

SBE

CHAPTER 24

SOCIETY of BROADCAST ENGINEERS

MADISON, WI

PAGE ONE

September 1990

Edited by: Leonard Charles
 Articles Welcome!! Send them to:
 Chapter 24 Newsletter
 5714 Modernaire St.
 Madison, WI 53711
 (608)-274-0041
 (608)-271-4321
 (hard copy or ASCII text message
 on BBS at 608-274-7776)

Contributors this month:
 Doug McDonell
 Doug Smith
 Tom Weeden
 Stan Scharch

MEETING ANNOUNCEMENT

DATE: Sep 13, 1990

CORBYS

NAKOMA PLAZA
 (VERONA ROAD at the Beltline)
 Dinner: 5:30pm
 Business Meeting: 7:00pm

Program: Chris Cain of WISC TV will deliver an entire Computer Local Area Network (LAN) via a slide show depicting the hardware, high powered software, and tips on substantial cost savings thru the use of a DOS based server and clone-type work stations.

UPCOMING MEETING DATES

Oct 4-7 - SBE National
 October 16, 1990
 November 14, 1990
 December 13, 1990
 January 15, 1991
 February 13, 1991
 March 21, 1991
 April 23, 1991
 May 22, 1991

News Timer Plus now locks your pc to...

ABC CBS NBC WWV
maney_logic

804 Janifer St Madison, WI 53703 (608) 255-9708

Time Remain

Time Out

10:28 28:57
PC Compatible
Composite video

YOUR OFFICERS....

CHAIRMAN:

Steve Zimmerman (WKOW TV) W - 274-1234
 H - 845-8738

VICE CHAIRMAN:

Jim Hermanson (WTSO/WZEE) W - 275-7130
 H - 231-2005

SECRETARY:

Tom Weeden (WMTV TV) W - 274-1515
 H - 276-7915

TREASURER:

Fred Sperry (WI Public TV/ TOC) W - 273-5500
 H - 833-6074

COMMITTEE APPOINTEES

Past President - Denny Behr
 Membership - Dave Gerisch
 Sustaining Membership - Leonard Charles
 Strategic Plan Comm - Denny Behr (Chair)
 Newsletter - Leonard Charles
 Program Chairman - Kevin Ruppert
 Cert/Ed - Doug McDonell/Tim Trendt
 Frequency Coor - Chris Cain
 Chapter Liason - Doug Smith

SONY

Kevin Eckham
 Account Manager
 Broadcast Products Division

Sony Communications Products Company
 1200 North Arlington Heights Road
 Itasca, Illinois 60143
 Telephone: (608) 271-3778
 (708) 773-6046
 Service Center (708) 773-6037
 Emer Tech. Assist (201) 833-9533
 National Parts Center (800) 538-7550

NATL CONVENTION....

ST. LOUIS, MISSOURI, Oct 4 - 7
 \$125.00 registration for engineering
 conference, Friday lunch, Saturday
 dinner, Receptions, Proceedings.

FREE ENNES ENGINEERING WORKSHOPS BY
 FACTORY REPS WEDNESDAY, OCT. 3rd.

- 1) UNDERSTANDING AND MAINTAINING C-QUAM AM STEREO SYSTEMS
- 2) MEDIUM AND HIGH POWER FM TRANSMITTERS
- 3) RF TECHNOLOGY SESSION EVERYTHING YOU WANTED TO KNOW ABOUT RF FROM AM TO TV
- 4) S-VHS ENG AND PRODUCTION
- 5) EARTH STATION TECHNOLOGY
- 6) SATELLITE COMMUNICATIONS

7) MANAGEMENT FOR ENGINEERS

ST LOUIS CARPOOLING....

Anyone interested in carpooling to the SBE national in St. Louis, contact Dave Gerisch at WMTV 15. (608) 274-1515.

CERTIFICATION....

Future Exam Dates:
 SBE Convention October 6th
 November 9-19
 Contact Doug McDonell for info.



LAST MONTH'S MEETING....


AUGUST 1990 MEETING MINUTES

Madison, Wisconsin Chapter 24 of the Society of Broadcast Engineers met on Wednesday, August 15, 1990 at Alexander's Restaurant in Madison for the regular monthly meeting. The attendance at the August meeting was 28. 17 were Chapter 24 SBE members, three were members of the LaCrosse chapter, and of these, 18 were SBE certified.

Chairman Steve Zimmerman called the meeting to order at 7:03 PM.

