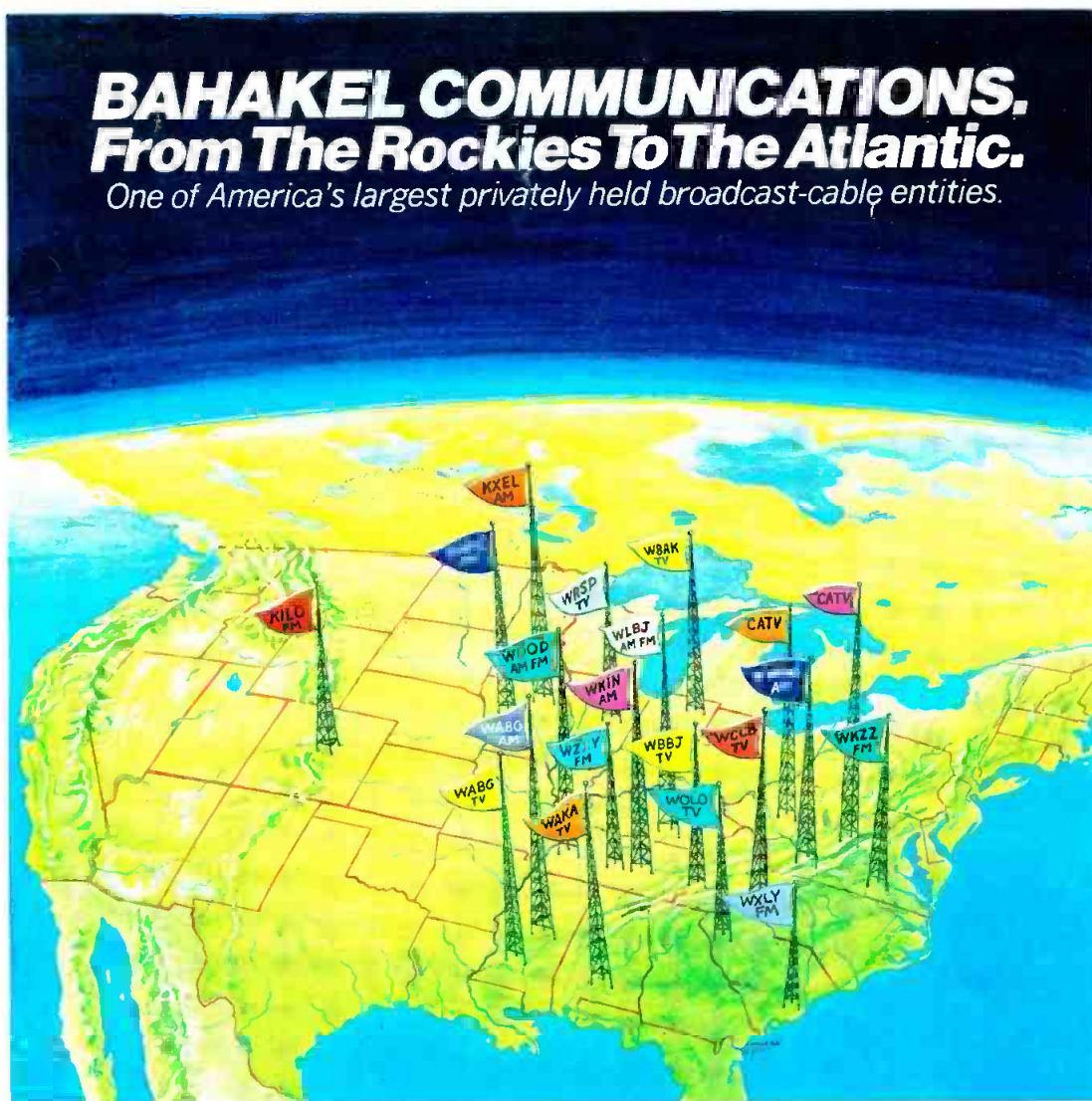


One of America's largest privately held broadcast-cable entities.



Corporate Headquarters: P.O. Box 32488, Charlotte, N.C. 28232

55th Year 1986

55th Year 1986

FCC's AM Wishlist

NAB Equipment Preview

Why America's Most Successful Radio Broadcasters Demand The Research Group

*Dick Ferguson
President
Katz Broadcasting*



"Over the past five years, 'our partners' at The Research Group have helped us see the radio business not only through the eyes of programmers, promoters and sales people, but as strategists and marketers. This strategic and marketing perspective, combined with the information we gained from their research studies, has given our stations a tremendous advantage in this intensely competitive field.

The Research Group really understands the concept of 'value added'. Sometimes I think they invented it. Their influence at our strategic sessions is invaluable. . . and it goes way beyond the information that comes between the covers of one of their studies. It's the quality of their thinking, the scope of their experience and their commitment to our company and its goals that earns them a place in our most critical and sensitive planning meetings. We don't think of them as a research company; we think of them as part of our team. And if you know us very well, that's the highest compliment we can pay anyone."

In almost every field, there is a company that has *earned* a reputation as the leader.

The Research Group

METROPOLITAN PARK, SUITE 1200, 1100 OLIVE WAY • SEATTLE, WASHINGTON 98101 • (206) 624-3888

201-95

Earl Nightingale

To Be Inducted Into Radio Hall Of Fame

On April 15, the name of Earl Nightingale—one of today's most listened-to radio commentators—will be added to a distinguished roster of individuals, including Edward R. Murrow, Lowell Thomas, William Paley and Orson Welles.

"I feel deeply honored and also grateful to the entire industry," he said, when told of his induction into radio's Hall of Fame.

Earl Nightingale's broadcasting career began in 1944 when, as a young Marine instructor at Camp LeJeune, he took a part-time job at WJNC in Jacksonville, North Carolina.

After World War II, he was on-air with KTAR in Phoenix, WBBM and later WGN in Chicago. He began syndicating his five-minute daily *OUR CHANGING WORLD* in 1959. This commentary on life, the world and people became an almost instant success.

OUR CHANGING WORLD is now broadcast by more than 500 stations in the U.S. alone . . . making it the most widely sponsored radio program in history.



"A major contributor to our image of responsible radio."
—John E. Hink
General Manager

Be Our Guest At The NAB In Dallas

Earl Nightingale
Hospitality Suite No. 334
Loews Anatole Hotel

OUR CHANGING WORLD
A fresh, five-minute program specifically designed with your advertisers in mind.

For rates and availabilities, a complete sales kit with audiocassette presentation, and additional information, please write or phone 1-800-572-2770.

Earl Nightingale Radio Features
Nightingale-Conant Corporation
7300 North Lehigh Avenue
Chicago, Illinois 60648

TRUST.

Jerry Atchley & Kerby Confer to Al Kaneb	Little Rock, AR/Memphis, TN \$13,500,000
Jack Roth to Bob Duffy & Marty Greenberg	San Antonio, TX \$11,000,000
Bob McGregor to Steve & Tom Hicks	Baton Rouge, LA \$ 8,500,000
Otto Schoepfle to Alan Beck	Orlando, FL \$ 7,500,000
Gery Swanson to Tom Stoner	New Orleans, LA \$ 7,000,000
Jim Phillips & Smokey Hyde to George Francis	Shreveport, LA \$ 5,000,000
Stan McKenzie to Alan Beck	San Antonio, TX \$ 4,200,000
Rebecca Lambert to Gery Swanson	Tulsa, OK \$ 3,500,000
Ron Curtis estate to Dick Oppenheimer	Little Rock, AR \$ 3,375,000
Jack Sampson to Jerry Atchley	Wichita, KS \$ 3,300,000
Jack Steenbarger to Randall Blair	Canton, OH \$ 2,500,000
Kermit Edney to George Francis	Hendersonville, NC \$ 2,200,000
John Dunn to Jim Ray	El Paso, TX \$ 1,750,000
Bob McGregor to Peter Starr	Pascagoula/Biloxi, MS \$ 1,725,000
Bill Fay to Tom Joyner	Jacksonville, IL \$ 1,500,000
Dennis Israel to Frank Lorenz	Syracuse, NY \$ 1,350,000



TOM GAMMON



CRAIG CULP



DAN T. GAMMON

AMERICOM
RADIO ★ BROKERS

Meet with us confidentially at the NAB Convention, Suite 610 Loews Anatole

Broadcasting Apr 7

Technology preview for NAB 86 "At Large" with CBS's Joseph Flaherty AM report preview by FCC

SNEAK PEAK □ FCC previews AM report. **PAGE 35.**
And the view from Mass Media Bureau Chief
James McKinney begins on **PAGE 37.**

GOLDEN VIEW □ Leonard Goldenson warns of
effects on broadcast stewardship in light of
takeover mania. **PAGE 35.**

FOR THE RECORD □ Record payola investigation
and reports cause words between CBS and NBC.
PAGE 38.

BY A WHISKER □ NBC edges CBS in the market-by-
market February sweeps tallies. **PAGE 39.**

TECHNICAL AGREEMENT □ Ampex and Sony join
together in video recording field. **PAGE 41.**

NAB 86 □ BROADCASTING looks at the technological
smorgasbord on display on the exhibit floor in
Dallas: The rush to digital video recording and the
battle in the small-format video market. Plus looks
at FMX, SNG, stereo television, TV graphics and
cameras, transmitters and HDTV. **PAGE 45.** A
complete listing of exhibitors runs from **PAGES 62 to**
123. A rundown of the agenda begins on **PAGE 123.**

FLAHERTY AT LARGE □ CBS's Joseph Flaherty
discusses, among other topics, the work behind
and still to come on achieving a single standard
for high-definition television. **PAGE 134.**

STAFF RECOMMENDATION □ FCC Mass Media
Bureau recommends rejection of settlement

agreement whereby Group W would buy RKO's
KHJ-TV Los Angeles. **PAGE 140.**

WHEEL KEEPS ROLLING □ *Wheel of Fortune* leads
Cassandra ratings for ninth consecutive time.
PAGE 146.

