

MARCH 1992

STATEWIDE EBS TEST THIS MONTH

by Paul Stoffel

The Wisconsin Division of Emergency Government will test the state-wide Emergency Broadcast System (EBS) on Thursday, March 26, at 10:15 a.m. According to Alan Wohlferd, Director Communications and Warning, test information, including a time-table and script, will be "officially" mailed March 19 to all Wisconsin broadcasters.

"If you haven't received any information by March 24, call me direct," said Wohlferd. The telephone number is (608) 266-1892. Local SBE chapters and the Wisconsin Broadcasters Association have each distributed copies of the test information at recently held meetings in February

"Normally, we do not give (this much) notice prior to a state EBS test, because that obviously does not test EBS preparedness; however, since it has been five (5) years since the last test, we want to give the engineers an opportunity to insure everything is in working order." said Wohlferd. "In the future, we will be testing one or two times each year with no more than one week notice, and, eventually, with no advance notice."

Wohlferd is also attempting to include all Wisconsin cable systems in the test and mailings.

At the conclusion of this state-

(cont'd on pg. 3, col. 2)

MARCH MEETING

DATE: Wednesday, March 18, 1992
AT: Alexander's Restaurant
5614 Schroeder Rd.
DINNER: 5:30 p.m.
MEETING & PROGRAM: 7:00 pm

Join Chapter 24 this month for a two part program. Part one, at Alexander's, will be a discussion of a "Tower Rescue Team" with Middleton EMS' Diane Saunders. Part two will be a tour of the studios of Triple M-FM, the Madison Area's newest FM radio station. The studios are located at 6313 Odana Road.

FEBRUARY MINUTES

by Fred Sperry, Secretary

Chapter 24 of the Society of Broadcast Engineers met on Wednesday February 19, 1992 at Broadcast Communications in New Glarus, Wis, for its regular monthly meeting. The attendance of the February meeting included 15 SBE members, 10 who were certified, and one guest for a total attendance of 16.

The meeting was called to order at 7:12 PM by Chairman Jim Hermanson.

Secretary Fred Sperry read the minutes from the January meeting. The minutes were approved as read.

Treasurer Paul Stoffet reported the chapter's account balance. Paul also mentioned that the chapter's annual financial report was complete and was available for inspection. Paul then gave an update on the SBE/NPR Certification Course. He was recently informed that the focus of the

(cont'd on pg. 2, col. 1)

UPCOMING MEETINGS

April 21 May 20

IN THIS ISSUE

'92 NOMINATING COMMITTEE
FCC VISITS MILWAUKEE by Paul Stoffel
FREEZE LIFTED by Paul Stoffel
AMATEUR RADIO NEWS by Tom Weeden, WJ9H
SBE DAY AT NAB7-10

CHAPTER 24

MINUTES

(cont'd from pg. 1)

course was on radio broadcasting and is oriented towards preparation for the Broadcast Technologist exam and as a review for the Broadcast and Senior level certifications. Paul indicated that he had been told that a course focusing on television broadcasting presented by that a course focusing on television broadcasting presented by PBS was a possibility in the future. Paul then mentioned that the time for the live interconnections in March had changed from 1:00 to 2:30 PM to 1:30 to 3:00

Chairman Jim Hermanson then thanked all those who participated in the sign-on breakfast and thanked Burt Young and BTS for sponsoring this breakfast. He asked if there were any comments about the breakfast from those present. There were none.

In Certification and Education related business, Jim asked Fred Sperry for an update on the status of the program to make training tapes from the different broadcast facilities around town available between stations. Fred indicated that he had received a list of training tapes from several facilities, but was still in the process of getting the program off the ground.

Chapter Liaison Paul Meyer pointed out some interesting items from several newsletters he had received recently from SBE Chapters in the area. He highlighted a seminar that was put on by the Twin Cities Chapter.

