TFT, Inc., today announced that all of its products, that are currently shipping and those shipped previously, will not be affected by any year 2000 issues. Specifically, the EAS 911 series of EAS Encoders and Decoders and the EMAS series distributed by Federal Signal Corporation will accommodate the rollover to the year 2000 and that for any dates from January 1, 1995 to December 31, 2094.

For further information, contact:

Jacob Lau
MIS Department
TFT, Inc.
Telephone: (408) 727-7272
Fax: (408) 727-5942
9500-0508a

M&N Electronics LLC
Response not yet received

The SBE Chapter 56 Inc. Newsletter is published on the 16th of each month, except December, and mailed to members and other interested parties.

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A \$15 annual donation is requested to cover publishing costs. Make checked payable to:
SBE Chapter 56, Inc., PO Box 703155, Tulsa OK 74170-3155.

Cont'd from page 3 and twenty. We were using a forty five foot section of RG8 for feed line and that length of line presented a very low impedance to the tuner on seventy five meters. The next try was with the twenty foot section of aluminum tubing which had been in the other vertical. I don't remember what the exact impedance was but it was around three hundred ohms.

Placing a series condenser at the bottom of the feed rod we were able to tune it until the bridge read fifty ohms with very low reactance. The SWR didn't go above 1.2:1 across the phone band. I called it the unipole feed and it did perform. Out to about the six hundred mile area it did not equal a low dipole. But from there out it was no contest.

Schedules with Frank WB5AHS at Midland, TX gave me better reports than W5KQD here in Tulsa who was using a 135 ft center fed antenna. I couldn't raise a VK or ZL on the low wire antennas but worked them when ever I heard them on forty meters on the vertical. By this time the little SBE33 was pushing a pair of 813'S to about 400 watts output.

It wasn't a very handy setup because the SBE33 did not have split transverse but did work. The XYL saved the day with a new Swan 270 for Christmas to which we promptly added a 508 external VFO. This antenna worked very well even after we added a eight element two meter beam on a twelve foot boom. Some time later we changed the Ringo to a Ringo Ranger and added a ten meter beam.

This extended the tower out to about forty five feet high. But that is another time and another antenna. Although my antennas usually have a change every few years we remember this antenna fondly. Of course today a tri-band beam graces the tower and the wire antennas have under went changes. No longer do we have wires over the house. Sloper antennas off the tower for the low bands, with a inverted V for 40 with the beams for the high bands and two meters. Who knows when the urge will change the system again, only time will tell. You know that change is one thing that makes HAM RADIO INTERESTING.

73's



SBE MEETINGS AND EVENTS SCHEDULED FOR NAB '99

SBE has announced its schedule of meetings and events to be held in conjunction with the NAB Spring Convention in Las Vegas, April 17-22.

Saturday, April 17

Certification Committee Meeting, Royal Salon, Las Vegas Hilton Hotel, 6:30 pm

Sunday, April 18

Board of Directors Meeting, Embassy Salon, Las Vegas Hilton Hotel, 8:30 am

Monday, April 19

Cont'd from page 3 Frequency Coordinators Meeting, Conference Room 13, Las Vegas Hilton Hotel, 1:30 pm
Ennes Trust Meeting, Conference Room 14, Las Vegas Hilton Hotel, 3:00 pm

Tuesday, April 20

Certification Exams, Conference Room 13, Las Vegas Hilton Hotel, 9:00 am

Membership/Chapter Chairmen Meeting, Room N250, Las Vegas Convention Center, 5:30 pm

The NAB Broadcast Engineering Conference, co-presented by SBE and NAB, will be held Sunday through Thursday.

The Ennes Workshops will be one of the conference session tracks offered on Wednesday (not on Saturday as was done the past two years). Admittance to the Ennes Workshops is included with Full Convention Registration. There is no additional fee. Exhibit Only registrants will not have access to the Workshops.

MEMBERS GET DISCOUNTED NAB REGISTRATION

Once again, SBE members get a great discount on registration for the NAB Convention in Las Vegas. SBE members will get the NAB Member rate off the full conference fee. This is a savings of \$330, Six times the cost of one-year of SBE membership! If you haven't received registration material direct from NAB, call them at (800) 424-8806 and request that one is sent to you.

NOMINATIONS COMMITTEE ANNOUNCED, CANDIDATES SOUGHT

SBE President Ed Miller, CPBE, has announced the names of members appointed to serve on the 1999 SBE Nominations Committee. Serving as chairman will be past SBE National President, Richard A. Farquhar, CPBE of RAF Associates in Canal Winchester, Ohio. Serving with Rick will be current member of the Board, Larry Wilkins, CPBE of Cumulus Radio in Montgomery, Alabama and Joseph Snelson, Jr., CPBE of Meredith Broadcasting in Fairway, Kansas. The Nominations Committee has the responsibility of identifying and presenting qualified candidates for national officer and board positions.