MATCHING PROBLEMS □ Barris Enterprises sues
Lorimar-Telepictures over alleged similarity
between game shows. **PAGE 149.**

AWARD WINNING NIGHT □ Ratings for Oscars help
ABC to tie NBC in weekly ratings. **PAGE 150.**

MONEY PLEA □ All-Industry Radio Music License
Committee asks for more funds to battle latest
demand for industrywide rate increase. **PAGE 152.**

MOVING ALONG □ ABC says sales are strong for its
July 4 weekend television coverage. **PAGE 155.**

PULITZER PROBLEMS □ Heirs to Pulitzer Publishing
Co. file suit against company. **PAGE 155.**

BIGGER STAKE □ Loews Corp. increases
ownership in CBS. **PAGE 157.**

CUTTING BACK □ ABC reduces its news staff by
6%. **PAGE 159.**

TRAILBLAZER □ George Brown receives NAB
engineering honor for pioneering efforts in radio
and television. **PAGE 191.**

INDEX TO DEPARTMENTS

Business Briefly	18	Fates & Fortunes	187	Law & Regulation	140	Riding Gain	144
Cablecastings	10	Fifth Estater	191	The Media	152	Satellite Footprints	158
Changing Hands	153	For the Record	169	Monday Memo	26	Stock Index	139
Closed Circuit	7	In Brief	192	Open Mike	33	Syndication Marketplace ..	148
Datebook	30	In Sync	160	Programing	146	Where Things Stand	162
Editorials	194	Journalism	159				

Broadcasting (ISSN 0007-2028) is published 52 Mondays a year by Broadcasting Publications Inc., 1735 DeSales Street, N.W. Washington, D.C. 20036. Second-class postage paid at Washington, D.C., and additional offices. Single issue \$2 except special issues \$3.50 (50th Anniversary issue \$10). Subscriptions, U.S. and possessions: one year \$65, two years \$125, three years \$175. Canadian and other international subscribers add \$20 per year. U.S. and possessions \$170 yearly for special delivery, \$100 for first-class. Subscriber's occupation required. Annually. *Broadcasting* □ *Cablecasting Yearbook* \$90. *Across the Dial* \$6.95. Microfilm of *Broadcasting* is available from University Microfilms, 300 North Zeeb Road, Ann Arbor, Mich. 48106 (35mm, full year \$55). Microfiche of *Broadcasting* is available from Bell & Howell, Micro Photo Division, Old Mansfield Road, Wooster, Ohio 44691 (\$37/yr.). Postmaster please send address corrections to *Broadcasting*, 1735 DeSales St., N.W. Washington, D.C. 20036.

INDEX TO ADVERTISERS: Accu-Weather, Inc. 105 □ Aerospatiale Helicopter Corp. 89 □ Allied Broadcast Equipment 110 □ Allied Satellite Equipment 142 □ American Uplinks, Inc. 10 □ Americom Radio Brokers 4, 154 □ Ampex Corp. 60-61 □ Antonelli Media Training Center 18 □ Associated Press Broadcast Services 43 □ BAF Communications Corp. 100 □ Bahakel Communications Front Cover □ Blackburn & Co. 152 □ Blair Television 98-99, 161 □ BMI 57 □ Bonneville Broadcasting System 75 □ Frank Boyle & Co. 22 □ Broadcast Electronics, Inc. 88 □ Broadcast Investment Analysts 116 □ CBS Radio/Radio 47, 58-59 □ Chapman Associates 151 □ Classified Ads 174-186 □ Colorado Video, Inc. 32 □ ColorGraphic Systems, Inc. 19 □ Columbia Pictures Television 28-29 □ COMSAT TeleSystems, Inc. 81 □ Continental Electronics 106-107 □ Conus Communications 84-85 □ R.C. Crister & Co. 159 □ Custom Business Systems, Inc. 143 □ Daniels & Associates 157 □ DFS Program Exchange 51, 52-53, 54-55 □ Fidelipac Corp. Third Cover □ Norman Fischer & Associates, Inc. 163 □ Four Star International, Inc. 16, 67 □ Fuji 72-73 □ Funny Button, Inc. 129 □ Gammon & Ninowski Media Investments, Inc. 169 □ Grass Valley Group 44 □ GTE Spacenet 70 □ Harris 65 □ Hogan-Feldmann, Inc. 162 □ Home Shopping Network 11 □ Houston International Teleport 114 □ Ikegami Electronics (USA), Inc. 87 □ ITC Entertainment 91 □ Kalil & Co., Inc. 155 □ Kaman Broadcasting 83 □ Kline Iron & Steel Co. 95 □ H.B. La Rue 160 □ LeBlanc & Dick 111 □ Lorimar-Telepictures 8-9, 20-21, 24-25 □ The Mahlman Co. 149 □ Major Market Radio 102 □ MCATV 27 □ Media General Broadcast Services, Inc. 127 □ MEI Electronics 109 □ Motorola 144 □ National Public Radio 17 □ NBC News 31 □ NEC America, Inc. Fourth Cover □ Nightingale-Conant Corp. 3 □ Orban Associates, Inc. 77 □ Philips Television Systems, Inc. 104 □ Professional Cards 171 □ Rank Precision Industries, Inc. 97 □ The Research Group Second Cover □ Cecil L. Richards, Inc. 153 □ R&R Syndications, Inc. 113, 115, 117, 119 □ Robins & Ries, Adv., Inc. 121 □ Robert W. Rounsaville & Associates 120 □ Satellite Systems Engineering, Inc. 158 □ Services Directory 170 □ Barry Sherman & Associates 156 □ Society Bank 108 □ SRDS 101 □ Stainless, Inc. 131 □ Howard E. Stark 122 □ Szabo 112 □ Edwin Tornberg & Co., Inc. 168 □ Townsend 49 □ Transtar 23, 145, 147 □ United Broadcasting 6 □ United Stations Radio Networks 93 □ Victory Television 12-13, 14-15 □ WDBB-TV 103 □ WDVN-TV 63 □ Western Union 118 □ World Tower Co. 140 □ WTTG 34 □ Youngs, Walker & Co. 187

Keep Reaching for the Stars, WYST-FM!

Announcing United Broadcasting
Company's Station of the Year:

92 STAR WYST

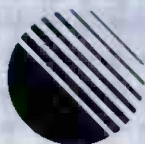
*Excellence in Broadcast Standards
Excellence in Community Service
Excellence in Programming
Excellence in Sales*



The All-Star lineup at 92Star

*Excellence in Operations
Excellence in Promotions
Excellence in Engineering*

**A UNITED COMMITMENT TO EXCELLENCE,
A UNITED COMMITMENT TO SUCCESS**



United Broadcasting Company
Corporate Offices/Bethesda

WJMO-AM Cleveland	WRQC-FM Cleveland	WYST-AM Baltimore	WYST-FM Baltimore	WDJY-FM Washington	WKDM-AM New York	KALI-AM Los Angeles	KSOL-FM San Francisco	WINX-AM Rockville, Md.
-----------------------------	-----------------------------	-----------------------------	-----------------------------	------------------------------	----------------------------	-------------------------------	---------------------------------	----------------------------------

UNITED CABLE COMPANY OF NEW HAMPSHIRE
Represented Nationally by Jack Masla & Co.
WJMO-AM/WRQC-FM Cleveland Heights, KALI-AM San Gabriel, KSOL-FM San Mateo

Border deal

U.S. and Mexico are said to be "very close" to signing new AM agreement. One source said agreement, which will permit AM daytimers to operate up to two hours past local sunset and allow full-time operation on Mexican clears, may be signed this week. If all goes as planned, representatives of U.S. and Mexican delegations to Regional Administrative Radio Conference, being held in Geneva to plan use of expanded AM band, will explain agreement through teleconference with broadcasters at National Association of Broadcasters convention in Dallas. Teleconference is scheduled for 9:30 a.m. April 15 at convention.

Encouraging dialogue

Hope for harmony between East (Japan) and West (Europe) to head off anticipated crisis over world standard for high-definition television (see "At Large," page 134) appeared enhanced Friday after meeting in Paris of consumer industries from each side. Organized by European Association of Consumer Electronics Manufacturers (EACEM) and Electronics Industries Association of Japan (EIAJ), meeting was to seek agreement on economic incentives that might affect their nations' consideration of technical issues. Participants, including representatives of Advanced Television Systems Committee, in catalyst's role, were cheered by decision to meet again—this time in Tokyo—two weeks hence.

Signs of life

Bad news for established TV owners is that FCC Mass Media Bureau is said to have revived work on VHF drop-ins. Good news is that bureau is in no sweat to complete job. Effort appears to be spurred more out of desire to quash perception that issue has been relegated to limbo than at shoe-horning fresh competition in.

Under FCC's original drop-in proposal, short-spaced station would have been authorized as long as it provided same protection to existing stations that normally spaced station would provide and service gains would outweigh losses; staff had completed work in 1983 on original proposal, which was introduced in 1980. Two years ago, FCC Chairman Mark Fowler directed commission staff to issue further notice of proposed rulemaking on drop-ins, looking toward additional protection of existing television service

("Closed Circuit," June 18, 1984). Bureau is still said to be trying to accomplish that, but it's not operating under any deadline.

Blocked

Home earth station owners may be unable to subscribe to cable superstations after their satellite signals are scrambled. Culprit is not satellite carriers that distribute superstations but copyright laws that make no provision for sale of superstations directly to dish owners. Satellite carriers would like to modify laws to permit direct sales, but prospects for any kind of copyright legislation are dim in wake of breakdown of talks between cable industry and Motion Picture Association of America on new cable copyright royalty formula.

House Copyright Subcommittee member Mike Synar (D-Okla.) has been working with Tempo Enterprises, satellite carrier of superstation WTBS(TV) Atlanta, in effort to come up with bill that would permit direct sales and that would have some chance of passage, despite antagonism between cable and motion picture industries on copyright front. Said Synar aide last week, "We are looking for a solution, but there may not be one."

Last man

Bob Herpe, president of Transcom Communications Co., Altamonte Springs, Fla., and National Radio Broadcasters Association director, has been chosen to serve one-year term on National Association of Broadcasters radio board, contingent on approval of NRBA executive committee. Herpe is one of 12 NRBA directors who will join NAB's radio board as part of merger between two associations (BROADCASTING, Feb. 24). Herpe is replacing original choice for seat, Jeff Smulyan, president of Indianapolis-based Emmis Broadcasting, who was elected to NAB board through that organization's own election process last month.

For licensees only

Debate is likely at National Association of Broadcasters over eligibility of networks to serve on radio board. Radio Board Composition Task Force will recommend bylaws change at association's June board meeting requiring networks to have at least one broadcast license to qualify for board. Recommendation is part of larger proposal to reorganize radio board by reducing number of network seats from six

to three and by reducing network service to two-year rotation. Current bylaws do not require station ownership as condition of network board representation. Under proposed change, Mutual Broadcasting and United Stations Radio Networks, currently represented on board, would lose their seats.

Joint Board Chairman Ted Snider of KARN(AM)-KKYK(FM) Little Rock, Ark., and NAB President Eddie Fritts oppose excluding nonlicensee networks because of role they play in industry. Snider says he will try to persuade board to permit networks to keep seats on board even if they aren't licensee.

On mend

Joseph Dougherty, executive vice president of Capital Cities/ABC, is said to be making steady recovery following stroke on Jan. 16. Although he still shows residual effects, Dougherty left hospital for home two weeks ago. He is reported to be improving and "anxious to get back to business."

Favorite subjects

More business-of-media literature is on way following *The Fanciest Dive*, book on Time Inc.'s failed cable-guide venture. Ken Auletta, author and New York *Daily News* columnist, is at work on lengthy piece about major CBS shareholder and board member, Laurence Tisch. Sally Bedell Smith, on leave from media reporting job at *The New York Times*, is at work on unauthorized biography of CBS Founder Chairman William S. Paley. And former corporate affairs staffer at ABC is reportedly at work on book about that company. NBC spokesman said network knows no book-in-making about that operation.

