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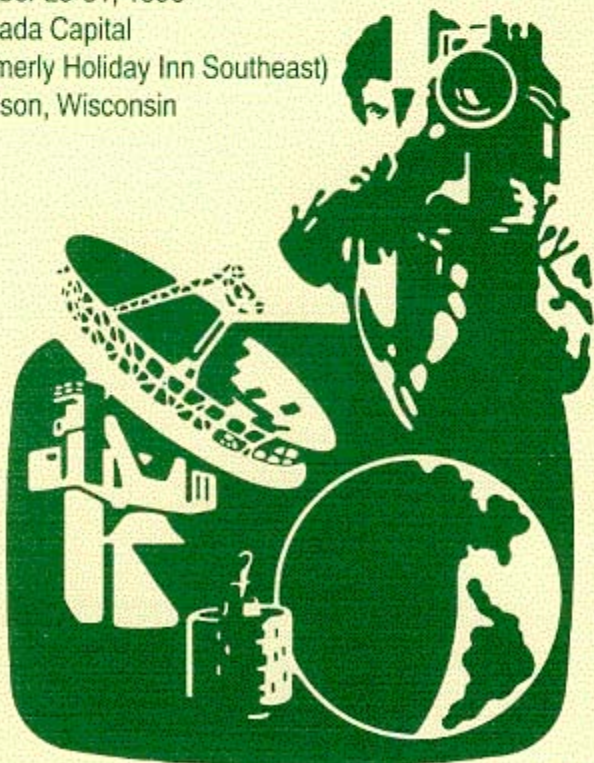
Presenting the 42nd Annual

# BROADCASTERS CLINIC

and

Upper Midwest Regional  
SOCIETY OF BROADCAST  
ENGINEERS MEETING

October 29-31, 1996  
Ramada Capital  
(Formerly Holiday Inn Southeast)  
Madison, Wisconsin



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## BROADCASTERS CLINIC 1996

We are pleased to present the program agenda for the 1996 conference. The papers reflect a very broad spectrum of current technologies. As you review the various presentations we hope you will find subjects of interest to you.

The Program Planning Group

### TUESDAY, OCTOBER 29

- 7:45 a.m. Registration and Continental Breakfast
- 9:15 **Advanced Digital FM Exciter Technology**  
David Hershberger, Principal Engineer  
Continental Electronics Corp., Dallas, TX
- 10:00 **Digital Demodulation of Commercial Broadcasting**  
Greg Buchwald  
Motorola, Schaumburg, IL
- 10:45 Break
- 11:00 **Applying Digital Networking Techniques to Single and Multiple Site Remote Transmitter Plant Operations**  
John E. Leonard, Jr., Director of Broadcast Site Control  
Gentner Communications Corp., Salt Lake City, UT
- Noon Luncheon Address -  
**Broadcast Station Security**  
Neil Purtell  
FBI, Madison, WI
- 1:30 or  
2:00 p.m. **What Is The FCC Doing To You Now?**  
Donald L. Markley, Engineering Consultant  
Peoria, IL
- 2:45 **Digital Workstation Backup-Price vs. Functionality**  
Jim Thomason  
Harris, Quincy, IL
- 3:30 Break
- 3:45 **New Opportunities Available to Short Spacing - FM Allocations**  
Doug Vernier, Engineering Consultant  
V-Soft Communications, Cedar Falls, IA

- 4:30 **Equipment Exhibits**
- 7:30 **Engineering Forum**  
Steve Brown, Ken Dixon & Gary Mach

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### WEDNESDAY, OCTOBER 30

- 7:45 a.m. Registration and Continental Breakfast
- 8:30 **An Antenna Is An Antenna Is An Antenna**  
Robert Surette, Manager RF Engineering  
Shively Labs, Bridgton, ME
- 9:15 **Evolving Transport Technology**  
Robert Raasch  
Masters Engineering Group Ltd., Big Bend, WI
- 10:00 **Equipment Exhibits**
- 1:30 p.m. **From NTSC To Digital Television & How We Got There**  
Charles W. Rhodes, Consultant  
Upper Marlboro, MD
- 2:15 **Telco Remote Audio on POTS v.34 and ISDN**  
Lynn Distler  
Comrex Corporation, Acton, MA
- 3:00 Break
- 3:15 **Power Utility Interference**  
Rick Krakau  
Wisconsin Power & Light, Madison, WI
- 4:00 **Store And Forward Satellite Technologies What Can And Cannot Be Expected From Satellite Digital Audio Digital Video Compression**  
Jeff Nordstrom  
Harris Broadcast Products, Richmond, IN  
John Skaggs  
Wegener Communications, Duluth, GA
- 6:30 Reception
- 7:30 **Upper Midwest Regional Meeting of the Society of Broadcast Engineers Followed By EAS Local Plan - Case Studies**  
Hosted by SBE Chapter 24, Madison, WI
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# THURSDAY, OCTOBER 31

