



June Meeting
Tuesday, August 29th 2000
12:00 Noon
KTUL Channel 8
3333 S. 29th W. Ave., Tulsa
(Lookout Mountain)

August Program to Demonstrate COFDM Technology.

The date of the August SBE meeting has been changed to Tuesday, August 29th. This month's program will be a demonstration of COFDM technology presented by NEC Electronics. The program will be presented by John Leahy, sales manager, Radio Communications Systems Division, NEC America, Inc. The program will be held at noon at KTUL Channel-8, 3333 S. 29th W. Ave. on Lookout Mountain here in Tulsa.

To get to KTUL coming from the East, take 1-44 West toward Oklahoma City. Exit on S. 33rd W. Ave. and head North. (This is the first exit after passing under Hwy. 75.) Off of S. 33rd W. Ave. turn right or East on W. 41st Street. Go a short distance and turn left onto S. 29th W. Ave. We are at the top of the hill. If you're coming from downtown, take 244 West toward Oklahoma City. Stay right on 244 after it and Hwy. 75 split, and exit at W. 40th Place (the first exit after the split.) Turn left onto Southwest Boulevard. At the next intersection, turn left onto W. 41st street. At the bottom of the overpass turn right onto S. 29th W. Ave. We're still at the top of the hill. If you need additional directions, call 445-8888.

Electronic News Gathering (ENG) poses some pretty tough challenges-such as covering spot news in urban areas. In urban areas it is often impossible to establish a direct line-of-sight transmission path to the receive antenna. Because DML's receiver/ decoder requires only 64 of the 544 carriers to arrive in time with each other (either direct or reflected), it provides full performance wherever news happens.

NEC will demonstrate a continuous "move & shoot" in the streets of Tulsa. NEC's Digital Microwave Link (DML) is an all-digital microwave

system that combines COFDM modulation with the efficiency of MPEG-2 compression. The result-robust transmission with excellent picture quality for ENG and live events. It also enables simultaneous transmission of live footage from two different locations on the same channel. Utilizing existing directional transmit antennas and a single omni receive antenna, DML provides all the range of analog microwave, using 6db less power.

Incorporating both Coded Orthogonal Frequency Division Multiplexer (COFDM) and MPEG-2 technologies, NEC's DML system provides robust transmission without a line of sight signal path, using approximately half the bandwidth required by traditional analog transmissions. This provides efficient transmissions where the terrain profile does not provide a clear line of site to the station's tower or receiver site.

"NEC first offered DML in Japan at the 1997

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InterBEE tradeshow in Japan. Since that time, we have made significant reductions in size and have incorporated more channels to meet the demands of the US broadcast marketplace," said John Leahy, of NEC America, Inc. "DML provides broadcasters with a viable solution for dealing with the impending channel re-assignment in the 2 GHz band."

Spectrum stretch, a technology unique to NEC, allows simultaneous transmission from two different locations, on the same channel, at the same time, in the same amount of spectrum as a single existing analog channel. *Continued on Page 3*

www.broadcast.net/~sbe56

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Meeting Information

Chapter meetings are held at 12:00 noon on the fourth Tuesday of each month, except December, Fountains Restaurant, 6540 South Lewis Avenue, Tulsa, OK
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SBE Ch. 56 Meeting Minutes

June 27, 2000

The Fountains Restaurant Tulsa, OK
Chairman Don Dobbs called the meeting to order. Everyone present introduced himself or herself.

Meeting minutes

Meeting minutes from the May meeting (taken by Larry Miller) as published in the June newsletter were approved.

Treasurers Report

Larry Miller reported the chapter checking account balance was \$3,202.02 as of July 25, 2000. Checks and cash received for payment of dues that have not yet been deposited totaled \$345.00. The Chapter received a rebate check from the National Headquarters in the amount of \$259.25. One check will be written for the July newsletter publishing expenses in the amount of \$58.35. The amount of the rebate check is determined by an amount equal to 15% of the dues paid by Regular and Associate members in our Chapter, along with an additional \$5.00 for each new SBE member assigned to our Chapter during the year.

EAS Report

Roger Herring asked that if stations are not monitoring the primary station listed in the statewide EAS plan to notify him so he can update his monitoring list, which will be forwarded to the FCC. No new news regarding EAS, otherwise

Frequency Coordination

Richard Hardy reported no new activity below 1 GHz. Above 1 GHz, Larry Miller reported no new activity.

Newsletter/ Secretary

Bill Lee reported that there is still 4 corporate members (whose ads are not being run as a result) that have not renewed in the amount of \$350.00 (and most likely will not). There is 40 regular members who have not renewed (in the amount of \$600.00) He encouraged them to renew soon. And noted that there newsletters have a label attached to remind those members.