Dusted off

Reports from Capcities/ABC suggesting that ABC Division President John B. Sias is encouraging network to develop informational programming in attempt to wean viewers from higher priced entertainment fare may be true. In profile of Sias 15 years ago (BROADCASTING, June 29, 1970) it was reported that Sias "advocates information-entertainment mix...as a demonstrably economical and sound programming approach." Among shows Sias advocated at time were series on consumer information and medical news and "a poor man's *Sesame Street*."

FALL CR

CLEARED IN 71%

NEW YORK.....WPIX
LOS ANGELES.....KTLA
CHICAGO.....WGN
PHILADELPHIA.....WTAF
SAN FRANCISCO.....KTVU
BOSTON.....WNEV
WASHINGTON, DC.....WDCA
DALLAS.....KXAS
MIAMI.....WDZL
MINNEAPOLIS.....KITN
ATLANTA.....WGNX
ST. LOUIS.....KDNL
DENVER.....KWGN
SACRAMENTO.....KRBK
BALTIMORE.....WBFF
INDIANAPOLIS.....WISH
NEW HAVEN.....WHCT
SAN DIEGO.....XETV
CINCINNATI.....WCPO

KANSAS CITY.....WDAY
NASHVILLE.....WZTV
ORLANDO.....WMOX
NEW ORLEANS.....WGNO
BUFFALO.....WUTV
GREENVILLE.....WLOS
OKLAHOMA CITY.....KAUT
RALEIGH.....WKFI
SALT LAKE CITY.....KSTU
GRAND RAPIDS.....WZZM
MEMPHIS.....WHBC
PROVIDENCE.....WSTG
SAN ANTONIO.....KABT
HARRISBURG.....WPMY
DAYTON.....WRGT
SHREVEPORT.....KMSS
RICHMOND.....WVRN
WICHITA.....KWCH
MOBILE.....WPMI

Sign-up now for

CON ST

OF THE COUNTRY.

WEST PALM BEACHWTVX
JACKSONVILLEWNFT
GREEN BAY.....WGBA
DES MOINES.....KDSM
CHAMPAIGN.....WAND
INDUCAH.....WSIL
OXINGTON.....WLKT
HATTANOOGA.....WDSI
UCSON.....KDTU
VANSVILLE.....WEVV
ACO.....KXXV
DOUX FALLS.....KDLT
AS VEGAS.....KRLR
ARGO.....KVRR
HARLESTON, SC.....WCSC
C. MYERS.....WFTX
VANNAH.....WTOC
ANTA BARBARA.....KCOY
MARILLO.....KCIT

CORPUS CHRISTI.....KRIS
WICHITA FALLS.....KSWO
TALLAHASSEE.....WTWC
LA CROSSE.....WLAX
LUBBOCK.....KAMC
TYLER.....KTRG
IDAHO FALLS.....KPVI
BILOXI.....WXXV
SAN ANGELO.....KIDY
PALM SPRINGS.....KESQ
FLAGSTAFF.....KNAZ
TUSCALOOSA.....WCFT
WENATCHEE.....KCWT
ANNISTON, AL.....WJSU

AND MORE ARE JOINING
EVERY DAY!

intage year!

LORIMAR-Telepictures™

Festival expansion

Home Box Office put Festival, its experimental new pay service, on RCA Americom's Satcom K-1 last week, making it available to the handful of cable systems that have been lined up to test market it this month.

The service, which will run 19 hours a day (7 a.m. to 2 a.m. NYT), seven days a week, is aimed at noncable subscribers and basic-only subscribers who have never taken a pay service or who have taken one, but dropped it. According to HBO, much of the excessive sex and violence in the existing general-appeal pay services that many people, especially older ones, find objectionable has been expunged from Festival.

According to HBO spokesman Alan Levy, six systems of American Television and Communications have agreed to test market Festival starting this month. He declined to identify them, saying marketers feared putting the spotlight on the systems would skew the results of the marketing tests. ATC, like HBO, is a subsidiary of Time Inc.

Festival is being beamed over transponder 15 of Satcom K-1, a medium-power Ku-band satellite launched into orbit in January. HBO secured the transponder and two

others under a deal with RCA, under which HBO and RCA will build Satcom K-3, a satellite similar to Satcom K-1, and launch it late this decade. Although the deal hasn't been finalized, Levy said the fact that HBO has already begun to use one of the transponders "underscores just how close we are" to signing final papers. RCA and HBO hope to lease or sell transponders on Satcom K-3 to cable programmers. While waiting for it to be launched, they will encourage programmers to lease transponders along with HBO on Satcom K-1.

Viacom sews up 60 Cannon films

Showtime/The Movie Channel Inc. and The Cannon Group Inc., a Los Angeles-based film studio, announced last week an agreement, said to be worth more than \$100 million, that gives the two pay services the exclusive television (all television, not just pay cable) rights to more than 60 Cannon films through 1989 and possibly beyond. And before the films are shown on the two Viacom-owned pay services, they will have an exclusive pay-per-view run on Showtime's PPV service, Viewer's Choice. After the films finish their pay-cable cycle, they will be syndicated worldwide (as part of the same deal) by the commonly owned Viacom Entertainment Group.

About half of the films covered under the agreement have already been completed or are currently in production and include such

titles as "Runaway Train," "The Delta Force," "Fool for Love," "Death Wish 3" and "Death Wish 4." Cannon says it has such stars as Dustin Hoffman, Al Pacino, Dian Keaton, Michael Caine, Amy Irving and Anthony Quinn under contract for future feature films.

Viewer's Choice will start the pay-per-view cycle of Cannon films in late spring or early summer, spokesmen for the companies said, and Showtime and TMC will begin exhibition of the films in late summer or early fall. A Showtime spokesman said the deal will let the two pay services exhibit a combined average of three exclusive titles each month during 1987.

A source at HBO said the company was surprised by the announcement, given earlier statements by both companies that the high price of exclusive deals was not cost efficient. The source said that of the top 50 box office hits in 1985, HBO had the exclusive rights to 28 while Showtime/TMC had the exclusive rights to 10. "It looks like they are playing catch-up," the source said. A Showtime spokesman replied that exclusive deals done on "a selective basis" are beneficial because they help a channel differentiate itself from other services.

In any case, at a press conference in Los Angeles last week announcing the deal, Fred Schneider, the head of film acquisitions for Showtime/TMC, said he would "absolutely" be looking for additional exclusive licensing agreements with studios in the future.



American Uplinks, Inc.

Transmit Your TV Programming Live Via Satellite!

The number one mobile satellite earth station company in the U.S. Quality advanced electronics, two degree approved, standby powers one low price. NOW IN HAWAII!

1-800-525-9999
(303) 674-8657

P.O. Box 699
Idaho Springs, CO 80452

A Division of American Communications and Television Inc.



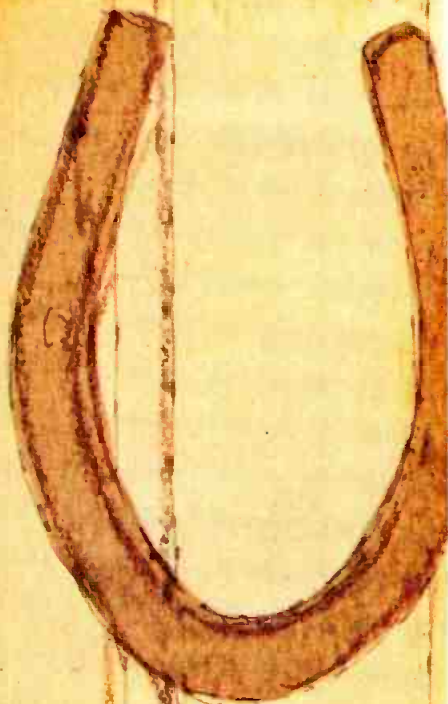
Cable can be fun. Home Box Office's Comic Relief, a "comedy concert" aimed at raising money for the nation's poor and homeless, was telecast by the pay television network in March and deemed a success. Hosted by Billy Crystal, Whoopi Goldberg and Robin Williams, the four-hour show from the Universal Amphitheater in Los Angeles featured 40 comics and, by latest count, raised \$2.5 million. At the reception, cable and comic talent mixed. Above: Madeline Kahn and Michael Fuchs, chairman and chief executive officer, HBO. HBO plans to boil the telecast down into a one-and-a-half-hour feature and show it April 9, April 15 and April 25.

PURE BOTTOM LINE...



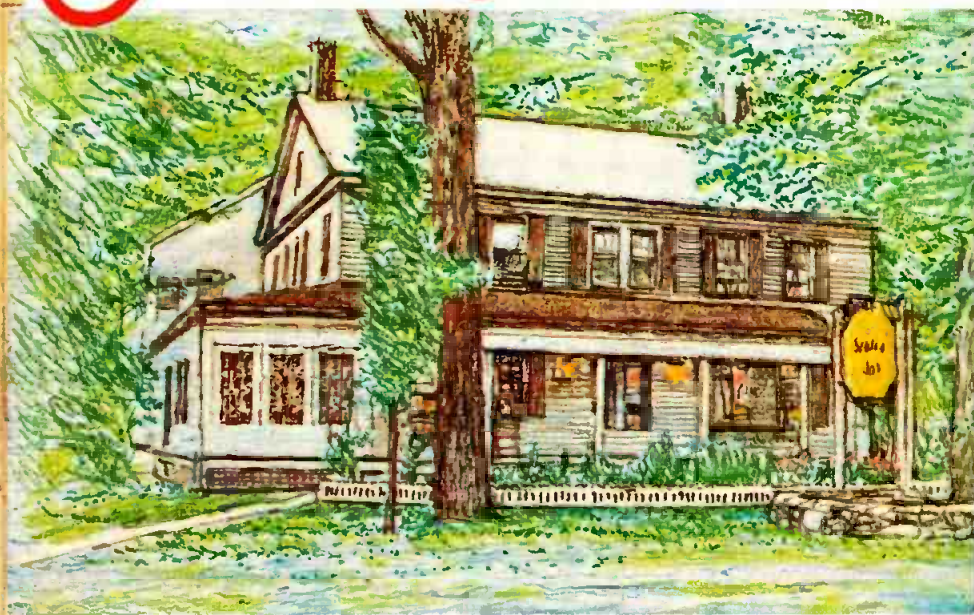
...PURE PROFIT





The great ones
are always a better
buy for the long
run!

Newhart



Another MTM production from

Victory Television

New York (212) 687-1516, Chicago (312) 790-3030,
San Francisco (415) 388-4030, Atlanta (404) 980-2552



Another
MTM production
from
**Victory
Television**

New York (212) 687-1516
Chicago (312) 790-3030
San Francisco (415) 388-4030
Atlanta (404) 980-2552





St. Elsewhere

Your local books reveal six lucrative reasons to buy "St. Elsewhere."

