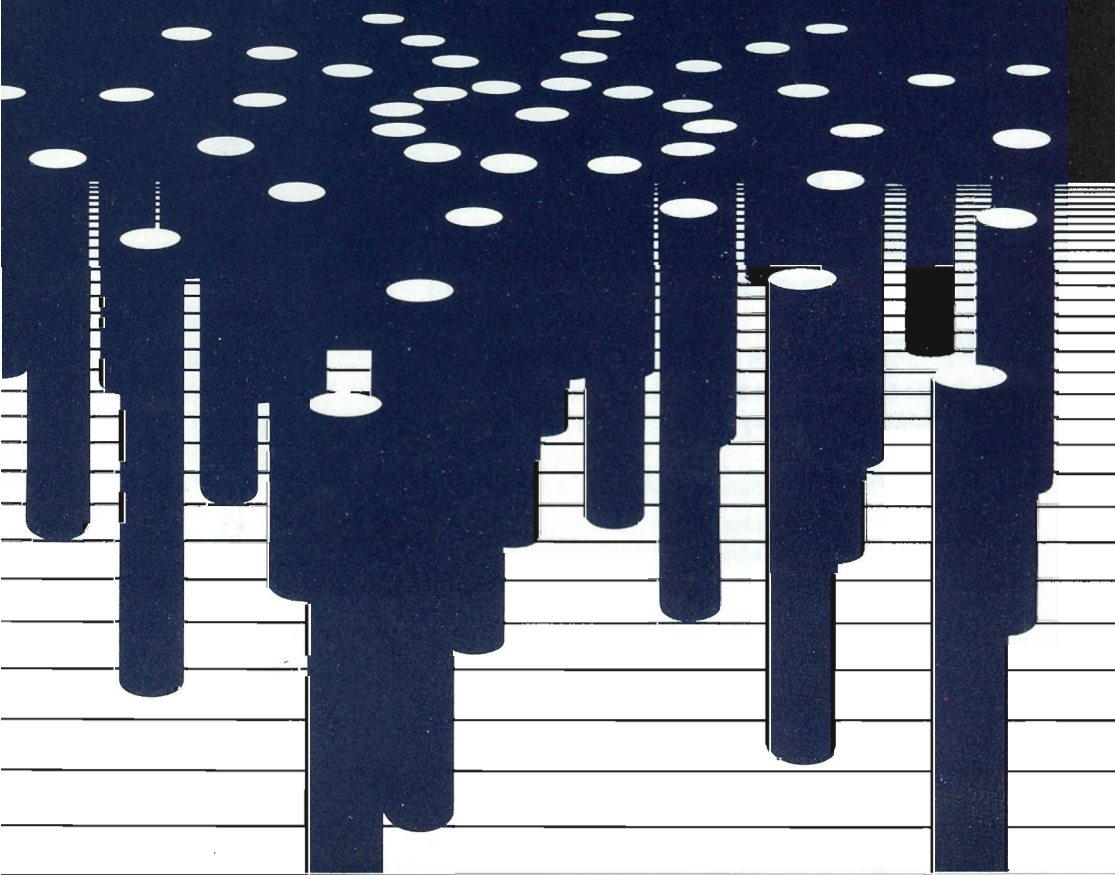


35th Annual
University of Wisconsin/Extension

BROADCASTERS' CLINIC

October 16-19, 1989
Madison, Wisconsin

Supported in part by
Radio World and TV Technology



The University of Wisconsin
proudly presents...the 35th Annual

BROADCASTERS' CLINIC 1989

A quality conference for the motivated Broadcast Engineer...

New and Improved Format and Fee Structure!

MONDAY, OCTOBER 16

Morning **General Broadcast Engineering Sessions**
Afternoon **Concurrent Workshops Including Management**
Evening **Our Famous "Pizza-Engineering Forum"**

TUESDAY, OCTOBER 17

All day **Technical Sessions (Radio)**
Evening **Equipment Exhibits**

WEDNESDAY, OCTOBER 18

Morning **Technical Sessions (Radio and Television)**
Afternoon **Equipment Exhibits**
Evening **Engineering Forum (Nuts and Bolts)**

THURSDAY, OCTOBER 19

Morning 'til ? **Technical Sessions (Television)**

REGISTRATION:

We hope you can be with us for the entire conference.
However, you may register for any two or three days you choose.

