

Section H: This, the "Technology" section, begins with a list of U.S. and international equipment manufacturers and distributors, and continues with listings of frequency measuring services, videotext operations, teletext operations, videotext and teletext software and hardware suppliers, automated-channel suppliers, computer services and broadcast automation systems, and a directory of companies providing mobile production services. These listings include addresses, telephone numbers, and names of principal executives. Next are lists of common carriers including land line, microwave & multipoint distribution services. On page H-58 a chart shows the growth of broadcasting, and on page H-72 a chart shows television and radio set sales from 1958-1985. The last part of Section H begins on page H-61 with the 1989 Buyer's Guide, the yellow pages, a commercial directory to equipment, programing and broadcast services.

Section I: is divided into three parts-Professional Services, Associations, and Broadcast Education. Part one provides listings of brokers and consultants, station financing firms, research services, technical consultants, law firms and attorneys in communications law, public relations services, talent agents, and employment services. Part two, Associations, begins with the National Association of Broadcasters and includes trade organizations, professional associations and societies, and unions. Broadcast Education, part three, opens on page I-55 with broadcasting schools. The section continues with reviews of recently published books related to the Fifth Estate. Section I concludes with a list of colleges and universities offering degrees and courses in radio and television.

A

Abbreviations xii
 ABC's of the Fifth Estate..... A-1
 ADI's..... C-142
 A Short Course in Broadcasting..... A-3
 A Short Course in Cable..... D-3
 Adult Contemporary.....
 programing..... F-74, F-99, F-110
 Advertisers Index..... xiv
 Advertising Agency Directory..... G-1
 Advertising Assns., Media
 Societies..... I-55
 Advertising Services..... G-7
 Affiliates (see appropriate network)
 AFRTS..... B-361
 Agencies, Advertising..... G-1
 Agencies, State Cable Regulatory A-36
 Agents, Talent..... I-51
 Agricultural programing..... F-78, F-99
 AM Stations
 By Call Letters, Canada..... B-381
 By Call Letters, U.S..... B-362
 By Frequencies, Canada..... B-417
 By Provinces, Canada..... B-340
 By Frequencies, U.S..... B-382
 By States, U.S..... B-1
 American Broadcasting Co. F-42
 American Indian
 programing..... F-78, F-101
 Anatomy of Cable Regulation..... D-1

Antennas H-17
 Electronics Research Inc.



Applications, TV Stations. C-96
 Applying for a Broadcast Station. A-33
 AP Radio..... F-49
 Armed Forces Radio & TV..... B-361
 Artists Representatives..... I-51
 Assignments of TV Channels, U.S. C-93
 Assignments of FM Stations, U.S. B-421
 Associations, Societies..... I-55
 Associations, State Broadcasters.... I-66
 Associations, State Cable..... I-67
 Attorneys, Communications..... I-42
 Audience (Radio & TV) G-16
 Audience Analysis..... G-16
 Audience in TV Markets..... C-142
 Audience Measurement Services.... I-32
 Audio Cable Programing Services... E-7
 Automated Cable Programers E-7

BECKERMAN ASSOCIATES

Media Brokers—Consultants

14001 MIRAMAR AVENUE
 MADEIRA BEACH, FLORIDA 33708
 TELEPHONE (813) 391-2824

Automated-Channel Suppliers H-50
 Awards & Citations F-38

B

Basic Cable Services..... E-5
 Beautiful Music
 programing..... F-78, F-101
 Big Band programing..... F-79, F-101
 Black programing..... F-80, F-102
 Books, International..... I-74
 Books Relating to Radio-TV I-72
 Broadcast Automation Systems..... H-52
 Broadcast History..... A-1
 Broadcasters in Cable..... D-313
 Broadcasters State Assns. I-66
 Broadcasting, Evolution of..... A-1
 Broadcasting since 1922,
 Growth of H-58
 Broadcasting, Short Course in..... A-2
 Brokers and Consultants I-1

William A. Exline, Inc.

Media Brokers • Consultants

4340 Redwood Highway • Suite F 230 • San Rafael, California 94903

(415) 479-3484

George **MOORE**
 & Associates, Inc.

MEDIA BROKERS & APPRAISERS

Dallas Las Vegas
 (214) 661-8970 (702) 368-1236

KAGAN MEDIA APPRAISALS, INC.
 126 CLOCK TOWER PLACE
 CARMEL, CALIFORNIA 93923-8734
 (408) 624-1536

appraisals

FOR:
 CABLE/PAY TV SYSTEMS
 RADIO/TV STATIONS
 FILMS/TV PROGRAMMING

Hogan - Feldmann, Inc.