W18-34. W18-49. W25-54. M18-34. M18-49. M25-54.

Your instinct for profit tells you the reasons are very compelling.

NCTA deals its ACE's

Suburban Cablevision won five of the 32 ACE awards presented by the National Cable Television Association at its annual convention in Dallas. Along with the System Awards for Cable Excellence (ACE), Greg Vandervort, marketing director at Suburban's East Orange, N.J., system, won the distinguished achievement award.

Included in Suburban's awards was one for "overall commitment to local programming" for a large system (over 30,000 subscribers). Other awards recognized the company's public affairs, news magazine and sports programming. The "overall commitment" award for a small system went to Rogers Cablesystems of Multnomah East,

Portland, Ore. The following is a list of the winners:

Excellence in local programming

Suburban Cablevision, East Orange, N.J., Maclean Hunter Cable TV, Bruce LaRose, program director □ Overall commitment to local programming: above 30,000 subscribers.

Rogers Cablesystems of Multnomah East, Portland, Ore., Rogers Cablesystems, Diane Linn, regional programming director □ Overall commitment to local programming: under 30,000 subscribers.

Excellence in a single program

Still Growing After All These Years □ Manhattan Cable Television, New York, American TV & Communications, Johanna Cooper, producer □ Documentary.

Right to Know—ABSCAM: Stinging the Constitution □ Suburban Cablevision, East Orange, N.J., Maclean Hunter Cable TV, Allan Wolper, producer □ Public affairs.

Stevenson Inquest □ Rogers Cablesystems of Multnomah East, Portland, Ore., Rogers Cablesystems, Larry Dunham, producer □ Community events coverage.

Cablevision News 12/Hurricane Gloria □ Cablevision of Connecticut, Westport, Conn., Cablevision Systems, Andree Hight, producer □ News—special coverage.

LSU Basketball 1984-85: LSU vs. Mississippi State □ Cablevision of Baton Rouge, Baton Rouge, Danleis & Associates Inc. Mark Grant, producer □ Sports events coverage.

Tallyho! Highlights of the Santa Barbara National Horse & Flower Show □ Cox Cable Santa Barbara, Santa Barbara, Calif., Cox Cable Communications, Barbara Williams, producer □ Sports events coverage.

The Great American Race 1985 □ Group W Cable, North Orange, Cluser, Fullerton, Calif., Group W Cable, Lisa Yale, producer □ About sports.

The Glass Harmonica □ Greater Boston Cable, Woburn, Mass., Colony Communications, Steven Kostant, producer □ Music.

Mis-Matched Socks □ Adams/Russell Cable Services, Norwood, Mass., Adams/Russell Cable Services, Eric Bicker-nicks, producer □ Comedy/variety.

It's Never Too Late to Learn □ Oceanic Cablevision, Honolulu, American TV & Communications, Tremaine Tamayose, producer □ Drama/dance.

Uncle Bill □ UA-Columbia Cablevision, Taunton, Mass., Uniter Artists Cablesystems, Laura Hahn, producer □ Drama/dance.

Voices and Visions: Alcoholism in the Family □ Cox Cable Crantston/Johnston Inc., Crantston, R.I., Cox Cable Communications, John Femino M.D. and Mark Cavanagh, producers □ Educational.

Write On □ Group W Cable Inc., Santa Ana, Calif., Group W Cable, Randy Magaiski, producer □ Children's programming.

Hand Art: Music in Your Hands □ Rogers Cablesystems of Multnomah East, Portland, Ore., Rogers Cablesystems, Do Klover, producer □ Special audience.

Excellence in a program series

Right to Know □ Suburban Cablevision, East Orange, N.J., Maclean Hunter Cable TV, Allan Wolper, producer □ Public affairs.

Info. New Jersey's Newsmagazine □ Suburban Cablevision East Orange, N.J., Maclean Hunter Cable TV, Janet Shalestil senior producer, and Robin Kampf, producer □ Magazine show.

City Alive □ University TV-California State University, Long Beach, Long Beach, Calif., Simmons Communications, Matthe Kaplan, producer □ Community events coverage.

Cablevision News 12 □ Cablevision of Connecticut, Westport, Conn., Cablevision Systems, Andree Hight, producer □ News.

Cablevision Sports □ Cablevision of Long Island, Woodbury, N.Y., Cablevision Systems, Robert de Polo, producer □ Sport events coverage.

Time In □ Suburban Cablevision, East Orange, N.J., Maclean Hunter Cable TV, Matt Loughlin, producer □ About sports.

Music City □ Cox Cable New Orleans, Cox Cable Communications, Jim Gabour, producer □ Music.

After Hours □ Group W Cable, North Orange Cluster, Fullerton, Calif., Group W Cable, Mike Ewing and Steve Arndt, producer □ Comedy/variety.

Doctors' House Call □ Cox Cable Santa Barbara, Santa Barbara, Calif., Cox Cable Communications, Patrick McCall, producer □ Educational.

Cleveland's Kids and Company □ Viacom Cablevision of Cleveland, Cleveland Heights, Ohio, Viacom Cable Communications, Cathy Moats-Ols, producer □ Children's programming.

Excellence in promotional programming

Sunrise Chevrolet □ Coachella Valley Television, Palm Desert, Calif., Palmer Communications, Joe Ponder, producer □ TV commercials/single spot.

Santa Barbara Holiday □ Cox Cable Santa Barbara, Santa Barbara, Calif., Cox Cable Communications, Patrick McCall, producer □ TV commercials/campaign.

Bad Horror and Sci-Fi □ Group W/KOZY-TV, Eugene, Or., Group W Cable, Mark Schacter, producer □ Cable promotional single spot.

HBO/Not Necessarily the News Promotional Campaign □ Group W Manhattan, New York, Group W Cable, Fern Silvergel, Jim Carney and Rick Derman, producers □ Cable promotion/campaign.

Milk Carton Derby □ Viacom Cablevision Pacific NW, Everett, Wash., Viacom Communications, Cynthia Heiden □ Public service announcement/single spot.

United Community Newsbriefs □ United Cable of Colorado, Englewood, Colo., United Cable Television, Alan Hayden and Michelle Edmunds, producers □ Public service announcement/campaign.

Program Insurance **STAR CLUSTER**

WHEN YOU HAVE A SHOW THAT:

1. Everybody likes
2. Is produced by an experienced professional
3. Delivers sitcom demographics
4. Stars current TV celebrities
5. Entertains and involves the audience

BUT:

Can't find a place in the market on a strip basis,

WHAT DO YOU DO?

You offer it once a week to be nurtured as a replacement for unexpected failures.

STAR CLUSTER is now available for one per week airing this fall. Call Four Star for your program insurance: a good policy at low premiums!

BENEFICIARY: Your audience.



*Four Star
International, Inc.*

931 North Cole Ave.
Hollywood, CA 90038-2675
(213) 469-2102

Selecting a newsroom computer system?

GO WITH THE WINNER!



More NewStar Systems have been sold and installed
in the U.S. and Canada during 1985 than all others combined.*

NewStar... The system of choice in the United States and Canada!

Colorgraphics Systems, Inc.

5725 Tokay Blvd., Madison, WI 53719 (608) 274-8686

*Based upon the best available public information as of December 1, 1985.

the \$1,000,000

When it comes to setting time periods on fir
no new show comes close to "The \$1,000,000
Chance Of A Lifetime."

As a mid-season introduction, stations turned to "Chance" to reverse
downward trends in troubled time periods. And "Chance" paid off, posting rich
increases in household shares, men and women.

Take a look at the numbers and you'll agree. There are a million good reasons to
add "Chance" to your '86-'87 line-up.

Sacramento KQVR

Monday-Friday 6:30 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	12	14	11
NOV 85 Dynasty	5	6	1
INCREASE	+140%	+133%	+450%

Indianapolis WISH

Monday-Friday 7:30 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	14	16	16
NOV 85 Price Is Right	12	11	11
INCREASE	+17%	+45%	+45%

Norfolk WTKR

Monday-Friday 7:00 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	17	20	19
NOV 85 News	10	9	10
INCREASE	+70%	+122%	+90%

Harrisburg WHF

Monday-Friday 5:00 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	20	28	29
NOV 85 Jeopardy	19	24	18
INCREASE	+5%	+17%	+61%

Mobile WKRG

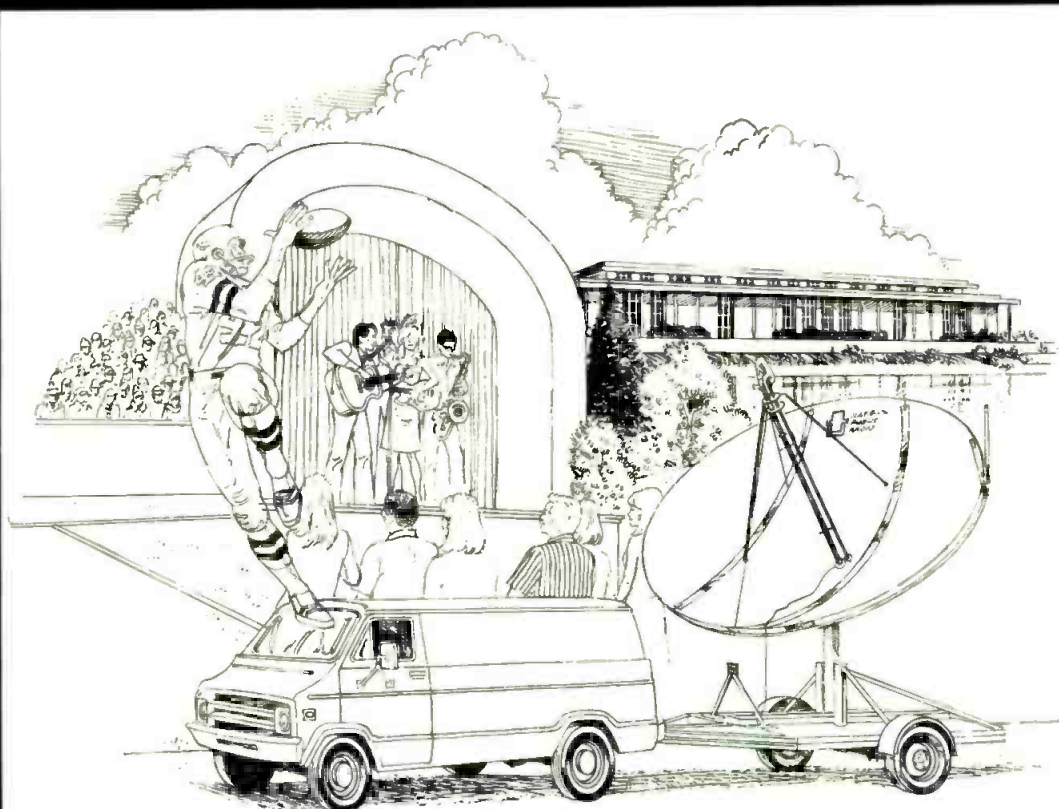
Monday-Friday 4:00 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	31	38	36
NOV 85 Jeopardy	27	39	33
INCREASE	+15%		+9%

Charleston, SC WCIV

Monday-Friday 7:30 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	15	17	13
NOV 85 Entertain. Tonight	12	8	11
INCREASE	+25%	+113%	+18%

LORIMAR-T

Taking the show on the road?