- 7:45 a.m. Continental Breakfast
- 8:30 **4:2:2 Serial Component Digital Production Switcher**  
Doug Buterbaugh, Marketing Manager - Switching Products  
Philips Broadcast Television Systems, Simi Valley, CA
- 9:15 **Introduction To Betacam SX**  
Michael Taylor  
Sony
- 10:00 Break
- 10:15 **D-5 HD Cost Effective Production Quality HD-DVTR Using 4:1 Compression**  
Phil Livingston, Director of Product Management  
Panasonic Broadcast & Television, Secaucus, NJ
- 11:00 **A Treatise On Serial/Analog Conversion**  
Robert L. Zuelsdorf, Senior Design Engineer  
Ensemble Designs, Grass Valley, CA
- Noon Luncheon
- 1:15 **Stacked Antenna Considerations For HDTV Conversion**  
Ernest H. Mayberry, Antenna Design Leader  
Dielectric Communications, Raymond, ME
- 2:00 **A Report From The Field On The Performance Of Diacode 60 KW UHF Television Transmitter**  
Timothy P. Hulick, PhD.  
Acrodyne Industries, Blue Bell, PA
- 2:45 **ATV Systems For The UHF Broadcaster**  
Mark A. Aitken, Director  
Comark, Chalfont, PA
- 3:30 **Transmitter Facilities Design And Construction For Digital Television**  
LDL Communications, Louisville, CO
- 4:15 Adjournment . . . See you at Broadcasters Clinic 1997

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# REGISTRATION FORM BROADCASTERS CLINIC 1996

October 29-31, 1996

I will attend: (Please check)

Tuesday     Wednesday     Thursday

Fees: \$135 (Any two days) \$165 (All three days)

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Amount enclosed: \$ \_\_\_\_\_

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

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

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

street

\_\_\_\_\_  
city/state/zip

Phone: (    ) \_\_\_\_\_

area code

daytime number/evening number

Social Security No.: \_\_\_\_\_

Not mandatory - used to ensure accessibility and accuracy of your educational record.

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Mail this form and your check made payable to  
Broadcasters Clinic:

**Don Borchert**  
**1955 Oakland Avenue**  
**Sun Prairie, WI 53590**

To register by phone,  
please call 608-255-2600 or fax to 608-256-3986.

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## GENERAL INFORMATION

### DATES

Tuesday through Thursday, October 29-31, 1996

### LOCATION

All sessions of the **Broadcasters Clinic 1996** are held at the Ramada Capital Conference Center, Highway 12 and 18 at I-90, Madison, Wisconsin 53704. Phone 608-222-9121.

### FEE

\$135 - Any two days

\$165 - All three days

Fee covers program materials, continental breakfasts and luncheons as indicated, refreshment breaks, and an evening reception with hot hors d'oeuvres (cash bar).

You are entitled to an 80% refund if cancellations are received prior to October 15, 1996. 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 Ramada Capital Conference Center, Highway 12 and 18 at I-90, Madison, Wisconsin 53704. Phone 608-222-9121. We suggest that you make your reservations before October 1, 1996, while discounted rooms are being held for the seminar. Please specify that you are attending the **Broadcasters Clinic 1996**.

### CREDIT

Continuing Education Units (CEU's) provided by University of Wisconsin Engineering Professional Development.

### INFORMATION

For further conference or exhibitor information, contact Don Borchert, 1955 Oakland Avenue, Sun Prairie, Wisconsin 53590. Phone 608-837-3462.

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## 1996 PROGRAM COMMITTEE

**Don Borchert**, Madison, WI

**John Bimrose**, Microspace, Raleigh, NC

**Craig Bluschke**, UW Engineering

**Steve Brown**, WLTE-CBS Radio Minneapolis, MN

**Leonard Charles**, WISC-TV, Madison, WI

**Ken Dixon**, WHA Television, Madison, WI

**Mark Durenberger**, Teleport Minnesota, Minneapolis, MN

**Jim Hermanson**, WKOW-TV, Madison, WI

**Vern Killion**, KRVN Radio, Lexington, NE

**Wil Koeller**, WTMJ, Inc., Milwaukee, WI

**Gary Mach**, University of Wisconsin, Green Bay, WI

**Elmo Reed**, Retired, Green Bay, WI

**Blaine Webster**, WLIT Radio, Chicago, IL

## EXHIBITORS

Among the many exhibitors at the **BROADCASTERS CLINIC 1996** are:

3M Center	Ice Crackers
A&D Cartridge Rebuilding	ITS Corporation
Acrodyne Industries	Joseph Electronics
Advanced Broadcast Systems	LDL Communications
Andrew Corporation	Leitch
APT-Audio Pro Technology	Litton Communications
Arrakis Systems	Midwest Electronic Sales Associates
Audio Broadcast Group	Mobile Media
Avid Technology	Odetics Broadcast
Avonix Video Systems	Panasonic Broadcast & TV
Broadcast Communications	Pinnacle Systems
Broadcast TV Systems	Ram Broadcast Systems
Broadcasters General Store	RF Systems
C-Cor Electronics	Richardson Electronics
CCA Electronics	Roscor Wisconsin
Comark Communications	Secore Electronics
Comsat RSI, Mark Antennas	Shively Labs
Continental Electronics	Skyline Communications
Dielectric Communications	Society of Broadcast Engineers
Dorrough Electronics	Sony Electronics
Dytec	Spencer Technologies
Electronic Industries	Switchcraft
Emmons Associates	Tektronix
Fuji Photo Film	Tektronix - Grass Valley
Fujinon	TFT
Full Compass Systems	Video Images
Gepeco International	Videotek
Gorman-Redlich Mfg.	Weather Central
Harris Allied	Wireready Newswire Systems
Hartmann & Associates	