At this time, Chairman Jim Hermanson announced some upcoming meetings being presented by the Milwaukee SBE Chapter.

There was no old business.

In new business, Vice Chairman Leonard Charles mentioned that he had checked with the Red Cross on CPR classes. Leonard then mentioned that he had not received much response to his notice in the last newsletter regarding these classes. He said he would probably not pursue this issue unless interest picked up. John Crooks of Broadcast Communications then indicated that the Red Cross would be at their facility in May and that it may be possible for Chapter 24 members involved in get session.Chairman Jim Hermanson then presented a paper he had received that claimed to have a better procedure to comply with FCC rules for on-tower occupational RF exposure. This paper is available from Jim.

Paul Stoffel then indicated that he had a Senior TV study guide on floppy disc available to anyone interested. Paul then presented some FCC emergency numbers he had received. Paul also mentioned the statewide EBS test scheduled for March.

Tom Smith then indicated that the FCC had extended the deadline for comments on EBS.

Chairman Jim Hermanson then mentioned that elections for Officers was coming up in April. Anyone interested in volunteering for the nominating committee should contact Doug McDonnell.

In personnel announcements, Steve Zimmerman announced that Robb Hagen, a former intern at Channel 27, was recently hired by WLUK-TV in Green Bay.

At this time Chairman Jim Hermanson presented the staff of Broadcast Communications who presented some of the new technology incorporated by tower dimbers and gave a tour of their new facility in New Glarus.

CHAPTER 24 OFFICERS

CHAIRMAN:

Jim Hermanson (WKOW TV) W - 274-1234 H - 231-2005

VICE CHAIRMAN:

Leonard Charles (WISC TV) W - 271-4321

H - 274-0041

SECRETARY:

Fred Sperry (WI Public TV/TOC)

W - 273-5500

H - 833-6074

TREASURER:

Paul Stoffel (WI Public TV) W - 263-2121

H - 241-4621

CHAPTER 24 COMMITTEE APPOINTEES

Past Chairman -Steve Zimmerman Membership - John Beck Sustaining Membership - Stan

Scharch

Strategic Plan - Denny Behr (Chair) Newsletter - Deanna Morris Program Chairman - Dave Willow Special Events - Kevin Ruppert Cert/Ed - Doug McDonell/Tim Trendt

Frequency Coor - Chris Cain Chapter Liason - Paul Meyer

Your Complete Source for Turn-Key Tower System

Broadcast Communications

P.O. Sox 730 New Giarus, WI 53574 Bus. (608) 527-5670 FAX (608) 527-5674

JOHN CROOKS



Rockin' Good Fun!

WMMM-FM 6313 Odana Road Madison, WI 53719 608-273-9774





'92 NOMINATING COMMITTEE **APPOINTED**

The 1992 Chapter 24 Nominating Committee has been formed. Steve Zimmerman, of WKOW-TV, is Chairman of the committee. He will be assisted by Dennis Behr of Wisconsin Public Television (T.O.C.) and Mark Croom of WNWC-FM Radio.

These three committee members are presently accepting applications for the four elected offices of Chapter 24, including Chairman, Vice-Chairman, Secretary, and Treasurer. Interested persons are asked to send a resume, an indication of position(s) of interest (including any possible alternate positions of interest), and a brief description of why you desire to run for the chosen office to any one of the three committee members.

The committee members may be reached at the following numbers:

Steve Zimmerman:

(W) 274-1234 (H) 845-8738

Dennis Behr:

(W) 273-6916 (H) 222-3896

Mark Croom:

(W) 271-1025

(H) 845-6643

FUJIFILM [&] SEDATE HOLLAND

FUJI PHOTO FILM U.S.A., INC. (TASCA, IL 60143 (708) 773-7200 • (800) 677-0555

STATEWIDE EBS TEST

(cont'd from pg. 1)

wide EBS test, broadcasters are requested to fill out a questionnairethis will be included with the test information—and return it to: The Division of Emergency Government, 4802 Sheboygan Avenue, Room 99A, Post Office Box 7865, Madison, Wisconsin 53707-7865.