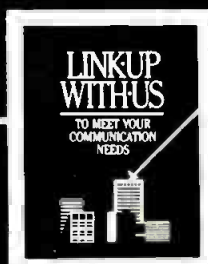


**Take along NPR Satellite Services
for special promotions, concerts and sports!
Whether you're a radio network, radio station or
program syndicator, link up with NPR for:**

**Transportable Uplink Service
Ad Hoc Networking
Backhauling From Domestic and Foreign Locations
Distribution on SATCOM 1R**

**"We were impressed with the very professional way the NPR
people handled the myriad details involved...and the results were
highly successful broadcasts."**

— Paul Hurd, Vice President/Chief Engineer, WHDH, Boston, referring to
NPR portable uplink service provided during the Super Bowl



Join us in Booth 2448 at the NAB or call (202) 822-2626

TV ONLY

Singleton Seafood □ Four-week flight will be conducted in selected markets throughout country, starting in late April. Spots will appear in daytime, fringe, sports and prime periods. Target: adults, 25-54, 25-34. Agency: Louis Benito Advertising, Tampa, Fla.

Big Boy Restaurants □ Eight-week campaign is scheduled to kick off this week in about 50 markets. Commercials focus on breakfast and feature song and theme line, "Nobody Takes Care of You Like Big Boy." It marks first formal co-op campaign involving Big Boy and its franchisees. Commercials will be placed in all dayparts. Target: adults, 25-54. Agency: Earle Palmer Brown, Bethesda, Md.

Insurance Information Institute □ As part of \$6.5-million campaign this year in television and print, institute has launched three-week flight in 37 spot markets and on NBC TV. Spot effort will resume with another flight in April and May. Campaign focuses on growth of

litigation in U.S. and its effect on various aspects of living. Spot makes offer of free booklet, "The Lawsuit Crisis." Commercial will run in all dayparts, particularly news and news-related segments. Target: adults, 18 and older. Agencies: Siegel & Gale, New York (creative); SFM Media, New York (media).

Roy Rogers Restaurants □ Eastern division of fast-food chain began six-week flight in Philadelphia, Boston, Washington and other Eastern cities last week. After brief hiatus, client will return for four-week flight covering May and June. Commercials will appear in all dayparts. Target: adults, 18-49. Agency: Earle Palmer Brown, Bethesda, Md., which created its first campaign for Roy Rogers since landing account in January.

Allnet Communications □ Long-distance communications service firm will launch campaign aimed at businesses on May 19 and it will continue into fourth quarter in 21 markets. Commercials will be scheduled in all dayparts. Target:

men, 25-54. Agency: Fallon McElligott Rice, Minneapolis.

Merrill Dow Pharmaceuticals □ Advertiser launches second- and third-quarter flight in early April for its Cepacol brand throat lozenge. Spots will be carried in a large number of major markets, including Detroit. Various dayparts will be used. Target: women, 50 plus. Agency: Vitt Media International, New York.

First Interstate Bank of Nevada □ Nine-week flight to be launched in Las Vegas April 21. Spots will run in prime, fringe and news dayparts. Target: adults, 25-54. Agency: Foote, Cone, Belding, Los Angeles.

RADIO ONLY

White Mountain Cooler □ Flight of about five weeks will start in early May in markets throughout U.S., including Dallas, Memphis, Philadelphia, Pittsburgh, Chattanooga and Knoxville, Tenn. Commercials will be placed in all dayparts. Target: adults, 18-34. Agency:

LEARN TO SELL TV TIME FROM THE MAN WHO TAUGHT REPRESENTATIVES OF WPIX, WNEV, KWGN, WDVM, KTVU AND WTXN.

There are 1,149 TV stations across this country. Selling their air-time is a career that's wide open.

But to learn the business you had to be in the business. Until now.

Now, Martin Antonelli, who trains representatives for some of the industry's leading TV time-sales firms and TV stations, and who helps experienced sales professionals sharpen their techniques, is offering his program to you.

In this intensive, individualized program you'll become a TV sales professional. You'll learn to speak the language of TV sales and how to evaluate programs, stations and

markets. You'll understand the role of news, movies, specials, sports and cable.

You'll learn how to create a package of programs, how to use your total inventory of shows to maximize your revenue and how to present to ad agencies. And you'll learn how to close the sale.

The program works. Former students now successfully sell time for firms like TeleRep, Blair, Seltel, HRP, Katz and MMT. Plus dozens of major stations all across the country.

To learn how you might work in TV time-sales, call or write for more information.

But do it today because new classes are starting soon.



ANTONELLI MEDIA TRAINING CENTER

20 West 20th Street, New York, New York 10011 (212) 206-8063

ANTONELLI MEDIA TRAINING CENTER, INC. LICENSED BY THE NY STATE DEPT OF EDUCATION



It's not chicken feed. Burger King Corp. is allotting more than \$25 million to television network and heavy spot TV campaign to introduce Chicken Tenders to its menu on nationwide basis. New campaign includes four new television commercials produced by J. Walter Thompson/New York, supplemented by fifth spot created by Uniworld Group Inc., New York, which is directed to black market. Commercials stress that Chicken Tenders are equal to fillets of all white meat chicken breast, not processed like nuggets. Spots utilize rhythmic song, "Ain't Nothing Like The Real Thing."

TURN-AROUND

Pittsburgh WTAE

Monday-Friday 7:30 pm	Household Share	W 25-54 Share	M 25-54 Share
B 86 CHANCE	22	31	28
V 85 Pyramid	19	24	24
INCREASE	+16%	+29%	+17%

Atlanta WAGA

Monday-Friday 7:30 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	16	19	19
NOV 85 Magazine	12	12	12
INCREASE	+33%	+58%	+58%

Kansas City KCTV

Monday-Friday 6:30 pm	Household Share	W 25-54 Share	M 25-54 Share
B 86 CHANCE	16	17	16
V 85 Price Is Right	12	9	12
INCREASE	+33%	+89%	+33%

Charlotte WPCQ

Monday-Friday 7:30 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	10	14	10
NOV 85 Pyramid	8	10	7
INCREASE	+25%	+40%	+43%

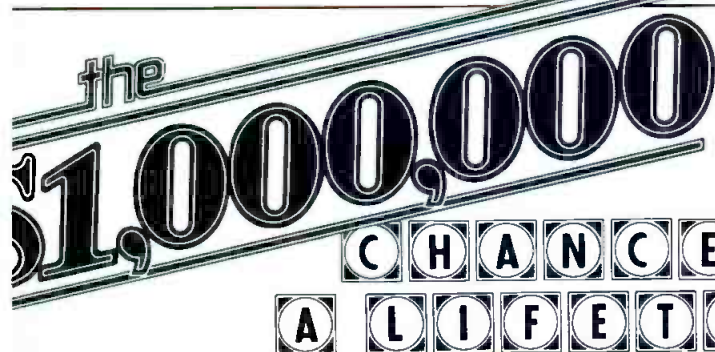
Knoxville WBIR

Monday-Friday 5:00 pm	Household Share	W 25-54 Share	M 25-54 Share
B 86 CHANCE	30	38	41
V 85 Three's Company	26	34	32
INCREASE	+15%	+12%	+28%

Green Bay WLUK

Monday-Friday 6:30 pm	Household Share	W 25-54 Share	M 25-54 Share
FEB 86 CHANCE	14	22	24
NOV 85 Taxi	9	10	14
INCREASE	+56%	+120%	+71%

Source: NSI/Cassandra *ARB



*The best new show
since the invention
of the "Wheel."*

pictures™

International House of Pancakes □ Regional buy covering Boston, Providence, R.I., and Springfield, Mass., is set to start in mid-April for four weeks. Commercials will be slotted in all dayparts. Target: adults, 25-54. Agencies: Cosmopoulos Crowley Daly, Boston.

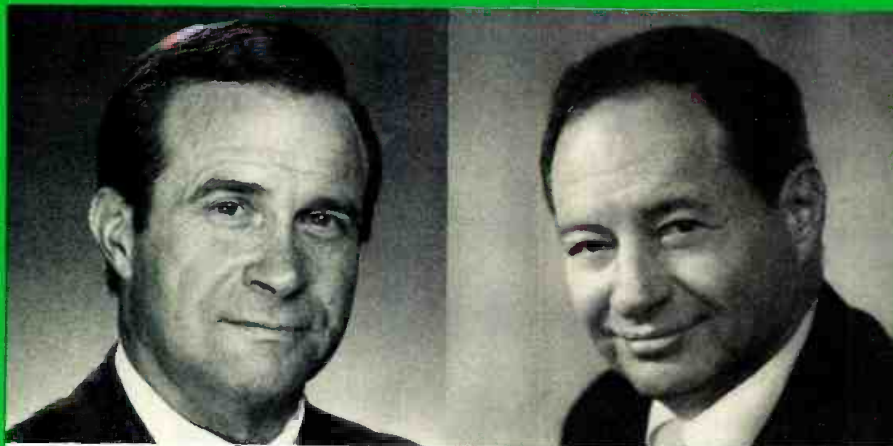
Swanson's Foods □ Le Menu line of frozen dinner entrees to be promoted in three-week flight beginning April 21. Spots will air in four Florida markets—Fort Lauderdale, Jacksonville, Miami and Tampa/St. Petersburg—during morning and evening fringe, prime and weekend dayparts. Target: adults, 25-54. Agency: Needham, Harper Worldwide, New York.

AdVantage

Off-pricers on TV. Television advertising by off-price retailers (discount stores) rose dramatically in 1985 to \$53.7 million, up 40% from 1984. Largest off-price advertiser in 1985 was Marshall's clothing stores, with more than \$10.6 million, up 54%, followed by Burlington Coat Factories, \$9.3 million; C&R Clothing, \$8.6 million; T. J. Maxx, \$5.2 million, and Ross Discount Clothiers, \$4.4 million. Figures were compiled by Television Bureau of Advertising from data supplied by Broadcast Advertisers Reports.

Touch up. AT&T will revive its pre-divestiture campaign slogan, "Reach Out and Touch Someone." Campaign was discontinued in summer of 1984 after more than five years while AT&T concentrated on building brand identification. Kim Armstrong, advertising director of AT&T, says: "We had to reintroduce ourselves as AT&T instead of the Bell System. We feel customers now know who AT&T is and know what sets us apart from our competitors. We again are reminding them how good it feels to reach out and touch someone." AT&T's agency for commercials is N W Ayer.