MEDIA BROKERS • CONSULTANTS

SERVING SINCE 1953

P.O. Box 136

Encino, California 91426

Area Code (818) 988-3201

A. B. La Rue,
 Media Brokers


New York (212) 288-0737 • Beverly Hills (213) 275-9266
 Atlanta (404) 442-5711

Buyer's Guide, Equipment.....	H-61
Buying Planning Svcs.....	G-7

C

Cable, A Short Course in.....	D-3
Cable, Basic Services.....	E-5
Cable, Broadcasters in.....	D-313
Cable Listings, Key to.....	D-10
Cable, Pay Services.....	E-5
Cable Penetration by Market.....	D-316
Cable Program Services.....	E-5
Cable programing status report.....	D-318
Cable Regulation, Anatomy of.....	D-1
Cable Regulatory Agencies, State	A-36
Cable Sports Services.....	E-7
Cable State Associations.....	I-67
Cable Systems in Canada.....	D-274
Cable Systems in U.S.....	D-12
Call Letters	
AM Stations (U.S.).....	B-362
FM Stations (U.S.).....	B-371
TV Stations (U.S.).....	C-84
Canada	
AM Stations by Call Letters.....	B-381
AM Stations by Frequencies.....	B-417
AM-FM Station Directory.....	B-340
Cable Systems.....	D-274
FM by Frequency.....	B-418
FM Stations by Call Letters.....	B-382
TV by Channel.....	C-91
TV Station Directory.....	C-71
TV Stations by Call Letters.....	C-91
Station Representatives.....	G-8
Canadian Broadcasting Corp.....	F-66
Canadian Cable Programing Services	E-8
Canadian Cable Television Assn....	I-60
Canadian Government.....	A-36
Canadian Radio-Television and Telecommunications	
Commission.....	A-36
Canadian Representatives.....	G-14
CBS Inc.....	F-48
Channel Suppliers, Automated.....	H-50
Channels, FM.....	B-400
Channels, TV.....	C-87
Circulation, TV Stations.....	C-129
Citations and Awards.....	F-38
Classical programing.....	F-80, F-103
Closed-Circuit TV.....	F-37
CNN (Cable News Network).....	F-63
Code, NAB Radio-TV.....	G-15
Colleges Offering Radio-TV	
Degrees.....	I-77
College-Owned Radio.....	B-419
Commerce Committees	
House and Senate.....	A-34
Commercial Identification System	G-15
Commercial Producers, Radio.....	F-1
Commercial Producers, TV.....	F-1
Common Carriers.....	E-2
Communications Attorneys.....	I-42
Communications, Canadian	
Department of.....	A-36
Computer Services.....	H-52
Congressional Committees.....	A-34
Construction Services.....	H-1
Consultants (Management, Financial, Program, Sales Promotion).....	I-19

Consultants (Technical, Engineering).....	I-36
--	------



PHASE ONE
COMMUNICATIONS, INC.

(407) 366-0534

Technical consulting services for TV, FM Radio
Cellular, ITFS, MMDS, MDS, OFS, and LPTV.
Application preparation and site acquisition.
P.O. Box 1034, Oviedo, Florida 32765

Contemporary Programing..	F-81, F-104
Corporation for Public Broadcasting.....	F-65
Country & Western Programming	F-83, F-104
County Population of Crossownership by Stations.....	A-62
CTV Television Network.....	F-66

D

Data Processing Services.....	H-52
DBS.....	A-7
Demographics, Cable.....	D-316
Demographics of TV Markets.....	C-142
Direct Broadcast Satellites.....	A-7, E-3
Discussion programing.....	F-97, F-110
Distribution Services, Multipoint....	H-54
Distributors, Equipment.....	H-1
Distributors, Programs.....	F-1

E

Educational Broadcasting Corp.....	F-65
Educational programing.....	F-87, F-105
Electronic Publishing, see Teletext, Video- text	
Employment Services.....	I-52

**EXECUTIVE SEARCH
AND RECRUITMENT**

GEORGE PONTE, V.P.
bornholdt, shivas & friends
295 MADISON AVENUE, NYC 10017
(212) 557-5252

Engineering Consultants.....	I-36
Engineers, See Engineering Consultants	
Equipment Buyer's Guide.....	H-61
Equipment Manufacturers, Distributors.....	H-1

EQUIPMENT Leasing

Leases from 5k, with 2-5 year terms for
qualified end users. Film, studio and video
my specialty. Les Sechler-Enterprise Leasing

(213) 872-1433 • (818) 986-1545

Equipment Manufacturers, International.....	H-45
--	------

F

Farm Broadcasters, National Assn. of.....	I-59
Farm programing.....	F-99
Federal Communications Commission Executives & Staff.....	A-8
Organization Chart.....	A-9
Past Members.....	A-10
Rules Regulating Radio-TV.....	A-11
Fifth Estate.....	A-1
Film Distributors for TV.....	F-1
Financial Consultants.....	I-19

Broadcasting & Cable Yearbook '89

Founder and Editor
Sol Taishoff (1904-1982)
1705 DeSales Street, N.W., Washington, D.C. 20036
Phone: 202-659-2340
Editorial department fax 202-429-0651
Administrative department fax 202-331-1732

Lawrence B. Taishoff, publisher.

Editorial

Donald V. West, managing editor.
Mark K. Miller, Harry Jessell,
assistant managing editors
Leonard Zeidenberg, chief correspondent.
Kira Greene, senior news editor.
Matt Stump, Kim McAvoy, John S. Eggerton,
associate editors.
Susan Dillon, Adam Glenn (international),
assistant editors.
Randall M. Sukow (technology), Peter D. Lambert,
Lucia Cobo, Joe Flint, staff writers
Kristina I. Hoyt, editorial assistant.
Anthony T. Sanders, systems manager.
Todd F. Bowle, Ed Kaitz, production.

**Broadcasting & Cable
Yearbook**

David Seyler, manager.
Joseph A. Esser, associate editor.
Deborah Segal, Tracy Gilliam-Turner, Paul Muller,
Francesca Tedesco, editorial assistants.

Book Division

David Dietz, manager.

Advertising

Washington
Kenneth W. Taishoff vice president, sales and marketing.
Robert (Skip) Tash, Southern sales manager.
Doris Kelly, sales service manager.
Debra DeZarn, classified advertising manager

New York

David Berlyn, senior sales manager.
Charles Mohr, Stacey Kibel,
sales managers

Hollywood

Tim Thometz, sales manager
Schliff & Associates (Western equipment
and engineering): 213-393-9265

Circulation

Kwentin K. Keenan, circulation manager.
Patricia Waldron, data entry manager.
Keith Brody, subscription service manager
Joseph Kolthoff, Vardell McPhatter

Production

Harry Stevens, production manager
Rick Higgs, production assistant.

Administration

David N. Whitcombe, vice president/operations.
Philippe E. Boucher, controller.
Tracy Henry, assistant controller.
Albert Anderson, office manager.
Nancy Miller, personnel administrator.
Shaun Gehan
Sheilene Scott, receptionist.