Secretary Tom Weeden read the minutes of the July meeting. Program Chairman Kevin Ruppert reported that Merrald Shrader from the Eimac division of Varian would be giving a talk on Klystrode technology tonight. September's program will be by Chris Cain on WISC-TV's use of Local Area Networks. Kevin also passed along that there was no new frequency coordination information from chairman Chris Cain. Steve Zimmerman said that Membership Chairman David Gerisch had dates for CPR

recertification: September 18 and 25 from 6:30 to 9:30 PM. A sign-up sheet was passed around. Sustaining Membership Chairman and Newsletter Editor Leonard Charles reported that Skyline Communications has become a new sustaining member and that Broadcast Communications has returned as a sustaining member, for a total of 16.



RICHARD WOOD
PRESIDENT


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

Leonard also reported that Steve Zimmerman and Deanna Morris from WKOW-TV are now postmarking newsletters for mailing. 97 newsletters were mailed out in August. Education and Certification Chairman Doug McDonnell presented certificates to Paul Meyer and Ken Sweet, who passed their Broadcast Engineer certification exams in June. The next exam session will be held at the SBE national convention October 6. The next local exams will be given in November, with a registration deadline of September 14. Treasurer Fred Sperry reported a balance of \$1581.46. Fred also mentioned the display of SBE pins for sale.

There was no old business.

In new business, Vice Chairman Jim Hermanson reported there had been four



27 WKOW TV
MADISON

applicants for the scholarship to the SBE national convention, and announced the winner to be Leonard Charles. In professional announcements, Fred Sperry announced that Kevin McLaughlin of Wisconsin Public Television had accepted a position with Odetics.

The business meeting adjourned at 7:19 PM. Program Chairman Kevin Ruppert then introduced Hernald Shrader from the Eimac division of Varian, who presented a program on Klystron technology.

THE CLINIC....

The dates for this years "Broadcasters Clinic" are November 14-15-16. No other details are yet available.

THE LEGALS....

info by Doug McDonell

The application for voluntary transfer of CP has been granted for transfer of W33AX, LPTV Channel 33, from Inspiration TV of Southern OR, Inc., of Madison, WI to Trinity Christian Center of Santa, Inc., D/B as Trinity Broadcasting Network.

An application has been granted to WSSH TV, Inc., of Madison, WI to cover the CP BPTIL-880624NL as modified for a new station.

An application has been granted to Eagle Broadcasting of So Wisconsin, Inc., of Evansville, WI for an aural STL on 946.5MHZ used in conjunction with WMJB FM of Evansville, WI.

An application has been accepted for filing from D.L. Markley & Associates, Inc., of Columbus, WI for voluntary assignment of license from D&P Markley Broadcasting, Inc., to Beaver Dam Broadcasting Co., Inc.

The FAA has published proposed amendments to part 77 of the Federal Aviation Regulations which deal with the construction and alteration of structures which may pose a hazard to air navigation. The agency proposes to incorporate electromagnetic interference as an element to be considered when determining whether the proposed construction or alteration of a structure would constitute a hazard to air navigation.

Heller Broadcasting Group, LTD Partnership of Verona, WI has had its application dismissed for a new FM station on 105.5MHZ to serve Verona, WI.


Knight Radio, Inc., of Verona, WI has had its application dismissed for a new FM station on 105.5MHZ to serve Verona, WI.

Cynthia K. Waldbillig of Verona, WI has had an application dismissed for a new FM station on 105.5MHZ to serve Verona, WI.

Odon Madison Limited Partnership of Sauk City, WI has had its application granted to make changes in the CP for WMLI FM, 96.3MHZ. The changes include ERP to 5.1KW, HAAT to 205 Meters, TL to Simpson

Road .4 KM North of US 12 near Springfield Corners, Dane County, WI.

An application has been accepted for filing from the Identity Institute of Madison, WI for voluntary assignment of CP W08CK, LPTV Channel 8 to Healthy's Inc.



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Betty Lynn Whirry, Waunakee, WI has had an application dismissed for a new FM station on 105.1MHZ to serve Waunakee, WI.

FCC NEWS....

info by Doug Smith

The Bush administration has proposed a 4% fee on revenues of commercial users of the spectrum. This fee would raise \$4 billion towards relief of the federal deficit; it's estimated about 38% of this would come from broadcasters. The National Association of Broadcasters is preparing a major lobbying action against this fee.

The Commission has initiated an inquiry and request for comments on standards for digital radio broadcasting.



Milwaukee
Madison
Chicago

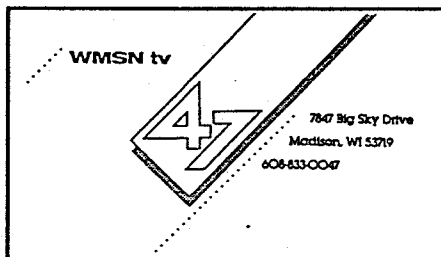
VIDEO
IMAGES

Jim Braun
District Sales Manager
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2137 S. Stoughton Road • Madison, WI 53716-2851
(608) 271-8888

An existing rulemaking regarding new regulations for "satellite" TV stations. "Satellites" are full-power stations that have no studios of their own, but relay the programming of other stations. Currently, satellites are authorized on an individual basis; the Commission is asking whether there should be specific circumstances under which satellite operation would be authorized.