Enlistees. Representative firm MMT Sales Inc., New York, says eight stations have signed up for new marketing division since it was announced five weeks ago. Stations are KGSW(TV) Albuquerque, N.M.; KOLN-TV Lincoln, Neb., and its satellite, KGIN-TV Grand Island, Neb.; KMEG(TV) Sioux City, Iowa; WEAU-TV Eau Claire/LaCrosse, Wis.; WLUC(TV) Marquette, Mich.; KTVO(TV) Kirksville Mo. (Ottumwa, Iowa), and WKY(TV) Lexington, Ky.



Bob Pates

Frank Boyle

4 EXCELLENT REASONS TO TRUST YOUR PROPERTIES TO THE NEWEST BROKER ON THE BLOCK.

1. We've been traveling to 40-45 cities a year for the past 25 years, working and talking to the key "movers and shakers" in the radio business. They know us and trust us.
2. We'll market your properties to only the most qualified folks. Folks who will meet you face-to-face.
3. We'll guarantee fast action. That means we'll get the deal done in 36 hours, or less.
4. We'll guarantee satisfaction because we have to. We're new and we're hungry.

So list with us, the hungry brokers. Call us today.

Frank Boyle Co.

55 Old Field Point Road, Greenwich, CT, 06830 203-869-4433

Broadcasting Publications Inc.

Founder and Editor
Sol Taishoff (1904-1982)

Lawrence B. Taishoff, President.
Donald V. West, vice president.
David N. Whitcombe, vice president.
Jerome H. Heckman, secretary.
Philippe E. Boucher, assistant treasurer.

The Fifth Estate Broadcasting

1735 DeSales Street, N.W., Washington 20036
Phone: 202-638-1022

Lawrence B. Taishoff, publisher.

Editorial

Donald V. West, managing editor.
Leonard Zeidenberg, chief correspondent.
Mark K. Miller, senior news editor.
Kira Greene, assistant to the managing editor.
Harry Jessell, associate editor.
Doug Halonen, Matt Stump, Kim McAvoy, John Eggerton, assistant editors.
Susan Dillon, A. Adam Glenn (technology), Scott Fitzpatrick, Jeanne Omohundro, staff writers.

Anthony Sanders, systems manager.
Randall M. Sukow, research assistant.

Todd F. Bowie, Cheryl L. Miller, production.

Senior Editorial Consultants
Edwin H. James (Washington)
Rufus Crater (New York)

Editorial Consultant
Rocco Famighetti (New York)

Broadcasting ■ Cablecasting Yearbook

David Seyler, manager.
Joseph A. Esser, associate editor.
Lucia E. Cobo, assistant manager.

Advertising

Washington
Robert (Skip) Tash, Southern sales manager.
Doris Kelly, sales service manager.
Meg Robertie, classified advertising.

New York
David Berlyn, senior sales manager.
Charles Mohr, Ruth Windsor, sales managers.

Hollywood
Tim Thometz, sales manager.

Circulation
Kwentin K. Keenan, circulation manager.
Patricia Waldron, data entry manager.
Sandra Jenkins, Debra De Zarn, Joseph Kolthoff, Chris McGirr.

Production
Harry Stevens, production manager.
Rick Higgs, production assistant.

Administration
David N. Whitcombe, vice president/operations.
Philippe E. Boucher, controller.
Albert Anderson.
Irving C. Miller, financial consultant.
Wendy J. Liebmann.

Corporate Relations
Patricia A. Vance, director.

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

Stephen McClellan, John Lippman, associate editors.
Vincent M. Dittingo, senior editor: radio.
Geoff Foisie, assistant editor.
Scott Barrett, staff writer.
June Chauhan, Karen Maynard, advertising assistants.

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

Richard Mahler, correspondent.
Tim Thometz, Western sales manager.
Sandra Klausner, editorial-advertising assistant.

International Advertising Representatives
Continental Europe: John J. Lucassen, John Ashcraft & Co., Akerdijk 150 A, 1171 PV Badhoevedorp, Holland. Phone: 02968-6226. Telex: 18406 harke nl. ■ United Kingdom: John Ashcraft & Co., 12 Bear St., Leicester Square, WC2H 7AS London, England. Phone: 01-930 0525. Telex: 895 2387 answer g ashcraft. ■ Japan: Masayuki Harihari, Yukari Media Inc., Hus Building, 4-21-1-602, Nakano-shima, Kita-Ku, Osaka, Japan. Phone: 06-448-5011. Telex: J64400 OHBINBTH.

Founded 1931. Broadcasting-Telecasting * introduced in 1946. Television * acquired in 1961. Cablecasting * introduced in 1972 □ Reg. U.S. Patent Office. □ Copyright 1986 by Broadcasting Publications Inc.

FORMAT 41* REPORT CARD



The Arbitron* Report cards are in and Transtar's Format 41SM is America's hottest format, focusing right on the money demographics.



Here are just a few examples. All stations listed carry Format 41SM via satellite at least 20 hours a day and all weekend.

LOS ANGELES:

KIQQ-FM From #30 adult 25-54 women to #3 after just 5 months on air.

PROVIDENCE:

WWLI-FM From 3.2 12+ share to 7.2. #1 adults 25-54.

MIAMI-FT. LAUDERDALE:

WJQY-FM #1 adult 25-54 women for 3rd book in a row-12+ from 4.0 to 4.2.

GREENSBORO-HIGH POINT:

WOJY-FM 5.6 to 9.3 12+, #2 women 25-54.

DETROIT:

WLTJ-FM Just started on the satellite and up from 1.8 to 2.9 12+ ... all in adults.

MILWAUKEE:

WLTQ-FM 12+ share: 1.9 to 4.1 adults 25-49: 2.7 to 7.1 share (13th to 4th place).

RALEIGH-DURHAM:

WYLT-FM 2.7 to 6.5 12+ share-women 25-54 from 3.5 to 9.9.

SALT LAKE CITY:

KMGR-FM Debuts at 2.7 12+ share (jumps 11 rank positions). Up 24th to 7th adults 25-54.

Transtar formats include Format 41SM, Adult Contemporary, Country, and now "The Oldies ChannelSM." Format 41SM is already gone or reserved in many markets, but it may still be available in yours.

To find out, write or call today. 1-800-654-3904 (California 1-800-962-4653)

Please send me a Format 41SM air-check & brochure.

Name/Title: _____

Station: _____

Address: _____

Phone: _____

Send To: Transtar Radio Network, Inc. 6430 Sunset Blvd., Suite 401, Los Angeles, California 90028

TRANSTAR
The Quality Satellite Network

*Fall 1985 Arbitron. AQH Share, 6A-12M, Mon-Sun, MSA.

*Service mark of Transtar Radio Network, Inc.

SUPER
COOL

91 STATIO

77% of the country al
46 of the to

From Ralph Edwards Produc
in a

LORIMAR-T

PRIOR PORT

NS SOLD!

dy covered, including
50 markets!

Stu Billett Productions
on with

epictures™

A personnel commentary from Brad Marks, Korn/Ferry International, Los Angeles

Searching for the right person for the right job

What do these companies have in common: Chirs-Craft/United Broadcasting, Columbia Pictures, Cox Communications, The Walt Disney Co., Fries Entertainment Inc., Golden West Television, The Samuel Goldwyn Co., Group W Broadcasting, Paramount Pictures, Taft Broadcasting, Wometco Broadcasting? They all use executive search firms.

Unless we're all asleep at the switch in the broadcast industry, we are aware of an acute need for an expanded talent pool. Over the years this pool has become stagnant, courtesy of the "old boy" network system. So where is the talent? How will it be found? These questions weigh heavily on the minds of executives in the radio, TV and cable industries.

You've been running that classified ad for weeks. You've probably even tried a "blind" ad. You're frustrated at the lack of good response. In time, you'll also discover that blind ads won't help much either. Quality candidates seldom respond to these, because they don't want to take the risk of exposure in case their own company is running the ad. After a few weeks you'll find that the process of trying to indentify suitable candidates is a time-consuming experience. No key executive can afford to spend the time necessary to seek candidates all over the country. Many turn to search firms. Some questions and answers:

■ How can you tell if a search firm is qualified to do the job?

Make sure it specializes in this industry. Preferably a search executive should have his or her own career roots in broadcasting. This selection eliminates the learning curve of an outsider in the business. The client company and the search executive will be on the same wavelength.

■ How do you draw the distinction between a "contingency fee" recruiter and a "retained" search firm? Also, how do you decide which is more cost effective?

A contingency firm will fill the job with whatever applicant it can since that's the only way it will collect its fee. This "shot-gun" approach can cause the client company to interview far more candidates than necessary.

A retained search firm will take the time to research all the possibilities and weed out the candidates itself. At the end of the selection process the client company will have fewer candidates to interview. A retained firm is able to take this time because its fee is paid no matter how long the search may take.

Understand that either method is preferable to no search firm at all. The industry executive must be aware that *established*



Until last week Brad Marks was the president of The Entertainment Search Co., an executive search firm specializing exclusively in the broadcast and entertainment industries. On April 1, Marks was appointed a partner and the managing director of worldwide entertainment for Korn/Ferry International, based in Los Angeles. He has been associated with ABC, Walt Disney Co. and ITC Entertainment in managerial capacities and was an independent producer with ABC and CBS.

manpower is in short supply today, and the demand has escalated salaries to much higher levels than yesteryear. Search firms allow employers to maximize the competitive edge. This brings us to another question.

■ What are the problems in the search business vis-a-vis the broadcast industry?

One large problem is on-air talent in the news area. There are certain search firms wearing two hats—that of a talent agent and that of an executive recruiter. This issue has created so much confusion that often it is difficult to know who is doing what for whom. Let the buyer beware.

Understand the difference in the functions of an agent and a recruiter. Recruiters are supposed to match up qualified candidates for openings within a company. Ultimately, one candidate is hired. The hiring company pays a fee to the recruiter based upon a percentage of the candidate's compensation package the first year of employment.

An agent represents the talent. When a candidate (the talent) is placed by the search firm, the agent continues to receive a percentage of the candidate's income.

A conflict of interest arises when recruiters collect a percentage of the talent's income while simultaneously collecting a search fee from the hiring company. An ethical firm never collects its fee from a candidate. An ethical agent never collects a fee from the hiring company.

■ How can a search firm work with talent agents?

Recently a major talent agent we deal with regularly sent a tape of a tremendous talent in a top 20 market. The agent said that although this anchor had a long-term contract, there was a window in the contract that the agent would exercise provided there was an outstanding opportunity.

We called the news directors of a broadcast group client and advised them of the availability of this talent. Although there weren't any openings at any of these stations, they all thought he was sensational. We advised the news directors to call the president of their station group and tell him of this talent's availability. The very next day the president called and told us to recruit this talent for his group on the corporate level.