Don Moran, Chairman, Wisconsin State Emergency Communications Committee, and Wohlferd will also look at restructuring the EBS monitoring assignments based on comments they receive in the questionnaire. In a couple months, Moran, Wohlferd and Operational Area Coordinators will meet to discuss improvements.

USED BROADCAST **EQUIPMENT WANTED**

Students at James Madison Memorial High School in Madison are interested in constructing an in school radio station. The student station would play through the school's public address system. In order to accomplish this, they are in need of some equipment. Namely, needed are used broadcast microphones, turntables, cassette players, CD players, mike mixers, etc. They are looking for tax deductible donations, but would consider buying. If you have any equipment of this sort, contact Jonathan Little at 273-9774.

CHAPTER 24 SUSTAINING **MEMBERS**

Our newest sustaining member is: WMTV 15

Anixter **Broadcast Communications** The Tape Company **Emmons Associates** Maney Logic Panasonic Broadcast Communication Technologies WMMM-FM 3M Professional Audio/Video Fuji Film I&I Skyline Communications WKOW TV 27 Video Images Todd Communications Roscor Wisconsin Electronic Industries Wis. School of Electronics Scharch Electronics WISC TV 3



Wiring Systems Specialists · Video · Date · Power

> (414) 355-0222 In State - 1-800-242-5575 tionwide - 1-800-447-8565 FAX - (414) 355-2415



Sony Broadcast

615 Forward Drive, Madison Wisconsin 53711 (608) 274-1515



ncrnd

Steve Peck Sales Representative

Roscor Wisconsin 2510 Green Ridge Drive Madison, WI 53704 Phone: 608-242-1575

The FCC Visits Milwaukee

by Paul Stoffel

The FCC is trying to "improve and revitalize the EBS (Emergency Broadcast System) program." said Linda Arquilla, FCC Public Affairs Specialist, during Chapter 28's February meeting in Milwaukee.

Gary Timm, Chairman of the Southeast Wisconsin Operational Area, invited Arquilla and Phil Bradford, Engineer-in-Charge, up from the Chicago Field Operations Bureau to speak about the EBS.

On current EBS objectives, Arquilla said, "The FCC began a series of workshops last fall involving Federal, State and local officials, as well as business and industry leaders and broadcast representatives. We are working with them to update their state and local plans which haven't been changed since the 1970's." (The Wisconsin EBS State plan was updated in 1979. The South Wisconsin Operational Area Plan and the Dane County Plan were both updated in early 1985.)

"Our goal is to have all local and state plans updated by the end of this year. Then, in 1993, each state should test their plans either by a silent or on-air test. Finally, in 1994, two national EBS tests will be performed —one silent and one over the air."

To improve the EBS, the FCC has taken the initiative to investigate new technologies to replace or supplement the present EBS. It is hoped that a more sophisticated system can convey to a receiver the nature and area of an emergency, thereby giving emergency information to a

concentrated area.

There is Notice of Proposed Rulemaking to shorten the two-tone alert signal from 20-25 seconds to 6 seconds (with a decoder demute time of 3-4 seconds). "By shortening the tone," Arquilla said, "many (viewers/listeners) won't be as quick to change the station and will become accustomed to listening a lot sooner to the necessary information that is needed during an emergency." This is close to becoming an actual rule. The Central Michigan Operational Area has tested the proposed shortened tones for 6 months and found no problems. According to Gary Timm, Michigan felt a two-step phase-in is needed. First, shortening of the demute time. Then, allowing the stations to shorten the encode time.

EBS isn't just for broadcasters. Arquilla added, "We will be trying to reach another industry, (cable television,) for their assistance. Sixty percent of homes in this country subscribe to cable service. Our agency is discussing with cable operators the importance of their cooperation.