The Nominations Committee is seeking candidates to run for office this summer. Candidates must be Regular, Senior or Life SBE members in good standing and hold a current SBE engineering certification. Board members serve terms of two years and are expected to attend two full Board meetings each year; the spring meeting held in conjunction with the NAB Spring Convention, and the fall meeting, held during the SBE National Meeting. Terms for officers are one year. Officers are expected to attend the two full meetings of the Board, plus two Executive Committee meetings, held in between Board meetings during the winter and summer. All those who serve must be willing to cover their own travel expenses. Members of the Board are usually appointed to serve as chairman of a committee.

Cont'd page 6

Cont'd from page 5

If you are interested in being nominated for a national elective position by the Nominations Committee, or would like to discuss the idea further, contact any of the members of the committee before March 8th. Rick Farquhar - rick@rafassociates.com; Larry Wilkins - wilkins@wlwi.com or Joe Snelson - jsnelson@kctv.com.

MAKE 1999 THE YEAR YOU BECOME SBE CERTIFIED

There are now four SBE Certification exam periods held each year in local chapters, plus, exams may be taken during the NAB Convention in Las Vegas. You have more opportunities to become certified - at times convenient to you. For more information about SBE Certification, see your Chapter Certification Chair or contact Linda Godby-Emerick, Certification Director at the SBE National Office at (317) 253-1640 or lgodby@sbe.org.

Exam Date(s) Location Application Deadline

April 20 NAB Convention March 22, 1999
June 11 - 21 Local Chapters April 30, 1999
August 18 - 28 Local Chapters July 5, 1999
November 12 - 22 Local Chapters September 30, 1999

31ST LEADER SKILLS SEMINAR SET FOR JUNE 7-11 IN INDIANAPOLIS

The Society of Broadcast Engineers will present the Leader Skills Seminar for Broadcast Engineers for the third consecutive year, June 7 through the 11, in Indianapolis. This in-depth course teaches leadership and management techniques and is designed specifically for broadcast engineers. Our seminar leader will be Richard Cupka. Mr. Cupka has presented this program for most of its 31-year history, training over 1000 broadcast engineers along the way.

Cost for the five-day program is \$675 and includes all instruction materials, breaks and a course certificate. Transportation, lodging and meals are additional. To register, or for more information, contact John Poray at the SBE National Office, at (317) 253-1640 or jporay@sbe.org.

MONTHLY HAMnet BRINGS SBE TO REMOTE AREAS

At 8:00 pm EST, 0000 GMT, on the second Sunday of each month, SBE Chapter 73 takes the air. Hal Hostetler, WA7BGX, of Tucson, Arizona, is the control station for the "meeting." Updates on SBE activities are given each month and participants can discuss technical issues and visit. HAMnet was originally begun to help serve members who lived too far to attend meetings of any regular chapter, but any amateur operator is welcome and encouraged to participate. Look for HAMnet on 14.205 MHz.

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FCC and Shipboard Use of Morse Code

Global Maritime Distress and Safety System

Fully Implemented effective February 1, 1999

The Federal Communications Commission announced today that the Global Maritime Distress and Safety System (GMDSS) became fully implemented in the United States effective today, February 1, 1999.

All cargo ships of 300 gross tons and upwards, all large passenger vessels operated in the open sea and all small passenger vessels operating on international voyages now must comply fully with the GMDSS requirements unless exempted by the FCC.

The GMDSS is a ship-to-shore distress and safety communications system that requires two separate means of sending a distress alert. It relies on geostationary communications satellites and terrestrial digital communications systems that enable ship radio operators to send and receive distress and safety communications worldwide. The GMDSS also uses radar transponders and distress beacons that pinpoint the location of a ship or survival craft in distress. It replaces the manual Morse Code radiotelegraph system.

Full implementation of this automated communications system vastly improves the ability of ships at sea to notify the maritime community of events which may threaten loss of life.

The GMDSS was first adopted by the International Maritime Organization (IMO) in 1988. In 1992, the FCC adopted new rules phasing in GMDSS compliance, with full implementation scheduled for February 1, 1999. Prior to the GMDSS, passenger and large cargo ships were required to be equipped with manual Morse code radiotelegraph installations manned by skilled radiotelegraph operators when sailing in the open sea or on international voyages.

The SBE Chapter 56 Inc. Newsletter is published on the 16th of each month, except December, and mailed to members and other interested parties. A \$15 annual donation is requested to cover publishing costs. Make checked payable to SBE Chapter 56, Inc., PO Box 703155, Tulsa OK 74170-3155. Other SBE Chapters may use excerpts, if attributed to the original author and this newsletter. The deadline for submitting articles is the 15th of each Newsletter month.

Rex Gotcher 455-5864	Pager # 745-7527
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