There were a number of people in the station group whose contracts were due to expire, and we suggested that this person could be used as leverage. Needless to say, when this fellow was in place, the word got around to the talent agents that they had better not be too demanding in salary requirements when the contracts of their talent began to expire.

You are probably asking yourself, "Who are examples of candidates recruited to our industry by search firms?" Steve Sohmer was recruited from NBC-TV to head up Columbia Pictures. Another example of this cross-pollination occurred during a search for a major Hollywood studio. It wanted to find a vice president of advertising for the television division, and had been searching for about four months. We knew of a fellow working for a small broadcast group in a top 20 market. His particular area of expertise was exactly what the client was looking for. He was the only candidate presented for the position. The studio flew him in and hired him almost immediately.

Another case involved a major broadcasting client looking for a vice president of human resources. Although it preferred someone with industry experience, the key factor was heavy experience in labor negotiations. We had to go outside the industry to the public sector to obtain the best candidate for the position. Two years later that person is still as happy with the company as the company is with him.

Are you still shuffling through resumes from that classified ad? Are you still going to try to do it all by yourself?

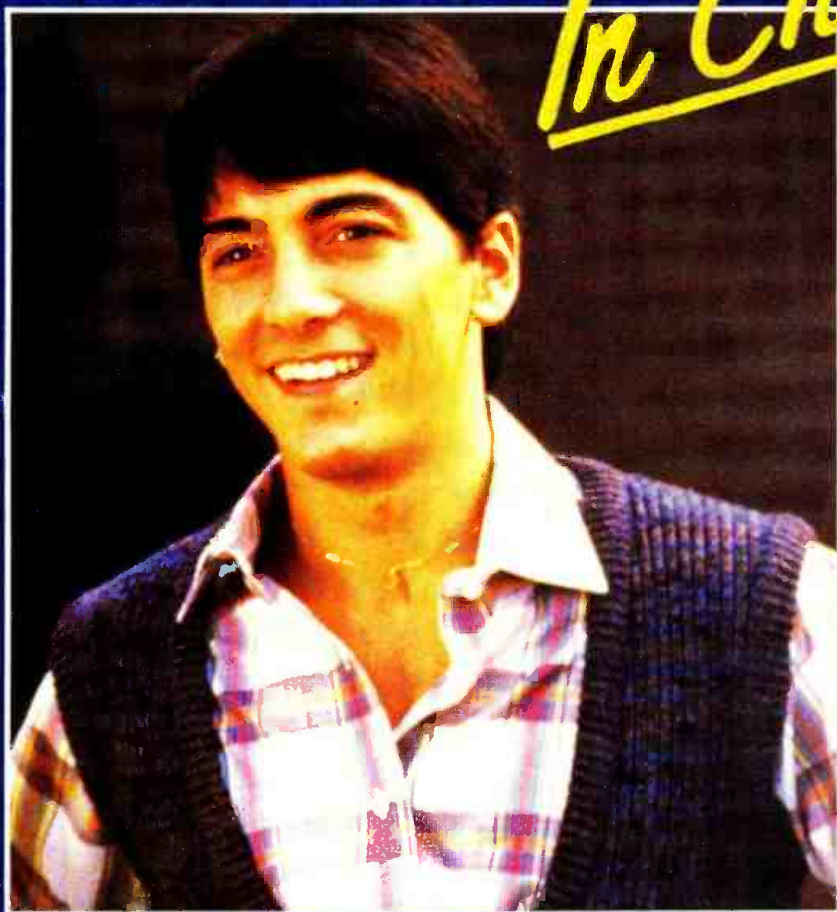
I can only give you the following analogy. There was a time in my life when I was fortunate enough to be able to play golf every day. I only play golf occasionally now, and naturally I was a better golfer when I played all the time. When you do something all day, every day, you're going to be much better at it than when you do it only occasionally. If you miss a shot in golf once in a while, it might not be such a big deal. But when you're trying to get that key employee, missing that shot can be a very big deal. ■

**ALL 6 TRIBUNE STATIONS SOLD:
N.Y., L.A., CHICAGO, ATLANTA, DENVER & NEW ORLEANS.**

**FIRST-RATE
FIRST-RUN**

CHARLES

In Charge



Charles In Charge which premiered on the CBS Television Network, is available this January with all-new, first-run episodes. And Scott Baio, acclaimed for his starring role as Chachi in *Happy Days*, will once more be in charge.

That's good news for stations and

advertisers looking for a first-rate, first-run, half-hour, comedy series that has one of the strongest demographic combinations of young women, teens and kids.

CHARLES IN CHARGE

starring Scott Baio

Station clearances: MCA TV (212) 605-2786.

Advertiser sales: MCA TV (212) 605-2720/Tribune Entertainment Co. (212) 557-7800.

A CO-VENTURE OF **MCA TV** AND **TRIBUNE ENTERTAINMENT Company**

T.J. HOOPER

A FORCE TO BE



COOKER CHECKED WITH.



**Available now
for Fall '87!**

A Spelling / Goldberg Production
in association with



McGinty

This week

April 7-10—Infocom '86, sponsored by *Institute of Electrical and Electronics Engineers*. Sheraton Bal Harbour hotel, Miami.

April 8—*International Radio and Television Society* "Second Tuesday" seminar. Topic: "Women in Electronic Communications—A Progress Report." Panelists include Jacquelin Smith, Capcities/ABC; Geraldine Laybourne, Nickelodeon; Ellen Hulleberg, McGraw-Hill Radio; Joan Lunden, ABC's *Good Morning, America*, and Joan Hamburg, WOR(AM) New York. Viacom Conference Center, New York.

April 8—*Television Bureau of Advertising* regional sales conference. Sheraton New Orleans.

April 8—*Women in Cable, New York chapter*, meeting. ■ Indicates new entry

ing. Topic: scrambling, with representatives of M/A Com and UA Cablesystems. HBO Media Center, New York. Information: Sherri London, (212) 661-4500.

■ **April 8**—*Washington Women in Public Relations* monthly luncheon meeting, "Crisis Communications." National Lawyer's Club, Washington.

■ **April 8**—*Media Research Club of Chicago* meeting, "Hispanic Marketing Opportunities." Lawry's Ontario, Chicago. Information: (312) 828-1170.

April 9—"Radio: In Search of Excellence," session in "Women at the Top" series sponsored by *American Women in Radio and Television, Washington chapter*. National Association of Broadcasters, Washington. Information: (202) 347-5412.

April 9—*National Academy of Television Arts and Sciences, New York*, luncheon, featuring Terrence Elkes, president and chief executive officer, Viacom

International. New York.

April 9—Time buying and selling seminar, co-sponsored by *International Radio and Television Society* and *Station Representatives Association*. Bankers Trust, New York.

April 9—50th anniversary presentation of *Ohio State Awards*. National Press Club, Washington. Information: (614) 422-0185.

April 9—*Women in Communications, New York chapter*, party to benefit Coalition for Literacy. Honorary hosts: Mrs. George Bush, CBS's Diane Sawyer and *Ms.* magazine editor Gloria Steinem. Studio 54, New York.

April 9-13—*Alpha Epsilon Rho, National Broadcasting Society*, 44th annual convention. Speakers include Eddie Fritts, president, National Association of Broadcasters, William Moll (keynote), president, Harte-Hanks Communications, and William Banowsky, president, Gaylord Broadcasting Co. Sheraton Park Central hotel and towers, Dallas.

April 10—*Television Bureau of Advertising* regional sales conference. Ramada hotel, O'Hare Airport, Chicago.

April 10—*Hollywood Radio and Television Society* newsmaker luncheon. Speaker: Grant Tinker, chairman, NBC. Beverly Wilshire, Los Angeles. Information: (818) 769-4313.

April 11—*Broadcast Promotion and Marketing Executives* board meeting. Loews Anatole, Dallas.

April 11-13—*National Association of Black Owned Broadcasters* 10th annual spring broadcast management conference, "Getting On Top and Staying There." Loews Anatole hotel, Dallas. Information: (202) 463-8970.

April 11-13—*American Public Radio* annual convention. Speakers include Peter Sellars, director, American National Theater. Hyatt Islandia hotel, San Diego. Information: (612) 293-5417.

April 12—*Radio-Television News Directors Association* region one conference/awards luncheon. Spokane, Wash. Information: (503) 222-9921.

April 12-16—*National Association of Broadcasters* 64th annual convention. Dallas Convention Center.

April 13—*Television Information Office* first general membership meeting, during NAB convention (see above). Dallas Convention Center, Dallas.

April 13—*Association of Maximum Service Telecasters* membership meeting. Dallas Convention Center, Dallas.

Also in April

April 13-17—*National Public Radio* annual convention. Town and Country hotel, San Diego. Information: Carolyn Glover, (202) 822-2090.

April 14—*Association of Maximum Service Telecasters* engineering breakfast. Adolphus hotel, Dallas.

April 15—*Broadcast Pioneers* annual breakfast, during NAB convention. Anatole, Dallas.

April 15—*Television Bureau of Advertising* regional sales conference. Americana Inn, Albany, N.Y.

April 15—Deadline for entries for *National Psychology Awards* for Excellence in the Media, sponsored by *American Psychological Association* and *American Psychological Foundation*. Information: (202) 955-7710.

April 15—*Pennsylvania Cable Television Association* third annual state legislative conference. Marriott Inn, Harrisburg, Pa.

April 15—*Southern California Cable Association* dinner and meeting. Speaker: Stuart Karl, president, Karl-Lorimar Home Video; founder of Alternatives and Instructional Home Video Products, and producer of Jane Fonda "Workout" tape. Pacifica hotel, Los Angeles. Information: Mel Matthews, (213) 684-7024.

April 16-18—*Pratt Center* computer graphic arts con-

Stay Tuned

A professional's guide to the Intermedia week (April 7-13)

Network television □ **ABC**: *My Two Loves* (romantic drama), Monday 9-11 p.m.; *Mr. & Mrs. Ryan* (comedy/drama), Saturday 9-10 p.m. **CBS**: *A Case of Deadly Force* (drama), Wednesday 9-11 p.m.; *World Championship Tennis Finals*, Saturday 2-3 p.m. and Sunday noon-3 p.m.; *Masters Golf Tournament* (live coverage), Saturday 3:30-6 p.m. and Sunday 3-6 p.m.; *Dream West* (three-part mini-series), Sunday 9-11 p.m., continuing Monday 9-11 p.m. and Tuesday 8-11 p.m. **NBC**: *The Last Precinct** (comedy series), Friday 9-10 p.m.; *Return to Mayberry* (comedy), Sunday 9-11 p.m. **PBS** (check local times): *The Little Sister* (drama), followed by *Rosey & Jonesy* (comedy), Monday 9-11 p.m.; *Elektra* (opera), Friday 9-11:30 p.m.