AND MORE . . .

Watch for more information and program updates in
Radio World & Television Technology.

Don Borchert

PROGRAM: BROADCASTERS' CLINIC 1989

MONDAY, OCTOBER 16

7:45 am Registration and Continental Breakfast

9:15 **General Broadcast Engineering Sessions**

The Educated Technologist Citizen
Mark Durenberger, Director of Network Development
WCCO Sports Networks, Minneapolis, MN

A Practical Approach to Getting the Greatest Benefits from NRSC
William Ammons, CRL Systems, Tempe, AZ

FMX™: Consumer and Professional Applications
Thomas Keller, Broadcast Technology Partner, Springfield, IL

12:15 pm Luncheon

1:30 - 4:30 **Concurrent Workshops**

Antenna Systems for Radio
Don Markley, D.L. Markley & Associates
Ralph Evans III, Ralph Evans & Associates
John Saddler, Federal Communications Commission

Technical Management
John Commuta, President, Market-Line

FX 50: The FM Exciter with Audio Performance that
Rivals CD Specifications
Ed Anthonie, Design Engineer, Broadcast Electronics

7:30 Our Famous Pizza-Engineering Forum
Mark Durenberger

TUESDAY, OCTOBER 17

7:45 am Registration and Continental Breakfast

9:00 **Engineering Sessions: Radio**

Where Are You? Use the Global Positioning System
Garrett Lysiak, President, Owl Engineering, St. Paul, MN

Off-Premises Monitoring and Remote Control Via Satellite
Peter Burk, President, Burk Technology, Teppell, MA

Do Folded Di-Poles Really Work? (discussion based on experience)
Lawrence Behr, President, L.B.A. Group, Greenville, NC

950 MHz Aural STL/TSL Systems (including alternatives in
congested areas)
Jeff Nordstrom, Allied Satellite

12:15 Luncheon

- 1:30 **Engineering Sessions: Radio**
 I S D N: Its Impact on the Broadcast Engineer
A presentation by AMERITECH
- Satellite Communications for Broadcast: A Ku Band Update
John Brimrose
Mark Durenberger
Ray Conover
RCA/GE Americom
- And More . . .*
- 4:30 **Equipment Exhibits Open**
 Reception and Cash Bar

WEDNESDAY, OCTOBER 18

- 7:45 am Registration and Continental Breakfast
- 9:00 **Engineering Sessions: Radio and Television**
 Integrating Leading Edge Technology in Current Audio Production
Bill Mullin, Operations Manager, Pyramid Audio
- Compact Disc: Theory and Maintenance
Denon America, Parsippany, NJ
- Utilizing CAD for Broadcast Applications
Kahn, Phillips & Associates, Oak Park, IL
- PC-Controllable Automated Video Measurements
Mel Infanzon, TEKTRONIX
- And More . . .*
- Noon **Equipment Exhibits Open**
- 6:30 **Engineering Forum**
Moderator: Ken Dixon, WHA Television

THURSDAY, OCTOBER 19

- 7:45 Registration and Continental Breakfast
- 9:00 **Engineering Sessions: Television**
 Television Station Automation
David Bird, Broadcast Television Systems
- How Expansion and Contraction Can Cause Problems in Rigid Coaxial Transmission Line (discussion of solutions)
Andrew Corporation
- Multi-Channel UHF Antenna Systems
Ernest Mayberry, LDL Communications, Laurel, MD
- The D2 Format: Field Reports
William Carpenter, AMPEX Corporation
- 12:15 Luncheon
- ???
- Adjournment . . . See you next year!

REGISTRATION FORM
Broadcasters' Clinic 1989 (0280)

October 16-19, 1989
Holiday Inn Southeast, Highway 12 and 18 at I-90
Madison, Wisconsin 53704
(608) 222-9121

I will attend: (Please check) Mon. Tues. Wed. Thur.
Fees: \$100 (Any two days) \$135 (Any three days) \$160 (All four days)

Amount enclosed: \$ _____

Social Security No: _____
(Not mandatory—used only to ensure accessibility and accuracy of your educational record.)