Corporate Relations

Patricia A. Vance, director.

Bureaus

New York: 630 Third Avenue, 10017
Phone: 212-599-2830
Fax: 212-599-2837

Geoff Foisie, chief correspondent.
Rich Brown, George Mannes, staff writers
June Butler, advertising assistant.

Hollywood: 1680 North Vine Street, 90028
Phone: 213-463-3148
Fax: 213-463-3159

Tim Thometz, Western sales manager.
Sandra Klausner, editorial-advertising assistant.
Stephen McClellan, chief correspondent
Steve Coe, staff writer.

International Advertising Representatives

Europe and United Kingdom: Lucassen International,
John J. Lucassen, Kamerlingh Onneslaan 67, 1171 AC
Badhoevedorp Amsterdam, Netherlands. Phone:
31(2968)9 6226. Teletax: 31 (2968)9 3617. ■ Japan:
Masayuki Harihara, Yukari Media Inc., 9-4-302, Miyakoji-
makitadori, 2 chome, Miyakojima, Osaka, 534 Japan.
Phone: (06) 925-4452 Telex: 02423928

□

Broadcasting Publications Inc.

A Times Mirror Business Publication

Lawrence B. Taishoff, president.
Kenneth W. Taishoff, vice president.
Donald V. West, vice president.
David N. Whitcombe, vice president.

Founded 1931. Broadcasting-Teletexting* introduced
in 1946 Television* acquired in 1961 Cablecasting*
introduced in 1972 □ * Reg U.S. Patent Office. □
Copyright 1989 by Broadcasting Publications Inc

Financing, Station.....	I-31
FM Stations	
Allotments of FM Stations, U.S....	B-421
Authorized.....	H-58
By Call Letters, Canada.....	B-382
By Call Letters, U.S.....	B-371
By Frequency, Canada.....	B-418
By Frequency, U.S.....	B-400
Channels.....	B-400
Directory.....	B-1
Foreign Language	
programming.....	F-88, F-105
Formats by AMFM.....	F-120
Formats by Commercial/	
Noncommercial.....	F-120
Formats, Radio Programming.....	F-74
French programming.....	F-88, F-105
Frequencies	
Canadian AM.....	B-417
Canadian FM.....	B-418
United States AM.....	B-382
United States FM.....	B-400
Frequency Measuring Services....	H-48

G

German programming.....	F-88, F-105
Global Television Network.....	F-66
Golden Oldies programming. F-91, F-107	
Government Agencies.....	A-34
Federal Communications	
Commission.....	A-8
House Committee on Commerce..	A-34
Senate Committee on	
Commerce.....	A-34

Supreme Court.....	A-35
Government, Canadian.....	A-36
Group Ownership of Stations.....	A-37
Growth of Broadcasting.....	H-58

H

High-definition television.....	A-7
History of Broadcasting.....	A-1
House Committee on Commerce..	A-34
Hughes Television Network....	E-1, F-64

I

Independent Media Buyings	
Planning Svcs.....	G-7
Independent TV Stations,	
Assn. of.....	I-59
Index to Advertisers.....	xiv
Industry Standard Commercial	
Identification System.....	G-15
Information Agency, U.S.....	A-35
Instructional Television Fixed Service	
(ITFS).....	A-7
International Broadcasting	
Publications.....	I-74
International Equipment	
Manufacturers.....	H-45
International Producers, Program	
Suppliers.....	F-26
International Stations in the U.S.	B-361
ITFS (Instructional Television Fixed	
Service).....	A-7

J

Jazz programming.....	F-88, F-106
Jingle Producers.....	F-1

K	
Key to Cable Listings.....	D-10
Key to Radio Listings.....	B-1
Key to Television Listings.....	C-1

L

Labor Groups & Unions.....	I-68
Labs, TV Processing.....	F-1
Land Lines (AT&T).....	H-53
Law Firms.....	I-42
Lawyers, Communications.....	I-42
License, How to Apply for.....	A-33
Licensing, Music.....	F-41
Low Power TV (LPTV).....	A-7, C-79


M

MAILING LABELS!
The BULLSEYE System
 Complete, Current Data
 On Advanced Computer System
Highly Selective:
 •Formats, Market Size, States, ADI's
 County Size.
 •Station Audience Ranks.
 •Executive Names, Phone Numbers.
 •Many Other Factors
Updated Daily
 All Radio And Tv Stations
 Special Needs? Ask Us!
 Also Available For Your Computer
RADIO INFORMATION CENTER
 675 Third Ave., NYC 10017
 (212) 818-9060

Magazine or Newspaper Ownership	
of Broadcast Stations.....	A-56
Management Consultants.....	I-19
Managers, Talent.....	I-51
Manufacturers of Equipment.....	H-1
Maps of TV Markets.....	C-142
Market Research Services.....	I-32
Marketing Guide.....	C-142
Markets, ADI TV.....	C-142
Markets, Cable Penetration of....	D-316
Markets, TV by Size.....	C-217
Markets, TV Demographics.....	C-142
Markets of TV (Maps).....	C-142
MDS.....	A-7, H-54
Measuring Services, Frequency....	H-48
Media Buying/Planning Services.....	G-7
Media Societies, Groups.....	I-55
Microwave.....	H-53
Middle-of-the-Road programming	
(MOR).....	F-89, F-107
Mobile Production Units.....	H-51
Monitoring Services.....	I-32
MOR (Middle-of-the-Road)	
programming.....	F-89, F-107
MSO's, U.S.....	D-294
MSO's, Top-50.....	D-319
Multiple Station Owners.....	A-37
Multiple Systems Operators, U.S.	D-294
Multiple Systems Operators,	
Top-50.....	D-319
Multipoint Distribution	
Services.....	A-7, H-54
Music Licensing Groups.....	F-41
Mutual Broadcasting System.....	F-60

N

National Assn. of	
Broadcasters.....	I-55
Radio Code.....	G-15
TV Code.....	G-15



**TV STATIONS SPEND
THOUSANDS OF DOLLARS
TO PROTECT THEIR
VIDEO EQUIPMENT—
AND NOTHING
TO PROTECT THEIR
PHOTOGRAPHERS**

The next investment you make to provide media coverage should be soft body armor protection for the people who bring you the news:

When news photographers cover drug busts, hostage situations and barricaded gunman stories, life threatening conditions may exist.