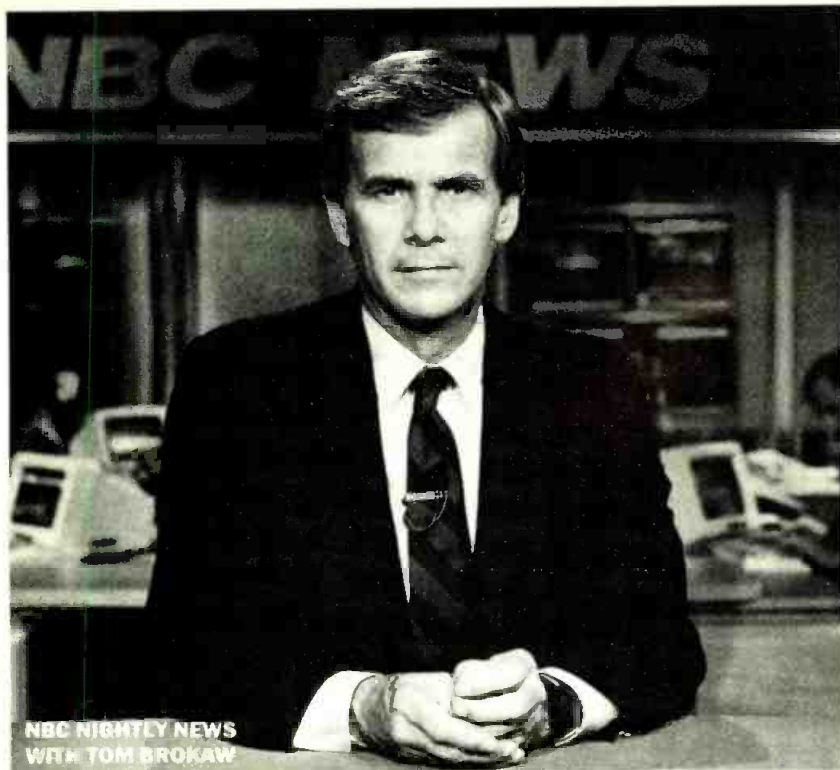
Network radio □ **American Public Radio**: *All That Fall* (play), Sunday 7-8:30 or 8-9:30 p.m. (times vary with stations). **CBS Radio Network**: *Masters Golf Tournament* (final two rounds), Saturday and Sunday 5:20-6 p.m.



*'Taurus Rising' on Lifetime

Cable □ **Arts & Entertainment**: *Just Me and You* (comedy), Friday 8-10 p.m.; *The Clouded Yellow* (thriller), Saturday 10 p.m.-midnight. **CBN**: *Dove Awards* (gospel music), Thursday 8-10 p.m. **The Disney Channel**: *Baseball Fever* (animated clips), Sunday 12:15-1:05 p.m. **ESPN**: *McDonald's High School All American Basketball Game*, Saturday 4-6 p.m. **HBO**: *Cops: Behind the Badge* (documentary), Monday 8-9 p.m. **Lifetime**: *Taurus Rising* (21-hour mini-series), Monday through April 18, 4-6 p.m. or 11 p.m.-1 a.m. **The Playboy Channel**: *City Boy* (comedy featurette), Monday 10-10:10 p.m. **WTBS(TV) Atlanta**: *Gateway to Goodwill: United States Amateur Box-Off*, Saturday 3:05-4:35 p.m.

Museum of Broadcasting (1 East 53d Street, New York) □ *James Dean: The Television Work*, screenings of 25 live television performances, through April 29. Information: (212) 752-4690, ext. 33.



NBC NIGHTLY NEWS
WITH TOM BROKAW

Why More Americans Watch NBC News' Three Daily Programs

Each network news department produces three Monday-through-Friday programs. More people, a total of over 30 million a day, watch NBC's three — NBC Nightly News with Tom Brokaw, Today and NBC News at Sunrise — than watch those of the other networks.

With good reason. 1986 has been a remarkable news year, and no one has covered it as well as NBC. Here's what knowledgeable observers say:

NBC Nightly News with Tom Brokaw:

"Brokaw likes to be where the action is; he is at his best with breaking stories . . . More than the other two, he projects a sense of involvement, the possibility that he shares his viewers' values."

— *Esquire Magazine*

Space Shuttle: "All three networks performed with admirable sensitivity . . . NBC's Brokaw was the coolest and most lucid of the three."

— *Time Magazine*

Philippines: "NBC's Tom Brokaw was the most visible of the network anchormen for coverage of Marcos' final fall . . ."

— *New York Daily News*

Today: "NBC's 'Today' show attracted the largest audience ever for a morning news and informational program last week when it was broadcast from South America."

— *Associated Press*

NBC News at Sunrise: "'Today' isn't the only morning star shining in the ratings . . . 'NBC News at Sunrise,' the newscast for early risers, has landed first-place honors."

— *USA Today*



TODAY
Bryant Gumbel and Jane Pauley



NBC NEWS AT SUNRISE
Connie Chung and Bob Jamieson

Audience data: Nielsen Television Index. Season to date through Mar. 7, 1986; total persons.

NBC NEWS

TUNED IN TO THE WORLD

April 12-16—*National Association of Broadcasters* 64th annual convention. Dallas Convention Center. Future conventions: Dallas, March 29-April 1, 1987; Las Vegas, April 10-13, 1988; Las Vegas, April 30-May 3, 1989; Dallas, March 25-28, 1990, and Dallas, April 14-17, 1991.

April 13-17—*National Public Radio* annual convention. Town and Country hotel, San Diego.

April 24-29—22d annual MIP-TV, international television program market. Palais des Festivals, Cannes, France. Information: David Jacobs, (516) 364-3686.

April 27-29—*Cabletelevision Advertising Bureau* fifth annual conference. Sheraton Center, New York.

April 27-30—*Public Broadcasting Service/National Association of Public Television Stations* annual meeting. Loew's L'Enfant Plaza hotel, Washington.

April 27-30—*Broadcast Financial Management Association/Broadcast Credit Association* 26th annual conference. Century Plaza, Los Angeles. Future conference: April 26-29, 1987, Marriott Copley Place, Boston.

May 14-17—*American Association of Advertising Agencies* annual meeting. Greenbrier, White Sulphur Springs, W. Va.

May 18-21—*CBS-TV* annual affiliates meeting. Century Plaza hotel, Los Angeles.

May 21-25—*American Women in Radio and Television* 35th annual convention. Westin Hotel Galleria, Dallas.

June 2-5—*ABC-TV* annual affiliates meeting. Century Plaza, Los Angeles.

June 8-11—*NBC-TV* annual affiliates meeting. Hyatt Regency, Maui, Hawaii.

June 11-15—*Broadcast Promotion and Marketing Executives/Broadcast Designers Association* annual seminar. Loew's Anatole, Dallas. Future con-

Major Meetings

ventions: June 10-14, 1987, Peachtree Plaza, Atlanta; June 8-12, 1988, Bonaventure, Los Angeles, and June 21-25, 1989, Renaissance Center, Detroit.

June 14-18—*American Advertising Federation* national convention. Grand Hyatt, Chicago.

June 19-22—*NATPE International* second annual production conference. Adam's Mark hotel, St. Louis. Information: (212) 757-7232.

June 22-25—*Cable Television Administration and Marketing Society* annual convention. Westin Copley Plaza, Boston.

■ **July 23-25**—*Eastern Cable Show*, sponsored by *Southern Cable Television Association*. Atlanta Market Center, Atlanta.

Aug. 26-29—*Radio-Television News Directors Association* international conference. Salt Palace Convention Center, Salt Lake City. Future convention: Sept. 1-4, 1987, Orange County Convention Center, Orlando, Fla.

Sept. 10-13—*Radio '86 Management, Programming, Sales and Engineering Convention*, sponsored by *National Association of Broadcasters* and *National Radio Broadcasters Association*. New Orleans Convention Center, New Orleans.

Sept. 19-23—11th International Broadcasting Convention, sponsored by *Electronic Engineering Association*, *Institution of Electrical Engineers*, *Institute of Electrical and Electronics Engineers*, *Society of Motion Picture Engineers*, *Institution of Electronic and Radio Engineers* and *Royal Television Society*. Metropole conference and exhibition center. Brighton, England.

Oct. 2-5—*Association of National Advertisers* annual convention. Homestead, Hot Springs, Va.

Oct. 14-16—*Society of Broadcast Engineers* na-

tional convention. St. Louis Convention Center.

Oct. 24-29—*Society of Motion Picture and Television Engineers* 128th technical conference and equipment exhibit. Jacob K. Javits Convention Center, New York. Future conference: Oct. 30-Nov. 4, 1987, Los Angeles Convention Center; Oct. 14-19, 1988, Jacob Javits Convention Center, New York, and Oct. 22-27, 1989, Los Angeles Convention Center.

Oct. 28-30—*Atlantic Cable Show*. Atlantic City Convention Center, Atlantic City, N.J. Information: (609) 848-1000.

Nov. 17-19—*Television Bureau of Advertising* 32nd annual meeting. Century Plaza, Los Angeles. Future meeting: Nov. 11-13, 1987, Atlanta Marriott, Atlanta.

Dec. 3-5—*Western Cable Show*, sponsored by *California Cable Television Association*. Anaheim Convention Center, Anaheim, Calif.

Jan. 23-27, 1987—*NATPE International* 24th annual convention. New Orleans Convention Center, New Orleans.

Feb. 1-4, 1987—*National Religious Broadcasters* 44th annual convention. Sheraton Washington.

Feb. 6-7, 1987—*Society of Motion Picture and Television Engineers* 21st annual television conference. St. Francis hotel, San Francisco. Future conferences: Jan. 29-30, 1988, Opryland hotel, Nashville, and Feb. 3-4, 1989, St. Francis hotel, San Francisco.

Feb. 7-10, 1987—Seventh annual Managing Sales Conference, sponsored by *Radio Advertising Bureau*. Hyatt Regency, Atlanta.

May 17-20, 1987—*National Cable Television Association* annual convention. Las Vegas Convention Center, Las Vegas.

June 11-17, 1987—15th *Montreux International Television Symposium and Technical Exhibition*. Montreux, Switzerland.

ference. Mark Hopkins, San Francisco. Information: (914) 592-1155.

April 16-20—*Society of Professional Journalists, Sigma Delta Chi*, region 11 conference for journalists and

student journalists from California, Arizona, Nevada and Hawaii. Sheraton Princess Kaiulani hotel, Honolulu. Information: (808) 536-5510.

April 17—*American Women in Radio and Television, Golden Gate chapter*, benefit (to place "high quality television programs in Bay area pediatric wards"), "Lights, Camera, Auction & Female Comedy Night." Bimbo's 365 Club, San Francisco.

■ **April 17**—*Corporation for Public Broadcasting* conference, "What Curriculum for the Information Age?" Co-sponsors: Teachers College, Electronic Learning Laboratory, National School Boards Association, Teachers College, Columbia University, New York.

■ **April 17**—Ninth annual copyright law conference, sponsored by *Federal Bar Association's Copyright Law Committee*. