



The University of Wisconsin-Extension

## **29TH ANNUAL BROADCASTERS' CLINIC**

September 27, 28 and 29, 1983      Madison, Wisconsin



The University of Wisconsin-Extension

offers the

## 29TH ANNUAL BROADCASTERS' CLINIC

### PROGRAM

Tuesday, September 27, 1983

7:45 am	REGISTRATION AND CONTINENTAL BREAKFAST	
9:00	INTRODUCTION AND WELCOME	<b>Don Borchert</b> , Director of Engineering, WHA Radio and Television, Madison, WI. <b>H. Richard Hiner</b> , General Manager, WHA-TV, Madison, WI
9:30	MICROWAVE PATH STUDIES	<b>Donald L. Markley</b> , Consulting Engineer, Peoria, IL
10:15	BREAK	
10:30	TLC FOR AM ANTENNA SYSTEMS	<b>Doug C. McDonell</b> , Broadcast Engineering Consultant, Madison, WI
11:15	FCC UPDATE	<b>Garrett Lysiak</b> , FCC, St. Paul, MN <b>George Sklom</b> , FCC, Chicago, IL
12:00	LUNCHEON AND ADDRESS: TAMING TECHNOLOGY—A SURVIVAL KIT FOR BROADCASTERS	<b>Robert Stow</b> , Director of Production Systems Analysis, CBS Television, New York, NY
2:00 pm	HOW TO BE A BROADCAST ENGINEER AND KEEP YOUR FAMILY TOO	<b>Mark Durenberger</b> , Director of Technical Development, Hubbard Broadcasting, St. Paul, MN
2:45	SATELLITE EARTH TERMINALS AND THE BROADCAST ENGINEER	<b>Rick Evans</b> , Communications Consulting Engineers, Thiensville, WI
3:30	USING SCA'S ON FM—APPLICATIONS / ENGINEERING	<b>Mike Hendrickson</b> , Group CE, Hedberg Broadcasting, Blue Earth, MN
4:30	RECEPTION, CASH BAR AND EQUIPMENT EXHIBIT	

Wednesday, September 28, 1983

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- 7:45 am CONTINUING REGISTRATION AND CONTINENTAL BREAKFAST
- 8:30 AUTOMATED AUDIO TEST SYSTEMS Robert Metzler, Tektronix Inc., Beaverton, OR
- 9:15 REBUILDING THE WFMT CHICAGO STUDIOS James S. Addie, Chief Engineer, WFMT, Chicago, IL
- 10:00 BREAK
- 10:30 PLANNING, DESIGN, AND CONSTRUCTION OF BROADCAST FACILITIES Frank W. Rees, Jr., Frank Rees Associates, Oklahoma City, OK
- 11:15 BROADCAST LOGS: ROLL YOUR OWN Garrett Lysiak, FCC, St. Paul, MN
- 12:00 LUNCHEON AND ADDRESS: EVOLVING TECHNOLOGIES AND THEIR EXPECTED IMPACT ON THE BROADCAST INDUSTRY Bernie Lechner, Advanced Development Project Leader, RCA, Princeton, NJ
- 2:00 pm DIGITAL AUDIO EARTH STATIONS Dr. Chuck Windett, Scientist, Scientific-Atlanta, Atlanta, GA
- 2:45 USING HY-COM NOISE REDUCTION IN FM BROADCASTING Bill Sacks, President/Chief Engineer, Straight Wire Audio, Arlington, VA
- 3:30 POWER TUBE REBUILDING AND OPERATION John Sullivan, President, Econco Broadcast Service, Woodland, CA
- 4:15 RECEPTION, CASH BAR AND EQUIPMENT EXHIBIT
- 6:00 DINNER (Optional)
- 8:00 BROADCAST ENGINEERING FORUM (NUTS AND BOLTS SESSION) Moderator: Stephen Brown, WCCO-FM, Minneapolis, MN

Thursday, September 29, 1983

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- 7:45 am CONTINENTAL BREAKFAST
- 8:30 IMPEDANCE MATCHING AND TERMINATIONS IN AUDIO CIRCUITRY DESIGN Jim Brown, Chief Engineer, Bridgewater Sound, South Holland, IL
- 9:15 CONTEMPORARY AUDIO INTERFACING IN THE BROADCAST ENVIRONMENT Craig Connally, President, NEOTEK, Chicago, IL
- 10:00 BREAK
- 10:30 NEW UHF TELEVISION EXCITER IMPROVEMENTS William A. Resch, Engineering Development, Harris Corporation, Quincy, IL
- 11:15 BATTERIES FOR ENG/EFP Anton Wilson, Anton Bauer Company, Inc., Shelton, CT
- 12:00 LUNCHEON AND ADDRESS: SEARS TOWER PROJECT Warren Shulz, Chief Engineer, RKO/WFYR, Chicago, IL
- 2:30 pm ADJOURNMENT Goodbye until next year. See you at the 1984 30th Annual Broadcasters' Clinic!
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## REGISTRATION FORM