Your news photographers can now have the same soft body armor that law enforcement officers have been using for years.

The Media Tactical Jacket, manufactured by Second Chance, leader in the body armor industry, is specially designed by a news photographer for news photographers.

VIDEO PROTECTION CO.
 NATIONAL DISTRIBUTOR OF "MEDIA TAC JAC"
 FLEXIBLE BODY ARMOR

**CALL NOW
TOLL FREE 1-800-722-9010**

**P.O. BOX
1131
GRAND
RAPIDS
MI 49501**

Call or write for more information on this opportunity to invest in safety!

National Assn. of Farm Broadcasters.....	I-59
National Black Network.....	F-53
National Broadcasting Co.....	F-53
National Cable Television Assn.....	I-59
National Public Radio.....	F-65
NBC Inc.....	F-53
Networks	
ABC Executives & Staff.....	F-42
AP Radio.....	F-49
Canadian.....	F-66
CBS Executives & Staff.....	F-49
Hughes Television Network.....	F-64
MBS Executives & Staff.....	F-60
National Black Network.....	F-53
NBC Executives & Staff.....	F-53
Public Broadcasting Service.....	F-65
Sheridan.....	F-55
Univision.....	F-64
UPI.....	F-64
United Stations.....	F-56
Robert Wold Co. Inc.....	F-65
Regional Radio.....	F-67
Regional TV.....	F-66
Satellite.....	E-1
News Directors, Radio-TV Assn.....	I-59
News programming.....	F-90, 107
News Services, Radio and TV.....	F-69
Newspaper Ownership of Stations.....	A-62

O

Oldies programming.....	F-91, 107
Operators, Multiple Systems.....	D-294
Owners and Operators, Satellite.....	E-1

Ownership, Group Stations.....	A-37
Ownership, Newspaper.....	A-56

P

Pay Cable Services.....	E-5
PBS (Public Broadcasting Service).....	F-65
Placement Services.....	I-51
Polish programming.....	F-108
Press Services.....	F-69
Processing Labs.....	F-1
Producers, International.....	F-26
Producers, TV Commercials.....	F-1
Product Guide.....	H-61
Production, Radio.....	F-1
Production, Television.....	F-1
Production Units, Mobile.....	H-51
Professional Societies.....	I-55
Program Distributors, Radio.....	F-1
Program Distributors, TV.....	F-1
Program Producers, International.....	F-26
Program Producers, Radio.....	F-1
Program Producers, TV.....	F-1
Program Services, Cable.....	E-5
Programming, Radio Formats Services.....	F-73
Programming, Radio Formats.....	F-74
Progressive programming.....	F-93, F-108
Promotion Consultants.....	I-19
Promotion Films.....	F-1
Promotion Services.....	I-49

Public Broadcasting Service.....	F-65
Public Relations Services.....	I-49
Publications, International.....	I-72

R

WLM CONSULTANTS
COMPLETE RADIO/TV BROADCASTING SERVICES
FREE BROCHURE
WILLIAM LEE MOCKBEE
(506) 529-8887
P.O. BOX 353 CALAIS ME 04619
267r MONTAGUE ST., ST. ANDREWS,
N.B. CANADA E0G 2X0

Radio

Advertising Bureau.....	I-58
Assignments of FM Stations, U.S.....	B-421
Attorneys.....	I-42
Audience.....	G-16
Call Letters AM.....	B-362
Call Letters FM.....	B-371
Canadian AM Call Letters.....	B-381
Canadian AM-FM Stations.....	B-340
Canadian FM Call Letters.....	B-382
Code of NAB.....	G-15
College-Owned.....	B-419
Commercial Producers.....	F-1
Directory, Canadian.....	B-340
Directory, U.S.....	B-1
Equipment Manufacturers.....	H-1
Formats.....	F-77
Frequencies, AM.....	B-382
Frequencies, FM.....	B-400
Group Ownership.....	A-37
International Stations in the U.S.....	B-361
Jingle Producers.....	F-1
Networks, Regional.....	F-42
Newspaper Ownership.....	A-56
News Services.....	F-69
Program Distributors.....	F-1
Program Producers.....	F-1
Programming Formats.....	F-77
Representatives.....	G-7
School-Owned.....	B-419
Station Authorization-1955-1981.....	H-58
Stations on Air.....	A-2
Radio Advertising Bureau.....	I-58
Radio Free Europe.....	B-361
Radio Liberty.....	B-361
Radio Markets.....	B-429
Radio-TV & Telecommunications Commission of Canada.....	A-36
Radio-TV News Directors Assn.....	I-59
Ranking of TV markets.....	C-217
Rating Services.....	I-32
Recording Services.....	F-1
Regional Radio Networks, Groups.....	F-67
Regional TV Networks.....	F-66
Religious programming.....	F-93, F-108



MEDSTAR

**Leader in Televised Medical News
and Health Information**

*Producers of Health Matters®, Med*Source™, and
a series of one-hour TV health specials*

5920 Hamilton Blvd., Allentown, PA 18106, (215) 395-8660

Representatives, Canadian..... G-14
 Representatives of Stations, U.S..... G-8
 Resale and Common Carrier,
 Satellite..... E-2
 Research Services, Radio-TV..... I-32
 Robert Wold Co. Inc..... F-65
 Rock programing..... F-95, F-109