In a related decision, the Commission has refused to rehear Anchor Media's request for authority to operate WAXA-TV Anderson, S.C. as a satellite of their WLOS-TV Asheville, N.C.. In theory the reason was that the petition was filed 3 minutes late but FCC comments made it clear the petition would have been rejected even if it was timely. Reasons cited included considerable signal overlap between WLOS and WAXA, and the fact that Anderson is already served by 5 commercial TV stations. (even after WAXA went off the air)

Apparently frequency sharing isn't dead... The FCC has granted the applications of Arizona State University and Maricopa County Community College for 89.5MHz in Phoenix; the two applicants will be allowed to operate every other day.



At least three complaints have been filed (one of them by a former WISC-TV engineer!) after Boston's public TV station, WGBH-TV, aired a story on controversial art, including a tour of the Robert Mapplethorpe exhibit at Boston's Institute of Contemporary Art. Mapplethorpe is the artist whose photographs raised the National Endowment for the Arts/obscenity controversy. A complaint from Donald Wildmon's "American Family Association" included a videotape of the program.

Looks like a radio license has become embroiled in a divorce proceeding. Bruce Lyons, who wanted to transfer his 51% ownership of WSHQ-FM Cobleskill, NY and WNYJ-FM Rotterdam, NY (both serving Albany) to minority shareholders has been challenged by his ex-wife, Susan Marcotte. Marcotte charges that she was under duress when she signed an agreement to sell her construction permit for a new FM station in Danville, Vt.; she also alleges that Lyons is guilty of four other violations, not involving her, but involving undisclosed transfers of ownership.

There is some controversy as to whether or not TV Marti is legal under international radio regulation. The

Bush administration claims that the 1948 Universal Declaration of Human Rights authorizes international television broadcasting to advance "... the right to seek, receive, and impart information and ideas through any media and

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FAX: (708) 208-2550	Telex: 283461

regardless of frontiers." However, in Article 30 of the international radio regulations, stations operating in the frequencies allocated to television "shall not employ power exceeding that necessary to maintain effective national service of good quality within the frontiers of the country concerned." Where TV stations do broadcast across an international border (such as U.S. stations being received in Canada, or Vatican stations received in Italy), specific international agreements are involved.

A committee of federal judges has approved a 3 year experiment allowing cameras and microphones in federal courts.

The Commission has moved responsibility for management of EBS from the Office of Managing Director to the Field Operations Bureau. It's hoped this change will allow EBS to better reflect local conditions.

Patrick Allinson
Service Manager

ROSCOR

Roscor Wisconsin
11350 W. Theodore Trecker Way
West Allis, Wisconsin 53214
Phone: 414-476-2600
FAX: 414-476-4949

The license of WRPZ Paris, Ky. has been revoked. WRPZ has been off the air for at least 2 1/2 years, and failed to contest a "show cause" order.

RADIO....

by Stan Scharch, W9HMA

The FCC has issued it's much awaited

Notice of Proposed Rulemaking for dealing with the deteriorating AM Band. Five broad goals for the existing band are outlined: Full time operation with stereomodulation; competitive technical quality; elimination of co and adjacent channel interference; nighttime coverage 15% or better than that of day-time; simplified antenna arrays.

So far the FCC has found 87 percent compliance with the NRSC1 specification rule which took effect June 30.

Sony Corp. is being sued by several music publishers. At issue is the consumer DAT recorder. In late June, Sony began a marketing blitz with its under \$1000 DAT recorders that contain the recently developed Serial Copy Management System (SCMS). SCMS allows a DAT recorder to digitally record CDs onto a blank tape, but that copy cannot be copied.

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TELEPHONE SYSTEMS

Scharch Electronics Company

2321 Whitlock Road
Madison, WI 53719
(608) 271-1800

The NAB has completed testing of the 1660 KHZ "Anti-Skywave" antenna outside Washington, DC. The final results of the tests will be made public at the September Radio Show in Boston.

(Excerpts from Radio World)


AMATEUR RADIO NEWS....

by Tom Weeden, WJ9H

The FCC has denied a request by the Radio-Television News Directors Association (RTNDA), asking for a rule change to allow amateur stations to provide communications support to broadcast operations on a more routine basis. Current rules only allow amateurs to provide "newsgathering" services to broadcasters if common-carrier and remote pickup links are disrupted or if life or property is in immediate danger. RTNDA specifically requested that the "immediate safety of life or property" provision be expanded to include information relating to any important news event. FCC denied the request, believing that the prohibition against use of amateur stations for broadcasting must be retained if amateur

frequencies are to remain free of commercial exploitation.