### BROADCASTERS' CLINIC

T43-5044-0277

September 27, 28 and 29, 1983; Sheraton Inn and Conference Center; Madison, Wisconsin

Social Security Number: \_\_\_\_\_ Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

(Not mandatory - used only to ensure accuracy and security of your educational record)

area code

exchange number/existing number

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization/Station: \_\_\_\_\_

Business Address: \_\_\_\_\_

street

city

state

zip

Payment enclosed:  \$85 registration fee  \$12 optional dinner on Wednesday, Sept. 29

To register, phone or mail this form, along with your check *made payable to UW-Extension*, to: Registration Office, The Wisconsin Center, 702 Langdon Street, Madison, WI 53706. Phone (608) 262-7942

*UW-Extension provides equal opportunities in employment and programming including Title IX requirements.*

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## **29TH ANNUAL BROADCASTERS' CLINIC**

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### **ABOUT THE CONFERENCE**

The University of Wisconsin-Extension proudly presents the 29th annual Broadcasters' Clinic—long considered a "must" within the industry for broadcast engineers eager to remain on the leading edge of their profession.

Broadcasters' Clinic 1983 features the most impressive array of speakers, topics and exhibits to date. Two dozen leading engineers, technologists, researchers and administrators from around the country will address a number of topics of vital concern to the broadcast engineer: dealing with emerging technologies; interpreting recent FCC decisions; designing broadcast facilities; and understanding state-of-the-art research in the field of broadcast engineering.

The popular "nuts and bolts" broadcast engineering forum will return in an expanded format this year. Industry exhibits will be even more extensive. You won't want to miss the 1983 Broadcasters' Clinic!

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### **GENERAL CONFERENCE INFORMATION**

- DATES:** Tuesday, Wednesday and Thursday, September 27, 28 and 29, 1983.
- LOCATION:** All conference sessions will be held at the Sheraton Inn and Conference Center, 706 John Nolen Drive, Madison, Wisconsin.
- FEE:** \$85. Fee covers program materials, 3 continental breakfasts, 3 luncheons, 3 break refreshments and 2 evening receptions with hot hors d'oeuvres. The Wednesday evening dinner is optional for an additional charge of \$12.00. You are entitled to an 80% refund if conference cancellations are received prior to September 20, 1983. Enrollees who do not cancel are obligated for the full fee. Substitutions may be made at any time.
- ACCOMMODATIONS:** Please make your own room reservations with the Sheraton Inn and Conference Center, 706 John Nolen Drive, Madison, Wisconsin, 53713. Phone (608) 251-2300. We suggest that you make your reservations before September 1, 1983, while discounted rooms are being held for the conference. Please specify that you are attending Broadcasters' Clinic. If you are handicapped and desire special accommodations, please advise us at least two weeks before the conference. Requests will be kept confidential.
- CREDIT:** A total of 2.2 Continuing Education Units (CEUs) can be earned from the University of Wisconsin-Extension by individuals attending the conference.
- INFORMATION:** For further conference information, contact Don Borchert, Director of Engineering, WHA Radio and Television, Vilas Communication Hall, 821 University Avenue, Madison, Wisconsin 53706. Phone: (608) 263-2157

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### **PROGRAM COMMITTEE**

Don Borchert, WHA Radio and Television, Madison, WI  
Elmo Reed, Post Corporation, Green Bay, WI  
Warren Shulz, WFYR, Chicago, IL  
Ray Hernday, WTMJ, Milwaukee, WI

Stephen Brown, WCCO-FM, Minneapolis, MN  
Harry Priester, WLS-FM, Chicago, IL  
John Freberg, WXRT, Chicago, IL

## EQUIPMENT EXHIBITORS

Among the organizations exhibiting at the 1983 Broadcasters' Clinic are the following:

ADDA  
Allied Broadcasting  
Ampex Corporation  
Andrew Corporation  
Anton Bauer  
AVC Systems  
Avonix  
Bridgewater Sound  
Broadcast Electronics, Inc.  
Color Video Services  
Delta Electronics  
Econco  
Electronic Industries  
Emmons Associates  
Enterprises, Inc.  
Flanner Pro Audio  
Full Compass Systems  
Grass Valley  
Harris Corporation  
International Tapetronics

Mark Persons Associates  
McCurdy Radio Industries  
Mike Dyer  
Microprobe Electronics  
NEOTEK  
RCA Broadcast  
Roscor  
Scientific-Atlanta  
Select Sound  
Skyline Communications  
Sony  
Sound Technology  
Straight Wire Audio  
Tektronix, Inc.  
The Huff Company  
Todd Communications  
Victor Duncan  
Video Images  
Video Midwest  
3-M Corporation

Don Borchert