"Information during emergency situations will not be reaching all individuals if they are tuned to a cable channel that does not have the capability of notifying them during a crisis. Cable companies do not want to purchase the necessary equipment because they are afraid this involvement will open the door to more regulation by the commission."

TCI Cablevision in Madison participates in the EBS program. By using a Dane County Alert Monitor Radio System decoder, TCI can receive emergency information from the Dane County's Public Safety Communications Center (9-1-1), Mike Rogers from TCI said, "The emergency information is put on all cable channels except the broadcast signals." TCI will also be participating in the upcoming State EBS test on March 26.

RADIO....

By Stan Scharch

The NAB will lobby the FCC to freeze new FM station assignments and to review the FM allocations and licensing policies. NAB believes that in light of current economic conditions, the radio broadcasting industry is overpopulated.

Radio stations WCBS and WCBS-FM were reprimanded but not fined by the FCC for an EBS violation that took place during an emergency activation in August, 1991. WCBS is presently working with New York State authorities to decrease the amount of air time required for EBS activation.

(Excerpts from Radio World)

BROADCAST ENGINEER WANTED

Audio Video Recorders of Arizona. Inc. is in need of a Broadcast Engineer to MANAGE the Engineering and Service Department of Arizona's leading video dealer and the state's only Sony Broadcast and Premier Dealer. Applicant must have minimum of Associate Degree in Electronics, Broadcasting or a related field, and five (5) years experience in Broadcast Engineering including system design, equipment installation, and maintenance. Successful candidate will hold a key position in the company and will report directly to top management. Good hours, pay, and benefits. Send resume to:

Mark Temen Audio Video Recorders 3830 North 7th Street Phoenix, Arizona 85014

Wisconsin School of ELECTRONICS

RONALO AXELSEN
CAREER DEVELOPMENT COORDINATOR
508/249/6611
1-800/792-3505 Ed. 358



A Division of Herzing Institute

Freeze Lifted

By Paul Stoffel

The Chapter 24 January newsletter contained a reprint article entitled, "WIRELESS MIC WARNING". It read: ...The FCC is concerned about wireless microphones being sold to broadcasters that may be set on invalid frequencies. ... Broadcasters may not use frequencies in the 160-172 MHz band as some units are configured. Additionally, operation by broadcasters in the 530 to 806 MHz band is also prohibited. Evidently, some vendors have been selling wireless mikes tuned to those frequencies which broadcasters are not permitted to use.

The article's contents originated from the Southern California Frequency Coordinating Committee, Inc. (SCFCC) December 1991 newsletter. The SCFCC newsletter said: If you are using wireless microphones on 168-172 MHz for either a radio or TV station, it is illegal under 90.415 of the Commission's Rules. This is true. These frequencies are used for public safety by government agencies.

The SCFCC newsletter went on to say: Any use of wireless mikes on any frequency between 530-806 MHz are illegal without an STA (Special Temporary Authority). This is no longer true. The FCC has "terminated the freeze on the authorization of wireless microphones on the UHF-TV spectrum above Channel 23 (i.e., above 530 MHz)." The FCC's MM Docket No. 85-36, released on January 15, 1992, details this change.

Originally, a FCC Proposed Rule Making intended to allow broadcasters the use of certain vacant channels in the UHF-TV spectrum for wireless camera operations. Until a decision could be reached by the FCC, a freeze was imposed on the licensing of Low Power Auxiliary Stations operation in the 530 to 806 MHz range. But broadcast interests said they were satisfied with current wireless cameras that operate in the microwave bands above 2 GHz. The freeze was eventually lifted.

The Docket went on to read: Pursuant to 74.803(b) of our Rules, wireless microphones are authorized and operated strictly on a secondary basis to other primary (principally broadcast) services. In larger metropolitan areas, VHF-TV channels (which also may be used by wireless microphones) are used intensively for broadcasting and lower UHF channels are often shared with private land mobile services. Available channels for wireless microphone use are further restricted by the co-channel spacing requirements of 74.802(b) of the Rules, particularly in larger urbanized areas. This has resulted in reports of congestion which would be alleviated by making the upper UHF-TV channels available again for wireless microphone operation. Thus, the public will benefit by our terminating the freeze.

To apply for a license, use FCC FORM 313, Application for Authorization in the Auxiliary Radio Broadcast Services.







1965 WEST RIDGE ROAD P.O. BOX 51 COTTAGE GROVE, WI 53527 (608) 839-4075



David M. Rahmlow Sales Representative

3M Professional Audio/Video and Specialty Products Division

908 North Elm Street Hinsdale, IL 60521 900/421 2479 FAX Orders 800/942 3961 Messages 3M 999



ELECTRONIC INDUSTRIES INC.

19 E. IRVING AVE. P.O. 80X 266 · OSHKOSH, WI 54902

distributors of electronic equipment and supplies

PHONES: 414 235-8930 414 739-8900 FAX: 414 235-4233 H4-STATE WATS: 1-800-445-0272 OUT OF STATE WATS: 1-800-558-0772

ONNUNICATION INC.

ONNUNICATION INC.

SI 3 AIGULE TON. SAMPLINGS STREET, 773

AIGULE TON. SAMPLINGS STREET, 773

AIGULE TON. SAMPLINGS

FAX. S

CONSULTING ENGINEERING FOR THE BROADCASTING AND CABLE TELEVISION INDUSTRIES

DICK GALL

NEAL MOLAIN

AT&T-PANASONIC-S.W.BELL TELEPHONE SYSTEMS

Scharch Electronics Company

1105 Middleton Street Madison, WI 53717-1078 608 831-2266

11

Dan Maney Systems Designer

maney_logic

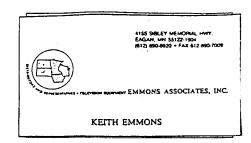
Denise A. Jones Marketing/Sales

4535 Thurston Ln. • Madison, WI 53711-4767 • (608) 277-8001

Software & Interfacing

Stan Scharci





AMATEUR RADIO NEWS

by Tom Weeden, WJ9H

(Take Note: Hams can talk to other SBE members on the second Sunday of every month on 14,205 MHz USB at 0000 Zulu--6 p.m. CST. This changes to 7 pm CDT in April.)

More than 42,000 people obtained their amateur radio licenses in the U.S. last year. The FCC's total as of December 31, 1991 was 545,548.

The US government has chosen 449 MHz to operate new NOAA wind profiler radar systems. The top of the amateur 70 cm band, which extends from 420 to 450 MHz, may be affected by their operation. The government radiolocation service actually has primary use of this band, and the amateur allocation of the same band is on a secondary, non-interference basis. Fortunately, the antenna pattern of the wind profilers is nearly vertical, putting very little RF energy toward the horizon. Also, the systems are planned to be located away from metropolitan areas, so interference to amateur operations should be at a minimum.

As reported last month, the Space Shuttle Atlantis will carry four amateur radio operators into space later this month. Atlantis is scheduled to lift off at 7:01 AM CST March 23. The astronauts plan to begin 2-meter operations on orbit 9, about 12 1/2 hours after liftoff. The downlink frequency will be 145.550 MHz; uplinks will be on 144.910, 144.950, and 144.970 MHz. The shuttle will make 47 passes over the U.S., and the crew says they'll be on the air as often as they can.

The Hillsboro, WI Balloon Team plans another "balloon carrying amateur radio" (BCAR) flight on the weekend of March 21 and 22 with a liftoff time of 10 AM. The BCAR will carry a 2-meter repeater plus low-power beacon transmitters on eight frequencies ranging from 170 kHz to 50 MHz, each running about 50 milliwatts. The beacons will help study propagation from different altitudes. A 30 mW beacon on a recent flight was copied in Europe and California.