S

Sales Consultants..... I-19
 Sales of Stations..... C-105
 Satellite Master Antenna Systems... A-7
 Satellites..... A-6, E-1
 Direct Broadcast..... E-3
 Owners, Operators..... E-1
 Resale, Common Carriers..... E-2
 Schools, Radio & TV..... I-70
 Senate Committee on Commerce. A-34
 Services
 BuyingsPlanning..... G-7
 Employment..... I-52
 Frequency Measuring..... H-48
 Rating & Research..... I-32
 Sheridan Broadcasting Network.... F-55
 Short Course in Broadcasting..... A-3
 Short Course in Cable..... D-3
 SMATV..... A-7
 Societies, Professional, Radio-TV... I-55
 Software, Computer..... H-52
 Spanish programing..... F-96, F-109
 Spanish Stations, TV..... C-84
 Sports Network (Hughes)..... F-64

State Broadcasters Associations..... I-66
 State Cable Assn..... I-67
 State Cable Regulatory Agencies. A-36
 Station Applications..... A-33
 Station Applications Pending, TV.. C-96
 Station Brokers..... I-1

Hogan - Feldmann, Inc.
 MEDIA BROKERS · CONSULTANTS
 SERVING SINCE 1953
 P.O. Box 116
 Encino, California 91426
 Area Code (818) 989-3201

Station, Crossownership by..... A-56
 Station Financing..... I-29
 Station Transfers, TV..... C-105
 Stations, Number..... A-2
 Suppliers & Services..... H-1
 Supreme Court..... A-35
 Surveys & Market Research..... I-32

T

WLM CONSULTANTS
 COMPLETE RADIO/TV BROADCASTING SERVICES
 FREE BROCHURE
 WILLIAM LEE MOCKBEE
 (506) 529-8887
 P.O. BOX 353 CALAIS ME 04619
 267r MONTAGUE ST., ST. ANDREWS,
 N.B. CANADA E0G 2X0

Talent Agents..... I-51
 Talk programing..... F-97, F-110
 Technical Consultants..... I-36

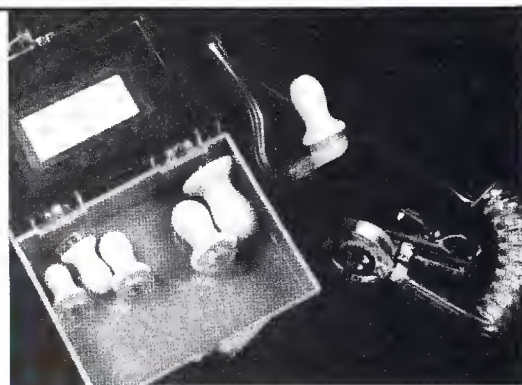
Teletext..... A-7, H-48
 Teletext Operators..... H-48
 Teletext Suppliers..... H-48
 Television
 ADI Markets..... C-142
 Advertising Bureau..... I-58
 Allocations..... C-93
 Applications Pending..... C-96
 Assignments..... C-93
 Attorneys..... I-42
 Audience..... G-16
 Bureau of Advertising..... I-58
 Business Films..... F-1
 Call Letters, Canada..... C-91
 Call Letters, U.S..... C-84
 Channel Assignments..... C-93
 Channels, Canada..... C-91
 Channels, U.S..... C-87
 Closed Circuit..... F-37
 Commercial Producers..... F-1
 Code of NAB..... G-15
 CTV Network..... F-66
 Dimensions..... A-2
 Directory, Canadian..... C-71
 Directory, U.S..... C-1
 Equipment Manufacturers..... H-1
 Group Ownership..... A-37
 High-definition..... A-7
 Instructional Television Fixed Service (ITFS)..... A-7
 International Publications..... I-74



On-Camera Audioclarifier with 6 sizes of quick change ear tips.

Audio Implements is a small company located in Brookfield, Wisconsin, a suburb of Milwaukee. We invented this ear piece and have manufactured it since 1967. All major television networks use our products and have for many years. We hope to have the opportunity to be of service to you.

CALL
 OR
 WRITE
 TODAY



The On-Camera Audioclarifier is used mostly for talent. It comes with six different size ear tips or a custom ear piece. Both custom and tip models are also used for security and surveillance work.

Please write or call for further information and printed material on our Audioclarifier.

We carry a large supply of cords, receivers and accessories in stock.

AUDIO IMPLEMENTS
 Division of Wisconsin Ear Mold Co.
 3059 N. 124th STREET • BROOKFIELD, WISCONSIN 53005 USA
 PHONE 414-784-0440 • TWX 910 262-1159 WISEARMOLD MIL
 FAX 414-784-0858

**FOR A SERVICE THAT
COVERS THE MOST**



**IT'S METRO WEATHER
FROM COAST TO COAST**

Local . . . Personable . . . Accurate
Forecasts for Radio and Television

Taped and Live Phoners . . . Features . . .
Hard Copy Weather Information . . .
Computer/Printer Accessibility to all
Weather Information . . .
*Serving the Media
For Over A Decade*

METRO WEATHER EAST

507-535 Rockaway Ave., Suite #3
Valley Stream, N.Y. 11581
(516) 568-8844

**METRO WEATHER!
THE ALTERNATIVE**

Low Power	A-7, C-79	Trade Assns, & Professional	
LPTV	A-7, C-79	Groups.....	I-55
Markets, by ADI	C-142	Transcription Services (Radio).....	F-1
Market Demographics	C-217	Transfers of TV Ownership.....	C-105
Market Ranking.....	C-217	Transmitter & Equipment Mfrs.	H-1
Network Delivery, by Market.....	C-221	TVA (Network).....	F-66
Networks, Regional.....	F-67		
Newspaper Ownership.....	A-56	U	
News Services	F-69	Unions & Labor Groups.....	I-68
Number of Stations	A-2	University-Owned Radio.....	B-419
Processing Labs.....	F-1	UPI.....	F-64
Program Distributors (TV).....	F-1	United Stations	F-56
Program Production Services		Urban Contemporary	
(TV).....	F-1	programing.....	F-97, F-110
Promotion Films	F-1	U.S. Govt. Agencies	A-34
Regional Networks.....	F-66		
Station Sales	C-105	V	
Transfers of Ownership.....	C-105	Videotext.....	H-48
Teleports.....	E-4	Videotext Operations.....	H-48
Television Bureau of Advertising	I-58	Videotext Supliers.....	H-48
Top-40 programing.....	F-81, F-104	Viewing Habits.....	G-16
Top-50 MSO's.....	D-319	Voice of America.....	B-361