Internet Committee

Gerald Weaver reported that Ray Klotz is unable to work on the Web Site so he will assume *Continued on page 7*

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August Ham's Corner by Glenn Thomas

Gosh it doesn't seem possible summer is getting ready to start winding down. For one thing I won't miss the heat when fall finally arrives. For another the high bands should start giving us some fine openings. I hope some thing like we had in the winter and spring.

I made a number of fine contacts all over the world back then. I have been able to make contact with my friend WOMDM in Iowa every week on 75 although some evenings it was rough. I was reading in the July CQ that some people were concerned about the loss of licensed amateurs in Europe. I don't know about the number of Hams in Europe but here I do know a number of Hams I have known for years have passed away and other older Hams have just dropped out of Ham Radio. I notice some of the old time Hams no longer show up very often at the monthly meetings at the Cafeteria in Eastland Mall each month, I try to make that meeting.

I missed all the Hamfests anywhere near here so far this year. I still have a chance to attend the one locally here later this year at Broken Arrow, October 6,7 and 8. I am looking forward to attending that one. I do wish there was a Ham shop in this area. I see they predict the bands will be back a little later.

I did hear an interesting QSO on a recent Sunday morning before church time. A Ham in New Mexico was in contact with a Japan. Both had good

Continued from Page 1 This feature provides news directors with the ability to cover two different stories "back to back" live in a newscast.

NEC's DML system also supports a move and shoot feature, which allows broadcasters to transmit video from a moving vehicle to a stationary receive site or multiple sites along a route. Used for applications such as large outdoor sporting events, the move and shoot feature helps to eliminate extra costs associated with the need for helicopter coverage and multiple receive sites that are necessary with analog transmissions.

Anyone interested in COFDM technology is encouraged to attend our next SBE meeting.



signals here in Oklahoma. One thing I wonder about is the lack of good articles in the Ham magazines. The August Issue of CQ seemed to have some interesting articles on various areas of amateur radio.

Although QST did not seem up to par in fact it has been below par so far this year. I have been a reader of QST since in the thirties when I was in high school. I keep my fingers crossed when thinking about the Ham membership. I know one problem is the cost of Ham gear. I have a transceiver that I bought for around \$270 many years ago.

That old transceiver is on my desk as a stand by even though it is all tubes, it does have a internal power supply. In recent years I added a solid state VFO to that rig and now it is about as stable as any modern rig. Due to its age and the fact some Ham dealer won't take a tube set in trade. It has little value so it makes an ideal stand by rig.

I don't remember where I heard this bit of information. This one Ham was talking about his antenna, it was a 65 foot piece of insulated wire. He lived on the second floor of an apartment building and having an out side porch. Standing on that porch using a sling shot he shot that sixty five foot piece of light insulated wire with a small weight on the end of it over the roof of the apartment building. He then added a radial to the bottom of the antenna by placing it to the side of the building about as high as the base of his porch. He claimed the antenna worked FB. He claimed WAS and DXCC using only a 100 watt Transceiver.

A word about the Ham Club that meets monthly at the Eastland Mall cafeteria. They meet monthly at usually a little before 12 noon on the third Tuesday of the month. Many old time Hams attend each month and all ages are welcome. You will find them a friendly group. The first chance you get try and make it out for lunch.

I have a OMNI D which is in good shape with a pre amp and a ASTRON 20 Amp 12 Volt power supply. Make an offer.

73S



NEW COMMISSION REGISTRATION SYSTEM (CORES) TO BE IMPLEMENTED JULY 19, 2000

Starting July 19, 2000, the Commission will begin implementing the Commission Registration System (CORES).

Questions and Answers about CORES

What is CORES?

CORES is a web-based, password-protected, registration system that assigns a unique 10-digit FCC Registration Number (FRN) for use when doing business with the FCC. Once CORES is fully implemented, every entity filing an application or paying a fee will be able to identify itself using its registration number. The same registration number can be used with all licensing and filing systems. The registration number, however, will not replace call signs, license numbers, certification numbers, or other numbers in authorization of service documents.

Who should get a registration number?

? Anyone filing any feeable or non-feeable application, and ? Anyone making a payment of any type to the Commission.

The registration number will allow the Commission to more rapidly verify fee payment.

When do I need to start using the registration number?

Currently, the use of the registration number is voluntary. We strongly recommend, however, that you start using your registration number with all payments to the Commission, including on applications, the payment remittance form (FCC Form 159), with regulatory fee payments, waivers, auction payments, forfeitures, and other payments and collections.

How do I get a registration number?

? Register on-line at www.fcc.gov. Click on the CORES Registration link.

