

CHAPTER 24 - MADISON, WISCONSIN  
JANUARY NEWSLETTER 1989

Edited by: Leonard Charles

Articles Welcome!! Send them to:  
Chapter 24 Newsletter  
5714 Modernaire St.  
Madison, WI 53711  
(hard copy or text files on 360K disk)

MEETING ANNOUNCEMENT

The return of the Chapter 24 lunch

DATE: Wed - Jan 11, 1989

ALEXANDERS of Madison  
5614 Schroeder Road  
Across from Vitense mini golf

LUNCH begins at NOON  
Meeting during the noon hour

There is no formal program at this lunch. However a discussion will be held on the organization of a Saturday bus trip to the Chicago area for a tour of the Andrew Plant. Your input is needed on the details of such a tour.

UPCOMING MEETING DATES

- Tuesday February 7
- Wednesday March 8
- Tuesday April 11
- Wednesday May 3

WE NEED A VOLUNTEER....

For the last three years, I have been the SBE Chapter 24 representative on the Dane County Telecommunications Commission. Now, due to a change of schedule, I find that I will not be able to attend its meetings. So the next volunteer for such representation is needed. According to the Commission's bylaws, the chair filled by Chapter 24, is a full voting seat and is necessary to provide technical advice on matters that require such advise to the Commission. The Commission has an advisory status forwarding its recommendations to the County Board and the City Council. It deals with everything concerning City/County communications including Police, Fire, EMS, and paging. It meets once a month, usually on the fourth Wednesday of the month on the second floor of the City/County building at 5:15pm. On request, you will be provided with a free parking sticker for the under building parking garage.

If you are interested, talk to either Andy Murphy or myself for more details.

THE LEGALS....info by Doug McDonall

The following applications have been received at the FCC for a new FM channel allocated to Verona, WI. on 105.5 MHZ...

Janice and Ronald Fedlers  
3.0 KW H&V at 100 Meters  
42 57 58 89 25 04

Verona Parque Broadcasting Co.:  
3.0 KW H&V at 100 Meters  
42 57 35 89 28 36

Cynthia K. Waldbillig:  
3.0 KW H&V at 100 Meters  
42 57 42 89 29 32

Wisconsin Bcst Comm Foundation Inc.:  
3.0 KW H&V at 100 Meters  
42 57 32 89 30 04

Heller Bcst Group Limited Partnership:  
3.0 KW H&V at 100 Meters  
42 59 13 89 33 09

Son Comm Inc.:  
3.0 KW H&V at 100 Meters  
42 57 42 89 29 32

Skywave Comm Corps:  
3.0 KW H&V at 100 Meters  
42 57 42 89 29 32

The following applications have been received at the FCC for a new FM channel allocated to Waunakee, WI. on 105.1 MHZ...

WIBU Inc.:  
2.45 KW H&V at 111.1 Meters  
43 13 47 89 10 20

Waunakee Parque Broadcasting Co.:  
3.0 KW H&V at 100 Meters  
43 13 43 89 21 54

Betty Lynn Whirry:  
3.0 KW H&V at 100 Meters  
43 13 01 89 18 08

Family Group LTD., III with WLAX Channel 25 in LaCrosse, WEXX Channel 40 in Chippewa Falls, WGBA Channel 26 in Green Bay, and WVFT Channel 27 in Roanoke, VA has applied to the FCC for assignment of all licenses or

CPs from Family Group LTD., III to Krypton Broadcasting Corporation.

-----

Evansville, WI, WEBU application granted for MP to make changes: 1.2 KW ERP H&V at 154 Meters

\*\*\*\*\*

FCC NEWS

The Commission has adopted new rules permitting limited short-spacing of FM broadcast station assignments by using directional antennas. The new rule will accommodate the operations of FM stations that encounter various antenna site restrictions. Because of the Commission's limited FM application processing resources, permissible short-spacing will be limited, temporarily, to 5 miles. The Commission reiterated that these changes do not alter the Table of FM allotments and vowed to maintain strict distance separation in the allotment of FM channels.

-----

Comments received by the FCC on adoption of the NRSC standards for AM radio favor adoption of the NRSC 1 audio standard rather than the FCC preferred NRSC 2 emission standard. Broadcasters asked for immediate adoption of NRSC-1 with further refinement of NRSC-2 before adoption.

-----

FM broadcasters commenting on the proposed increase of the maximum Class A operating power from 3KW to 6KW, are split over the two proposed plans. Most Class A's support the plan for the blanket increase, while most Class B and C operators support the NAB plan for the upgrade of about two-thirds of the nation's Class A's excluding

many in the northeast U.S. Some Class A members have resigned the NAB in protest of its plan.