Name: _____

Title: _____

Organization/Station: _____

Business Address: _____
street
city/state/zip

Phone: () _____
area code daytime number/evening number

Mail this form and your check, made payable to UW-Madison, to:
Registrations/105, Wisconsin Center, 702 Langdon Street, Madison, WI 53706.
To register by phone, please call: (608) 262-7942.

This information is collected to enhance the programming efforts of University of Wisconsin—Madison and is voluntary.

SEX: female male
BIRTHDATE: ___ Month ___ Day ___ Year
HERITAGE: American Indian Asian Black Hispanic White or Other

OCCUPATIONAL AREA
 100 Professional, technical and managerial occupations
 700 Other occupations

Please advise us at time of registration if you are handicapped and desire special accommodations. Requests are kept confidential.

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

1989 PROGRAM COMMITTEE

Don Borchert, University of Wisconsin—Madison
John Freberg, WXRT, Chicago, IL
Vern Killion, KRVN, Lexington, NE
Wil Koeller, WTMJ, Milwaukee, WI
Gary Mach, University of Wisconsin—Green Bay
Doug McDonell, Technical Consultant, Madison, WI
Ray Topp, Rochester, MN

**Among the many exhibitors at the
1989 Broadcasters' Clinic will be the following:**

A & D CARTRIDGE REBUILDINGS
ALLIED BROADCAST EQUIPMENT
AMPEREX CORPORATION
AMPEX CORPORATION
AUDIO PRECISION, INC.
AUDIO TECHNOLOGIES, INC.
AUTOMATIC FIRE PROTECTION
AVONIX
BROADCAST COMMUNICATIONS
BROADCAST ELECTRONICS, INC.
BROADCASTERS GENERAL STORE
BTS BROADCAST SYSTEMS
E.E.V., INC.
FULL COMPASS SYSTEMS, LTD.
HARRIS BROADCAST GROUP
INTERNATIONAL TAPETRONICS CORPORATION
LDL COMMUNICATIONS
M/A-COM, MAC, INC.
MICROWAVE RADIO CORPORATION
MOTOROLA
NEC AMERICA, INC.
PANASONIC BROADCAST SYSTEMS
RAM BROADCAST SYSTEMS
RADIATION SYSTEMS, MARK ANTENNA DIVISION
ROSCOR CORPORATION
SKYLINE COMMUNICATIONS
SOUND TECHNOLOGY
SONY CORPORATION OF AMERICA
THE TAPE COMPANY
TEKTRONIX, INC.
3M CORPORATION
TODD COMMUNICATIONS
VIDEO IMAGES

— AND MORE —

GENERAL CONFERENCE INFORMATION

DATES

Monday through Thursday, October 16 through 19, 1989

LOCATION

All sessions of the **Broadcasters' Clinic 1989** will be held at the Holiday Inn Southeast, Highway 12 and 18 at I-90, Madison, Wisconsin, 53704.
Phone: (608) 222-9121.

FEE

\$100 - Any two days
\$135 - Any three days
\$160 - All four days

Fee covers program materials, continental breakfasts and luncheons as indicated, refreshment breaks, the Pizza-Engineering forum, and two evening receptions with hot hors d'oeuvres (cash bar).

You are entitled to an 80% refund if cancellations are received prior to October 9, 1989. 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 Holiday Inn Southeast, Highway 12 and 18 at I-90, Madison, Wisconsin, 53704. Phone: (608) 222-9121. We suggest that you make your reservations before September 25, 1989, while discounted rooms are being held for the Seminar. Please specify that you are attending the **Broadcasters' Clinic 1989**.

CREDIT

Conference enrollees can earn up to 2.8 Continuing Education Units (CEUs) from the University of Wisconsin.

INFORMATION

For further conference or exhibitor information, contact Don Borchert, Director of Engineering, WHA Radio and Television, 821 University Avenue, Madison, Wisconsin 53706. Phone: (608) 263-2157.

This program is offered by UW-Madison in cooperation with UW-Extension.