? Manually complete and file FCC Form 160, (CORES Registration). You may obtain the form either at www.fcc.gov/formpage.html or by calling the FCC's Form Distribution Center at 1-800-418-FORM (3676) voice, 1-888-TELL FCC (835-5322) TTY. You may also pick

up the form at the Commission, 445 12th Street, SW, in Room TW-B200. You will find mailing instructions on the form.

? You will receive a CORES registration number automatically by mail if you are registered in the Wireless Telecommunications Bureau's Universal Licensing System (ULS) prior to June 22, 2000.

What information do I need to provide to get a registration number?

The amount of information varies depending on whether you are an individual or a company. The information collected generally includes your name, address, taxpayer identifying number, and e-mail address. Anyone holding a license, certificate, permit, or authorization is required to maintain a current official address that the Commission can use to contact you. Similarly, parties filing pleadings or making forfeiture payments should also provide a current address to which Commission correspondence may be sent. For purposes of CORES, a filer, licensee, certificate holder, or any entity sending payments to the Commission is considered to be doing business with the Commission.

Do I need more than one registration number?

Each entity with a separate taxpayer identifying number must have a separate registration number. To keep business activities separate, you may obtain as many registration numbers for as many taxpayer identifying numbers as you need. You may obtain a separate registration number for subsidiaries or sub-agencies, customers, or clients.

How do I change information in CORES?

It is important that the information in CORES remains current. You can change or update your password, name, address, contact representative name, contact address, contact telephone number and *Continued on Page 5*

If you would like to contribute to this newsletter please send your article to Bill Lee at:

KGEB Tulsa 53
7777 South Lewis Ave.
Tulsa, OK 74171
or willilee@oru.edu

CERTIFICATION EXAM DATES FOR 2001 SET

The SBE Certification Committee has established exam dates for 2001. 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 Linda Emerick, Certification Director at the SBE National Office at (317) 253-1640 or lgodby@sbe.org.

<u>Exam Dates</u>	<u>Location</u>	<u>Application Deadline</u>
Nov. 10-20	Local Chapters	Sept. 22, 2000
<u>2001 Dates</u>	<u>Location</u>	<u>Application Deadline</u>
Feb. 9-19	Local Chapters	Dec. 31, 2000
April 24	NAB	Mar. 23, 2000
June 8-18	Local Chapters	Apr. 30, 2001
Aug. 17-27	Local Chapters	July 9, 2001
Nov. 9-19	Local Chapters	Sept. 28, 2001

SBE ELECTION CANDIDATES FINALIZED

The list of candidates for SBE National Officer and Board positions has been finalized. No additional candidates were nominated from the membership, leaving the slate as proposed by the Nominations Committee. The following will stand for election: President James "Andy" Butler, CPBE, Alexandria, VA Vice President Richard L. Edwards, CPBE, Coral Springs, FL Secretary Raymond Benedict, CPBE, Washington, D.C. Barry Thomas, CSRE, Los Angeles, CA Treasurer John Batson, CPBE, Birmingham, AL Robert P. Hess, CPBE, Boston, MA Board of Directors Ralph Beaver, CBT, Tampa, FL Tom Daniels CPBE, Ft. Worth, TX Samuel Garfield, CPBE, Raleigh, NC Al Grossniklaus, P.E., CPBE, Indianapolis, IN Eric Hoehn, CSRE, Arlington, VA Mark D. Humphrey, CPBE, Chester Springs, PA Vinny Lopez, CEV, Syracuse, NY Robert Reymont, CPBE, Mesa, AZ Conrad H. Trautmann, CSRE, Stoney Brook, NY Jerry Whitaker, CPBE, Morgan Hill, CA

Election ballots will be mailed to all SBE voting members by August 8, 2000. Completed ballots must be received by US Mail at the SBE National Office no later than Thursday, September 7 at 5:00 pm, CDT. Ballots will be opened and counted by a Board of Tellers that evening. Results will be announced the following day.

The newly elected officers and board members will be installed during the SBE National Meeting in Pittsburgh, Pennsylvania on October 4.

SBE REGIONAL CONVENTION SCHEDULE

Six regional conventions and conferences are from August through October. Some are free to engineers while others have a registration fee. All offer technical paper programs and equipment exhibitions. For more information, go to the SBE website, www.sbe.org and

click on the Conventions and Conferences page.