(From March 1992 "QST" and "Badger State Smoke Signals")



120

SBE DAY AT NAB

by Jerry Whitaker Vice-President of Beaverton, Oregon SBE Chapter

The SBE has agreed to develop three technical sessions at the annual convention of the National Association of Broadcasters. The NAB show is scheduled for April 12-16 in Las Vegas.

The SBE sessions are being included for the first time at an NAB convention, and will be part of the NAB Broadcast Engineering Conference. The sessions will be packaged as "SBE Day at NAB '92," and are scheduled for Tuesday, April 14. The one-day event is designed to help engineers meet the technical challenges of radio and TV today.

There will be a radio and television engineering session in the morning, followed by a regulatory session on technical issues in the afternoon. A chapter chair meeting and certification exams will also be held in the afternoon.

The SBE will hold a membership meeting on Tuesday immediately following the afternoon session. The start time for the meeting is 5:00 p.m.

The SBE Day schedule follows the proven formula of hands-on technical information for which the SBE is known. A copy of the schedule follows.

TUESDAY, APRIL 14, 1992/Morning Radio Session

Radio: Coping with New Technology

Session Coordinator: John Battison, Consultant

Session Assistant Coordinator: Paul Montoya, Broadcast Services

8:45 a.m. Opening Presentation

8:55 a.m. Session Chair's Remarks and Welcome

9:00 a.m. Radio in the 1990s: Challenges and Opportunities

o Brad Dick, Broadcast Engineering magazine

An overview of the technical and regulatory issues currently before the radio industry.

9:30 a.m. Digital Cable Audio: When and Where

Don Lockett, National Public Radio

A technical overview of cable radio, and its place in your market.

10:00 a.m. The Expanding Role of DSP in Audio Technology

o Michael Collins, Motorola

An overview of digital signal processing technology, and how it is reshaping the professional

audio industry.

10:30 a.m. Improving Transmitter Performance Through Class E Operation

David Cripe, Broadcast Electronics

Theory of operation of Class E power amplifiers, and how they compare with conventional

Class D systems.

11:00 a.m. The Dependence of AM Stereo Separation on Transmitter Load Phase

Jerry Westberg, Consultant

Detailed analysis of load phase adjustment for optimum AM stereo performance.

11:30 a.m. Close of session

Panasonic

MI

Panasonic Broadcast Systems Company
Division of Matsushita Electric Corporation of America

425 E. Algonquin Rd. Arlington Heights, iL 60005 (608) 493-2619 (708) 981-7325

HERB VAN DRIFT

SBE DAY AT NAB

(cont'd from pg. 7)

TUESDAY, APRIL 14, 1992/Morning Television Session

Television: Coping with New Technology

Session Coordinator: Richard Farguhar, SBE President Session Assistant Coordinator: Robert Goza, KMOV-TV

8:45 a.m.

Opening Presentation

8:55 a.m.

Session Chair's Remarks and Welcome

9:00 a.m.

Television: Where has all the Money Gone?

Jerry Whitaker, Technical Writer

An examination of key trends in the television market today, and what we can do about them.

9:30 a.m.

· Enterprise-Wide Automation

Bob Paulson, AVP Communications

Report on a new way of viewing television station automation, and how it can apply to your

station.

10:00 a.m.

A Case History: Master Control Automation

Marvin Born, WBNS-TV, Columbus

The paybacks and problems of television station automation.

10:30 a.m.

Basics of Digital Video Compression

Carl Ostrom, Systems Resources

A summary of the major video compression schemes under development today, and what

they hold for the future.

11:00 a.m.

NASA: Applying New Technology Today

Tom Bentson, NASA

How NASA is using new technology to solve old problems.

11:30 a.m.