-----

Expressing a desire to act cautiously, the FCC has refined its prohibition against common ownership of radio and television stations in the same TV market. Specifically, it is retaining the "one to a market" cross ownership rule but will entertain waivers on a case by case basis if certain criteria are met.

-----

The FCC is proposing the use of 173.075 MHZ for use by stolen vehicle recovery systems.

-----

The Commission has added the FM booster stations to those stations requiring analysis of environmental Radio Frequency Radiation.

\*\*\*\*\*

NEW TOWERS....

You may have seen some new towers popping up around the county. In an expansion of the Dane County communications systems, four new sites for systems are being constructed. A new tower is up in the town of Roxbury to serve Northwest Dane County, a tower is under construction in Brigham Park the town of Blue Mounds to serve Southwest Dane County, and a tower is schedule for construction in spring near Rockdale in Southeast Dane County. The Sun Prairie water tower will also be used as a supporting structure for Dane County repeaters to serve Northeast Dane County. One more tower is being sought to aid with City com-

munications however an appropriate site is proving hard to find with a potential Maple Grove site having been disapproved by the FAA. A site on Hwy PD town of Verona is being considered or a site near High Point Road at Midtown as an alternative. As soon as a site is found, construction will begin.

\*\*\*\*\*

The following provided by Chapter 24 member Doug Smith...

Two notes from the papers..

On Thursday, there was an AP story from Indianapolis about Indiana licensing legally blind people to drive. (using special glasses and other vision devices) The blind driver interviewed, Bruce Guinn of Delphi, Ind., is believed to be the person behind famous pirate broadcasting station Jolly Roger Radio- Guinn is quoted in the article as saying he plans to use his new privileges to commute between two radio jobs in northern Indiana..

On Friday, W05BD (TV-5) announced plans to move to channel 54, with an increase in power, and a call letter change to "WSSM". There were several technical inaccuracies in the article: for one, it was stated that the Madison UHF's run 100kW ERP-- also, the new call letters appear to be a typo. Still, this change should vastly improve "TV-5's" range, as well as eliminating interference problems near leaky parts of the CATV system..

(Editors note - Channel 54 will transmit 10 KW ERP from the original Odana Road Channel 5 site.)

\*\*\*\*\*

ARE YOU AN ENGINEER....  
from the Editor

Unless you have been living in a cave for the past number of months, you have read about or at least heard from one of your colleagues about the battle brewing in some states over state licensing and certification of the Broadcast Engineer. I haven't seen so much written or heatedly discussed about since the FCC decided to halt its licensing exam procedure in favor of those little 'box top' type broadcast permits. And as usual, just about everyone has a strong opinion on this one. It appears that the main players in this dispute, besides the States thus far involved, are the Society of Professional Engineers (SPE), the National Association of Radio and Television Engineers (NARTE) and the Society of Broadcast Engineers (SBE).

It's hard to say for sure which group started all the hoopla. It appears that it could be an effort by the SPE to expand their membership base or to halt the loose use of the title "Engineer" in the broadcast world. Then again it could have been a few states trying to create another revenue source through their costly licensing programs. Or maybe a combination of efforts.

To date, State licensing of Engineers apply to Civil, Structural, or Electrical Engineers. The SPE says anyone using the title "Engineer" should be subject to the same scrutiny and licensing procedures. It's a simple argument. The folks on the other side say it would be totally inappropriate to require the Broadcast Engineer to adhere to the same criteria as the State certified Engineers. The reason, they say, is because the types of expertise required to perform the obs are completely different. The requirement for State licensing would

include a minimum term of experience, passage of a written and/or oral exam, and a four year academic degree. The problem expressed by the broadcast organizations is that the State exams contain very little pertaining to a Broadcast environment. Still unclear is whether this licensing would apply to the Broadcast Consultant Engineer, the Broadcast Contract Engineer, the Broadcast Station Engineer or a combination of some or all three types of Broadcast Engineer.

The States of Washington, New Jersey, New Mexico, and Michigan have so far pressed the issue but none of the cases have yet to end up in court largely because NARTE has been able to convince the states of its argument. That argument is, in essence, when State licensing of Engineers came about, it came about as the result of horrible disasters. Such disasters as bridges and buildings collapsing forced State governments to put in effect minimum qualifications for the people responsible for designing and constructing these buildings and bridges. When all this was happening, the Broadcast Engineer did not yet exist as a profession.

The FCC took themselves out of this battle from their inception, having always referred to the Chief Operator or the Station Operator(s) when stating the duties or requirements of a Broadcast Station's technical personnel.

The push now is for Federal legislation in this matter to prevent 50 separate battles to have to be fought if each State individually pushes for licensing. Meanwhile the SBE's legal council, Chris Imlay, says the SBE will back up any Broadcast Engineer who is charged by his or her State for improper use of the title "Engineer" in conjunction with their career. Mr. Imlay says that if some sort of Federal legislation

cannot be adopted, the SBE will push for recognition by each State of the SBE certification program.

\*\*\*\*\*

BENCHMARK CLASS A SOLD....

The Class A station for which the movement was begun to increase all Class A maximum power is being sold. Press Broadcasting is selling WJLK AM-FM and buying WBUD-AM and WKXW-FM in Trenton NJ. WKXW-FM is a Class B facility. Press VP Bob McAllan, the driving force behind the Class A power increase, says his group is not selling its interest in Class A's as it owns three under Docket 88-98 and is looking at buying another. McAllan is the president of the New Jersey Class A FM Broadcasters Association.

\*\*\*\*\*

SHORT CUT FOR SHORTS....

by Steve Sandlin / Chapter 99

It's 3AM and you've just gotten a call that your main transmitter just went off the air. Sleepily, you tell the announcer how to reset the overloads, and the transmitter comes back up, with all the readings normal. This is the third high voltage overload you've gotten in the last couple of weeks, but you can't seem to induce a failure when you're looking for it.

Bright and early the next morning, you're at the site with the auxiliary transmitter on the air, so you can do some more troubleshooting on the main. All the capacitors in the circuit check good, the diode stack checks out, and out of other ideas, the spare final is installed. Still with no firm diagnosis, the transmitter is

operated into the dummy load with everything operating as it should. After a few minutes, the transmitter goes down with overloads indicated in the high voltage supply.

About the only thing left is to check the power transformer. It checks OK with your VOM, but signs are really pointing to it shorting. There's no spare to substitute and it's too expensive to replace just on a hunch. You get a great idea that might work.

With power off, and everything discharged, the transformer is unbolted from the chassis of the transmitter. A piece of plywood is put under the transformer, insulating it from the rest of the transmitter. Finally, you locate an inline fuse holder and connect it from from the chassis of the transmitter to the frame of the transformer. You then install a 1 amp fuse in the holder and button everything back up.

The transmitter ran fine during the next week. During your weekly maintenance, with the standby transmitter on the air, you discover the fuse is blown in your temporary fuse holder. That proves it! -- The transmitter is shorting to ground intermittently. Until you get a new transformer, you leave the plywood in place, and label the transformer as "hot".

A few weeks later, the new transformer is installed. Finally, no more three AM calls.

\*\*\*\*\*

IT'S TIME FOR AN SBE TOWN MEETING...  
by Steve Brown/SBE Chapter Liason

I'm seeing a disturbing trend in some of the Chapter newsletters I've been reading lately-- the mood is resurfacing that the National officers and board of directors of the Society of Broadcast

Engineers aren't listening (or responding) to the membership of our organization. Maybe this doesn't affect you or your chapter, but if it does, or even if it doesn't, here comes your chance to speak your piece, with the folks minding the store on hand to listen up. The medium will be amateur radio, but before you non-hams turn away, stay tuned long enough to know that you're included, too.

Since it's tough to get the majority of SBE members across America in one place at one time (particularly in winter!) we're planning a national get-together on the ham bands. The way non-hams can participate is easy-- we'll have a telephone "request line" set up so that you can phone in your comments as the meeting proceeds--- all you need to listen is a shortwave receiver.

Here are the particulars.

SBE Chapter 73 (Chapter of the Air)  
Sunday night January 15, and Sunday night February 12, 1989 14.285 MHz (+/- interference) 6pm CST time (7pm EST, 4pm PST)

We'll have the officers and board members of the SBE on hand to moderate the discussion, and we're burning up the telephone lines to get other opinion leaders from our industry on frequency to add their two cents worth.

I've noticed that the typical ham/broadcast engineer doesn't have the big gun station on the band; we included. Maybe we're all too busy keeping our "real" broadcast stations going to put the time and energy into the big signal on 20 meters-- in that case, maybe you can operate the station of a big gun in your market for this occasion. If I can successfully feed 1500 watts into a 400 foot tower,

that's what I'll be using!

The topics for discussion? Well, for starters, the Executive Board will be fresh out of a meeting on January 12th, where they'll be discussing the current "hot topic" of Professional Engineer state licensing of broadcast engineers and the 1989 National SBE Convention in Kansas City. You undoubtedly have some questions or comments of your own, so why not join in?