Towers
Central Tower Inc. **H-60**

BOX 530
NEWBURGH, IN 47629-0530
812-853-0595
FAX 812-853-6652
MANUFACTURING • INSTALLATIONS

	W	
Westwood One Inc.....	F-59	
Wold, Robert, Co.....	F-65	

Abbreviations Commonly Used in BROADCASTING/CABLE YEARBOOK '89

A&E.....	Arts & Entertainment	bldg.....	building	dev	development
actg.....	acting	bor.....	borough	dir	director
ADI.....	Area of Dominant Influence	btfl.....	beautiful	div	diverse
admin.....	administrative	bus.....	business	dups.....	duplicates
adv.....	advertising	CATV.....	community antenna television	edit.....	editor
affil.....	affiliate	CEO.....	chief executive officer	educ.....	educational
affrs.....	affairs	ch.....	channel	enr.....	engineer
AFRTS.....	Armed Forces Radio and TV Service	CH.....	critical hours	engr.....	engineering
alt.....	alternate	chg.....	charge	EPG.....	Electronic Program Guide
Am Pub.....	American Public Radio	CHR.....	contemporary hit radio	ERP.....	effective radiated power
ant.....	antenna	chmn.....	chairman	ESPN.....	Entertainment & Sports Programming Network
AOR.....	album oriented rock	CBC.....	Canadian Broadcasting Corp.	ETV.....	educational television
AP.....	Associated Press	CBN.....	Christian Broadcasting Network	exec.....	executive
assn.....	association	coml.....	commercial	FCC.....	Federal Communications Commission
assoc.....	associate	contemp.....	contemporary	Fr.....	French
asst.....	assistant	coord.....	coordinator	g.....	ground
*.....	non-commercial	CP.....	construction permit	gen.....	general
atty.....	attorney	CRTC.....	Canadian Radio-television and Telecommunications Commission	Ger.....	German
aur.....	aural	C-SPAN.....	Cable Satellite Public Affairs Network	govt.....	government
aux.....	auxiliary	C&W.....	country & western	HAAT.....	height above average terrain
bcst.....	broadcast	D.....	day	HBO.....	Home Box Office
bcstg.....	broadcasting	DA.....	directional antenna	horiz.....	horizontal polarization
bcstr.....	broadcaster	DBS.....	direct broadcast satellite	hqtrs.....	headquarters
bd.....	board				
BET.....	Black Entertainment Television				

ind.....	independent	NAB	National Association of Broadcasters	SIN	Spanish International Network
info	information	natl.....	national	sls	sales
instal.....	installation	net	network	SMATV.....	satellite master antenna television
It	Italian	nwspr	newspaper	Sp.....	Spanish
khz.....	kilohertz	off	officer	spec	special
kw	kilowatts	opns.....	operations	ST	shares time
loc	local	own.....	owner	str.....	station
LPTV.....	low power television	per.....	personnel	sub.....	subscriber
LS	local sunset	Pol.....	Polish	supt.....	superintendent
lstng.....	listening	pop.....	population	supvr.....	supervisor
lw.....	long wave	PR	public relations	svcs	services
m.....	meters	pres.....	president	sw.....	short wave
MBS.....	Mutual Broadcasting System	prod.....	production, producer	t.....	terrain
MDS.....	Multipoint Distribution Service	prog.....	program	tech	technical
mdse.....	merchandising	progmg	programming	TNN	The Nashville Network
mfg.....	manufacturing	progsv.....	progressive	traf	traffic
mgng	managing	prom	promotion	trans.....	translators
mgr.....	manager	PSA.....	presunrise authority, Public Service Announcement	treas.....	treasurer
mgmt.....	management	ptrn.....	partner	twp.....	township
mhz.....	megahertz	pub affrs	public affairs	TWX.....	Teletypewriter Exchange
mi.....	miles	publ.....	publicity	U.....	unlimited
mktg.....	marketing	publ.....	publicity	UHF.....	ultra high frequency
mo.....	month	quad.....	quadrasonic	UPI.....	United Press International
mod.....	modification	rel	relations	var	variety
MOR	middle of the road	relg.....	religion	vert	vertical
MSO	multiple system operator	rep.....	representative	polarization	
MTV	Music Television	RFE.....	Radio Free Europe	VHF	very high frequency
mus.....	music	rgnl.....	regional	vis	visual
mw.....	medium wave	RL.....	Radio Liberty	VOA.....	Voice of America
N.....	night	rsch.....	research	VP	vice president
na.....	not available	sec.....	secretary	w.....	watts
		sep.....	separate	wkly.....	weekly
		sh	shares		
		SH.....	specified hours		

Index to Advertisers

EQUIPMENT

Allied Tower Co..... H back divider
 Audio Broadcast Group, Inc., The ... H-5
 Audio Implements..... x
 Belar Electronics Lab, Inc..... H-7
 Broadcast Services Co. H-61
 Broadcast Supply West..... H-63
 Cablewave Systems..... I front divider
 Central Tower, Inc. xii, H-60
 Comark Communications, Inc. H-11
 Continental Electronics ... B back divider
 Control Technology, Inc. H-12
 Daily Electronics Corp. H-62, H-70
 Delta Electronics..... H front divider
 EEV, Inc. H-13
 Electronics Research, Inc.... ii, inside back cover, H-15
 ERI Installations H-17
 Fidelipac Corp. iii
 Hitachi Denshi America Ltd. C front divider
 Holaday Industries, Inc..... H-19, H-67
 Jampro Antennas, Inc. H-21
 Jem-Fab Corp. H-22
 Midwest Communications Corp. back cover
 Moseley Associates, Inc..... vii