Close of session

LUNCH BREAK

(cont'd on pg. 9)

TODD COMMUNICATIONS Dan Takkunen

6545 Cecilia Circle • Minneapolis, MN 55439 (612) 941-0556 • FAX (612) 941-0940

PAGE 9

FEBRUARY 1992

SONY

Cevin Peckham Account Manager Broadcast Products Division

Sony Communications Products Company 1200 North Arlington Heights Road ... Itasca, Illinois 60143

I, Illinous 60143 none (608) 271-3778 (708) 773-6046 ce Center (708) 773-6037 Tech. Assist. (201) 833-9533 nnal Parts Center (800) 538-7550

SBE DAY AT NAB

(cont'd from pg. 8)

TUESDAY, APRIL 14, 1992/Afternoon Regulatory Session

Broadcaster's Rules of the Road

Session Coordinator: Dane Ericksen, Hammet & Edison Session Assistant Coordinator: William Hineman, WTHR-TV

12:45 p.m.

Opening Presentation

12:55 p.m.

Session Chair's Remarks and Welcome

1:00 p.m.

FCC Enforcement Efforts: Not Business as Usual Anymore

o Richard Smith, FCC FOB

Report on the enforcement activities of the Commission, and the effects that increased fines

are having on stations.

1:30 p.m.

Beta Testing a Self-Inspection Program

o Jim Zoulek, FCC Los Angeles office

Report on the track record of a unique self-inspection program organized by one of the FCC

Field Offices.

2:00 p.m.

Changes in Structural Standards for Communications Towers

o John Windle, Stainless, Inc.

An outline of the significant changes contained in new ANSI/TIA/EIA standards, and how they

will effect a ypical broadcast station.

2:30 p.m.

New Issues Facing Frequency Coordination

Richard Rudman, Chair, SBE Frequency Coordination Task Force

The upcoming political conventions, proposed spectrum reassignments, and the looming issue of HDTV augmentation channels have made frequency coordination more critical than ever.

3:00 p.m.

The SAGE I System for EBS

o Jerry LeBow, SAGE Alerting Systems

An inside look at one alternative to the current EBS system.

3:30 p.m.

The Future for EBS

o Bill Ruck, KFOG/KNBR Radio

With the perspective to two recent San Francisco Bay Area disasters (Oakland fire and SF

quake), where should EBS go from here?

4:00 p.m.

WARC-92: What is it and Why Should I Care?

o John Reiser, FCC

Report on the upcoming WARC meeting and other international activities, and what effects

they could have on broadcasters.

4:30 p.m.

Roundtable Discussion: Dealing with a Changing World

o Richard Smith

o Jim Zulik

o Don Windle

o Richard Rudman

o Bill Ruck

o Jerry LeBow

o John Reiser

o Dane Ericksen

5:00 p.m.

SBE Membership Meeting

5:30 p.m.

Close of Session

(contid on pg. 10)

SBE DAY AT NAB

(cont'd from pg. 9)

TUESDAY, APRIL 14, 1992/Afternoon Concurrent Event

2:00-5:00 p.m. Certification Exams

3:00 p.m.

SBE Chapter Chairmen's Meeting

CHAPTER 24 NEWSLETTER

(ASCII text message on BBS at 608-274-7776)

Edited by: Deanna Morris

Contributors this month: Dennis Behr, Chris Cain, Leonard Charles, Jim Hermanson, Kevin Ruppert, Stan Scharch, Fred Sperry, Paul Stoffel, Tom Weeden, Steve Zimmerman, John J. Beck.

Articles Welcome!! Send correspondence to:

Chapter 24 Newsletter 50 Schroeder Ct. #108 Madison, WI 53711

or call 608-271-3347 (home) 608-274-1234 (work)

The Chapter 24 Newsletter is edited on a Macintosh using Aldus Pagemaker

CHAPTER 24 NEWSLETTER

50 SCHROEDER CT. #108 MADISON, WI 53711





1 Tom Weeden 6802 Putnam Road 53711 Madison, WI