- August 16 -18 Texas Assn. of Broadcasters/SBE SW Regional Convention, San Antonio, TX
- September 14 -15 Central New York Regional Convention, Verona, NY
- October 3-4 Pittsburgh SBE Regional Convention/SBE National Meeting, Mars (Pittsburgh), PA
- October 12-13 Electronic Equipment Expo, Seattle, WA
- October 12 Arizona Broadcasters Assn./SBE Chapter 9 Regional Convention, Phoenix, AZ
- October 17-19 Broadcasters Clinic & Upper Midwest SBE Regional Convention, Madison, WI

NATIONAL MEETING SET FOR MARS

The 2000 National Meeting of the Society of Broadcast Engineers will be held at the Pittsburgh Sheraton North in Mars, Pennsylvania, October 3-4. The Sheraton is 17 miles north of downtown Pittsburgh on I-79 at the Pennsylvania Turnpike. The National Meeting is being held in conjunction with the Chapter 20 SBE Regional Convention. The Regional Convention features over 45 exhibitors and a full day of technical paper presentations. There is no cost to attend for engineers. There is a \$10 ticket required to attend the National Awards Reception and Dinner on October 4. For more information about the National Meeting, see the upcoming September issue of the SBE SIGNAL or the SBE Web site.

LISTING AVAILABLE TO CONTRACT ENGINEERS

SBE members who offer their broadcast engineering services as an independent contractor either full or part time can take advantage of an inexpensive way to advertise their service. For the first time, SBE will include a special section in the annual SBE Membership Directory & Buyer's Guide listing contract engineers by state and then alphabetically. A similar listing will also be available on the SBE web site. Each listing is only \$25 or \$40 for both for an entire year. Contact Angel Bates by August 18 to be included.

CHAPTERS ENCOURAGED TO HOLD STUDENT NIGHT CHAPTER MEETING

Each SBE chapter is encouraged to plan and hold one student night chapter meeting during the school year. High school age students are invited to a regular meeting of the chapter but a special program is held to inform students about broadcast engineering as a career. Information on how to plan your Student Night is available from the SBE National Office.

MORE LEADER SKILLS SEMINARS COMING SOON Continued on Page 5

Continued from page 2 his duties. He would like to see frequency coordination reported on the web site. Don Dobbs suggested that perhaps an outside individual be compensated to keep the Web Site up-to-date and improve its abilities. Gerald also suggested an on-line discussion group for engineers to inquire about manufacturers equipment and maintenance related questions.

Internship Committee:

Don Dobbs reported that 6 candidates had been interviewed from Spartan for the next internship position. Christopher Martin and Eric Harper have been selected to intern in the available Cable, TV and Radio Stations here in Tulsa starting August 7. Anyone interested in hosting the interns should contact Don Dobbs.

Membership Committee:

Jim Bowles was not present. No report was given.
Old Business
None.

New Business

It was moved and seconded that Don Dobbs should be reimbursed \$20.00 by the Chapter to compensate him for

picking up the checks for 2 people who walked (hopefully unintentionally) on the checks from the Fountains Restaurant after the July Meeting. The wait staff apprised all members that they will pay in advance for their meals to avoid possible confusion in the future.

Ron Fisher announced that RSI is sponsoring a seminar in OKC in regards to Non-Ionizing Radiation.

The seminar (on August 23, 2000) will aid stations in preparing a written safety plan to keep compliance with FCC regulations. Cost of the seminar is \$295.00 and a plan must be in place by September 1st to insure compliance with FCC regulations.

Today's Program:

John Hackness of MARTI Electronics (in business since 1960), presented a review of MARTI's product line for Broadcasters use, includes RPU equipment, IFB equipment and low power 100-watt FM transmitter with built in audio processing.

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The 32nd Series of Leader Skills Seminars continues this month in Indianapolis. Course II will be held August 16-18, at the Marten House Hotel and Conference Center. Course II will pick up where Course I left off, going into further depth and providing the participant with a solid foundation to manage others. The course is instructed by Richard Cupka. There are still some seats available for Course II. Students for Course II must have completed Course I or any of the previous Leader Skills Seminars presented by SBE or NAB since 1965.

The cost for Course II is \$425, which includes instruction, materials and refreshment breaks. Transportation, hotel and meals are additional. Registration Forms are available from the SBE National Office.

Another series of Leader Skills Seminars is being planned for Atlanta, with Course I November 29 - December 1 and Course II February 14 - 16, 2001. To register, call Angel Bates at the SBE National Office, (317) 253-1640 or e-mail her at abates@sbe.org.

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 <p>The TAPE Company</p> <p>Donovan Boiselle, Account Rep. 1525 Capital Drive #110 Carrollton, TX 75006 800-851-3113</p>	 <p>SPARTAN SCHOOL OF AERONAUTICS Communication Technology 8820 E. Pine Tulsa, OK 74115</p> <p style="text-align: right;">(918) 831-5117 Founded 1935 (800) 657-5767</p> <p style="text-align: center;">Your company advertisement could be here. Call 495-6450</p>



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