Motorola, AM Stereo Broad Equipment. H-26
 Fred A. Nudd Corp. H-27
 Omega International H-28
 Allen Osborne Associates H-29
 Panasonic Broadcast Systems Co... H-30, H-31
 Pinnacle Systems H-2, H-3
 Potomac Instruments H-61, H-65, H-66, H-67, H-69
 Racal-Decca Canada, Inc..... H-34
 Richardson Electronics, Ltd. H-35
 Rohn..... H-37
 Shively Labs, Inc. H-38
 Stainless, Inc. H-39
 Stanton Magnetics..... H-41
 Utility Tower Co. B front divider
 Vacuum Tube Industries, Inc..... H-65
 Video Protection Co..... vi
 Ward-Beck Systems, Ltd. v
 Weisman Consultants, Inc. H-69
 Western Wireless Works..... H-68
 Wiltronix, Inc. H-67
 World Tower Co. C back divider

GENERAL

Americom I-1
 Andrus & Associates, Inc..... I-37

Arbitron Ratings B-3, C-3
 Barclays American Business Credit I-29
 John H. Battison & Associates..... I-37
 Beckerman Associates, Inc.... ii, B-64, B-211, I-6
 Franklyn R. Beemish & Co. I-20
 Richard L. Biby I-37
 Blackburn & Co., Inc. inside front cover, I-3
 Books for Broadcasters . xiii, A-36, G-15, I-30, I-54, I-69
 Bornholdt, Shivas & Friends..... iv, I-52
 Frank Boyle & Co.. A-38, A-43, A-52, B-16, B-39, B-64, B-73, B-89, B-139, B-255, B-282, B-312, B-319, C-6, C-10, C-17, C-18, C-24, D-297, D-310, I-5
 Broadcast Data Services I-37
 Broadcast Investment Analysts I-21
 Broadcast Music, Inc. ix
 John FX. Browne & Associates, Inc.... I-37
 Howard Burkat Copy & Concepts... I-20
 Burns Media Consultants, Inc. I-33
 Business Broker Associates I-2
 Cable Adnet..... D-205
 Cable Networks, Inc. D back divider
 Robert A. Chaisson, Inc..... I-2, I-15
 Chapman Associates I-7
 Donald K. Clark, Inc. I-4
 Clover Park VTI I-71
 Cohen, Dippell & Everist I-37

Lauren A. Colby. B-2, B-14, B-25, B-46, B-53, B-57, B-72, B-84, B-87, B-112, B-117, B-126, B-135, B-155, B-163, B-170, B-178, B-182, B-185, B-187, B-189, B-193, B-197, B-210, B-224, B-235, B-241, B-246, B-261, B-268, B-270, B-280, B-301, B-304, B-306, B-315, B-321, C-2, I-43
 ComCapital Group, Inc. I-30
 Communications Equity Associates. I-4
 Communications Resources Unlimited, Inc. I-4
 Communications Technologies, Inc. I-37
 Courtright Engineering, Inc. I-37
 R.C. Crisler & Co. I-9
 Craig Culp Radio Brokerage. I-6
 John J. Davis & Associates. I-37
 D.B. Communications, Inc. I-37
 DSI Communications, Inc. I-37
 du Treil, Lundin & Rackley, Inc. I-37
 Charles C. Earls & Associates, Inc. I-6
 Larry D. Ellis & Associates. I-37
 Enterprise Leasing Corp. iv
 Evans Associates. I-37
 William A. Exline, Inc. ii, B-15, B-27, B-33, B-41, B-47, B-83, B-85, B-179, B-186, B-194, B-241, B-303, B-315, B-334, C-8, I-8, I-23
 Norman Fischer & Associates, Inc. B-17, B-19, B-34, B-48, B-127, B-195, B-236, B-286, I-8
 Don Fitzpatrick Associates. I-53
 Milton Q. Ford & Associates. I-10
 Paul Dean Ford. I-37
 Clifton Gardiner & Associates, Inc. I-10, I-32

Gammon Media Brokers, Inc. I back divider
 Cliff Gill Enterprises, Inc. I-10, B-34
 W. Richard Green & Associates. I-37
 Charles Greene Associates. I-10

GTE Spacenet. F back divider
 Hammett & Edison, Inc. I-37
 Harrison, Bond & Pecaro. I-24
 Ted Hepburn Co., The. I-11
 Hogan-Feldmann, Inc. ii, x, B-34, B-41, B-49, B-225, B-287, B-317, C-8, C-11, C-14, C-21, C-28, C-52, C-58, I-11
 R.L. Hoover. I-37
 IDB Communications Group, Inc. E-2
 George Jacobs & Associates, Inc. I-37
 Vir James. I-37
 Carl T. Jones Corp. I-37
 Kagan Media Appraisals, Inc. ii, I-13
 Kozacko-Horton Co. I-12
 H.B. LaRue. ii, B-33, B-40, B-56, B-72, B-89, B-139, B-147, B-176, B-204, B-227, B-254, B-290, C-9, C-11, C-14, C-18, C-22, C-31, C-32, C-37, C-43, C-48, C-53, C-60
 Lohnes & Culver. I-37
 Lunayach Communications Consultants, Inc. I-37
 The Mahlman Co. I-13
 R.A. Marshall & Co. I-13
 McClanathan & Associates, Inc. I-37
 R.E. Meador & Associates. I-12
 Media Venture Partners. I-14
 Millar Co., The. I-14
 Moffet, Larson & Johnson, Inc. I-37
 George Moore & Associates, Inc. ii, B-16, B-18, B-23, B-26, B-32, B-40, B-129, B-184, B-193, B-239, B-282, B-286, B-291, B-297, B-300, I-14
 Lawrence L. Morton & Associates. I-37
 PacificCorp Credit, Inc. I-31
 Doyle Peterson & Associates. I-15
 Phase One Communications, Inc. iv
 Proctor Group, The. A-37, B-21, B-51, B-65, B-113, B-128, B-196, B-237, B-287, B-291, B-298, C-9, C-16, C-59, I-15, I-32
 Radio Information Center vi, B-33, B-89, B-205, C-9, I-49