May we also suggest that you tape the meeting to play for other chapter members who can't be with us?

Why not get a group together at a local member's ham rig and help us accomplish one important task of our Society-- communication.....

Steve Brown, WA0ACX, Chapter Liason  
Chairman and net control

\*\*\*\*\*

CHAPTER 24 SUSTAINING MEMBERS

Thanks to these Renewals:

WMSM TV 47  
WISC TV 3  
RAM Broadcast Systems Inc.

WKOM TV 27  
Video Images  
Broadcast Television Systems  
Pro Video  
Floor Systems Midwest, Inc.  
Emons Associates, Inc.  
Broadcast Communications/Jim Crooks  
Allied Broadcast Equipment  
WTSO AM / 2104 FM  
Microtime Inc.  
RW Video, Inc.  
Todd Communications  
3M Audio/Video  
Richardson Electronics, LTD.

**SOCIETY OF BROADCAST ENGINEERS CHAPTER 24  
SUSTAINING MEMBERS**



**RW VIDEO, INC.**  
4902 Hammersley Rd.  
Madison, WI 53711  
(608) 274-4000

Production/Post-Production for Broadcast and Industry

Herb Van Driel  
Central Regional Manager  
Menomonee, Wisconsin  
(608) 493-2619

**● MICROTImE**


Microtime, Inc.  
1280 Blue Hills Avenue Bloomfield, Conn. 06002  
Telephone (203) 242-4242 Telefax (203) 242-9876  
TWX 710-425-1165 Telex 4938290 MCRO UI

A Subsidiary of ANDERSEN GROUP

**WTSO AM**  
1070

**Z104**  
FM

**Your News Station**




**WISC-TV**  
7025 RAYMOND ROAD  
MADISON, WI 53711  
608-271-4321

WISC-TV madison

**RAM BROADCAST SYSTEMS INC.**  
346 West Colfax Street Palatine, IL 60067

**STEVE GORDON**  
National Sales Manager  
Phone: 312-358-3330  
Fax: 312-358-3577

PROFESSIONAL BROADCAST PRODUCTS




**PROVIDEO**

Jerry Emmerich  
General Manager

2302 West Badger Road  
Madison, WI 53713  
Phone (608) 271-1226

Video Production From Concept To Completion

*Broadcast Communications*



608-833-3977  
Your Complete Tower,  
Antenna & Strobe Engineers


**JIM CROOKS, President**

**Jack T. Gerts**  
Sales Representative

**3M**

Audio/Video Professional Markets  
3M Magnetic Media Division

908 North Elm Street  
Hinsdale, IL 60521  
312/920 4233 Orders  
800/942 3961 Messages




**FODD** COMMUNICATIONS

**Steve Peck**  
Regional Sales Manager

6548 Cecilia Circle  
Mpls., MN 55435  
812-941-0556

4613 Hamlet Place  
Madison, WI 53714  
608-249-7080



1121 RIVERWOOD DRIVE  
BURNSVILLE, MN 55337  
(612) 890-8920

EMMONS ASSOCIATES, INC.

**KEITH EMMONS**

**ALLIED**

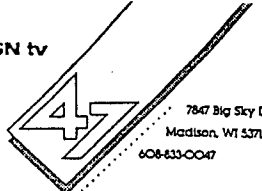
Broadcast Equipment

SUPPORTING THE SBE

OUR NEW NUMBER  
**1-800-622-0022**

THE ONLY 800 NUMBER YOU'LL EVER NEED  
FOR BROADCAST EQUIPMENT

**WMSN tv**



7847 Big Sky Drive  
Madison, WI 53719  
608-833-0047

**JEFFREY N. CLARINE**  
Regional Sales Manager

**BTS BROADCAST TELEVISION SYSTEMS, INC.**  
A joint Company of Bosch and Philips

21644 Evans Trail Farquar, Minnesota 55021 (507) 334-1891  
Telex: (507) 334-0109

**VIDEO IMAGES**


Milwaukee  
Madison  
Chicago

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


**CRAIG W. SANFORD**



**FLOOR SYSTEMS MIDWEST, INC.**  
3162 S. 28th St. • Milwaukee, WI 53215  
P.O. Box 37874 • Milwaukee, WI 53237-0874  
1-414-383-1819



**WKOW TV**  
MADISON



**Richardson Electronics, Ltd.**

40W267 Kessinger Road  
LaFon, Illinois 60147  
Telephone 312-232-6400,  
800-323-1770  
Telex 283461  
TWX 910-255-0779  
FAX 312-232-1071

**R. T. (Dick) Thomas**  
District Sales Manager  
Midwest Area