Twenty-two teams of ham radio operators from around the world competed in the World RadioSport Team Championship held July 20 in Seattle. In conjunction with the Goodwill Games, the two-operator




WISC-TV
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MADISON, WI 53711
608-271-4321

teams from 15 countries vied for gold, silver, and bronze medals in this unique radio contest. Each team operated from local Seattle hams' homes, using equipment as similar as possible. WRTC organizers and participants pronounced the event "a resounding success."

In its July meeting, the American Radio Relay League Board of Directors voted to file comments regarding the FCC's proposed code-free license. ARRL's assertion will be that the Commission should not eliminate the Novice and Technician classes, as they are essential elements of amateur radio. ARRL views the proposed Communicator class as an alternative means of entry into amateur radio, not a replacement for the Novice class as the FCC proposes.

From the enforcement department: US Marshalls and engineers from the FCC's Kansas City office seized 31 pieces of

JEFFREY N. CLARINE
CENTRAL REGION SALES MANAGER



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illegal radio equipment from three Missouri CB operators, "found to be operating on government frequencies, using equipment that had been illegally altered." Two were fined \$2000, the other \$1000....A former California ham was convicted July 20 of illegally operating a radio transmitter. Richard Burton's license had been revoked in the early 1980s, but he continued to operate. He was sentenced in 1984 for

illegal operation, serving seven months in jail, and now faces a possible \$100,000 fine and/or up to two years in prison for this conviction....

(From September QST magazine.)

NEWS FROM NATIONAL....

Ballots for the National Election of Officers have been mailed out. You should have yours or be receiving it soon. You can shape the direction of the organization through your vote. Send it in!

The Society of Broadcast Engineers National office announced that the growth in the number of new members for the first seven months of this year is 17% ahead of last. In addition, another milestone was reached in July 1990 when, for the first time in the history of the Society, more than 50% of the current membership have passed the certification process. The SBE represents about 6000 professionals in the communications field.

WISCONSIN DX....

info by Doug Smith

Heard in Winnipeg, Manitoba:
W1ZM LaCrosse

Heard in Midland, Michigan:
W1FL Green Bay

DON'T BLINK....

If you blink, you may miss the dawning of Digital Audio Broadcasting (DAB) in the US. Already our neighbors to the North in Canada are testing the Eureka 147 system developed in Europe. Those tests are showing that DAB overcomes traditional FM multipath problems while delivering CD like fidelity. In this country, just as the FCC announced a notice of inquiry to look into many aspects of DAB, one company has filed a petition for rulemaking to get DAB rolling.

Among the questions hoped to be answered by the FCC's inquiry are: terrestrial vs satellite transmissions; impact on current broadcasting; spectrum allocation; licensing; ownership restrictions; and facilities distribution.

Meanwhile, Strother Communications based in Louisiana has filed a petition for spectrum allocation to begin DAB.

Included in the filing are provisions for current broadcasters to be allocated DAB channels with simulcasting permitted

RAM

Professional Audio Products

<p style="font-size: small; margin: 0;">RON A. MITCHELL PRESIDENT</p>	<p style="font-size: small; margin: 0;">RAM BROADCAST SYSTEMS INC. 346 West Colfax St. Palatine, Illinois 60067 Telephone 708-358-3330 Telefax 708-358-3577</p>
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to a point when enough DAB receivers are in the market place to make DAB viable on its own. The petition suggests allocation of 225 to 273MHz which would accommodate 192 channels, each 250KHz wide. Most of that spectrum is now allocated to the government.


But wait!! Just when you thought the waters would remain clear, enter Dr. Paul Moose, an electrical engineering professor and VP of Mercury Digital Communications. The company was formed to develop and market the proprietary system designed by Dr. Moose called Multi-Frequency Modulation (MFM). It boasts of technology enabling DAB to exist within current spectrum use any without data compression. MFM can currently do 7 bits/HZ with work continuing on 10 bits/HZ efficiency. According to the company, CD quality audio is possible within current FM channels and digital television within the existing 6MHz TV channels. Mercury Digital will make their presentation to the NAB in early September.

Stay tuned!

Your Complete Tower,
Antenna & Strobe Engineers

Broadcast Communications

P.O. Box 131
Verona, WI 53593
608-845-8755



JOHN CROOKS
Vice President

TOWER SERVICE NOTE....

from Broadcast Communications a Chapter 24 Sustaining Member

OSHA regulations require at least one AMA Certified person be on-site at all times while work is being performed on a tower. The tower service technician should be carrying the certification card while on-site. The local Madison American Red Cross can be contacted for First Aid and CPR Certification courses.