Stan Raymond & Associates. I-15
 Cecil L. Richards, Jr. I-16
 William B. Schutz, Jr. I-16
 Sellmeyer Engineering. I-37
 Barry Sherman & Associates. I-17
 Gordon Sherman Associates. I-16
 Burt Sherwood, Inc. I-18
 Silliman & Silliman. I-37
 Barry Skidelsky. I-42, I-48
 Carl E. Smith. I-37
 Southern Broadcast Services. I-37
 Steiger, Hurray & Associates, Inc. I-37
 Structural Systems Technology, Inc. I-37
 Thoben-Van Huss & Associates, Inc. I-17
 Tillinghast Reid & Co. C-9, C-11, C-14, C-22, C-31, C-32, C-43, C-53, C-59, C-60
 Edwin Tornberg & Co., Inc. I-18
 Turner Broadcasting Systems, Inc. front cover
 Videotape Services, Inc. I-37
 Ann Vogt. I-37
 WLM Consultants. viii, x
 Larry Wood & Co., Inc. I-19

PROGRAM SERVICES

Associated Press Broadcast Services. spine
 Cable Music Network. E-7, F-4
 Globe Productions. F-12
 Medstar Communications, Inc. viii
 Metro Weather Service, Inc. xii
 Modern Talking Picture Service. C-5
 Sky Watch Weather Center. F-72
 TV Direct. F front divider
 United Press International. xi

Stations

WHCO. B-97

A Glossary of Terms Used in Yearbook

Basic cable service-Package of cable programming provided to subscribers without additional fee.

Cable television-System that transmits original programming, and programming of broadcast television stations, to consumers over wired network (see page A-6).

Clear channel-AM radio station allowed to dominate its frequency with up to 50 kw of power; their signals are generally protected for distance of up to 750 miles at night.

Coaxial cable-Cable with several common axis lines under protective sheath used for television signal transmissions.

CC-Closed captioning. Method of transmitting textual information over television channel's vertical blanking interval; transmissions are deciphered with decoders; decoded transmissions appear as text superimposed over television image.

CED-Capacitance electronic disk (RCA videodisk).

Common carrier-Telecommunication company that provides communications transmission services to public.

DBS-Direct broadcast satellite. High powered satellite authorized to broadcast direct to homes (see page A-7).

Domsat-Domestic satellite (see page A-6).

Downlink-Earth station used to receive signals from satellites.

Earth station-Equipment used for transmitting or receiving satellite communications.

EFT-Electronic funds transfer.

EM-Electronic mail.

ENG-Electronic news gathering.

ETV-Educational television.

Footprint-Area on earth within which satellite's signal can be received.

Geostationary orbit-Orbit 22,300 miles above earth's equator where satellites circle earth at same rate earth rotates.

Ghz-Gigahertz. 1,000 megahertz.

HDTV-High-definition television (see page A-7).

Headend-Facility in cable system from which all signals originate. (Local and distant television stations, and satellite programming, are picked up and amplified for retransmission through system.)

Hertz-A unite of frequency equal to one cycle per second. One kilohertz is 1,000 hertz; one megahertz is one million hertz; one gigahertz is one billion hertz.

HUT-Households using television.

ITFS-Instructional Television Fixed Service (see page A-7).

Khz-Kilohertz (see Hertz).

LED-Light emitting diode. Type of semiconductor that lights up when activated by voltage

LO-Local origination channel.

LPTV-Low-power television (see page A-7).

LV-LaserVision (optical videodisk).

MDS-Multipoint distribution service (see page A-7).

Mhz-Megahertz (see Hertz).

Microwave-Frequencies above 1,000 mhz.

MSO-Multiple cable system operator.

NTSC-National Television System Committee. Committee that recommended current American standard color TV.

PCM-Pulse code modulation. Conversion of voice signals into digital code.

PPV-Pay-per-view.

PSA-Public service announcement.

PTV-Public television.

RCC-Radio common carrier. Common carriers whose major businesses include radio paging and mobile telephone services.

SCA-Subsidiary communications authorizations. Authorizations granted to FM to broadcasters for using subcarriers on their channels for other communications services.

Shortwave-Transmissions on frequencies of 6-25 mhz.

SHF-Super high frequency.

SMATV-Satellite master antenna television (see page A-7).

STV-Subscription television (see page A-6).

Superstation-Local TV station whose signal is retransmitted via satellite to cable systems beyond reach of over-the-air signal.

Tariff-Common carrier's statement describing services it offers and rates it charges.

Teletext-One-way electronic publishing service (see page A-7).

Translator-Broadcast station that rebroadcasts signals of other stations without originating its own programming.

Transponder-Satellite transmitter/receiver that picks up signals transmitted from earth, translates them into new frequency and amplifies them before retransmitting them back to ground.

UHF-Ultra high frequency

Uplink-Earth station used for transmitting to satellite.

VCR-Videocassette recorder.

VHF-Very high frequency.

Videotext-Two-way interactive service that uses either two-way cable or telephone lines to connect a central computer to a television screen (see page A-7).

VTR-Video-tape recorder.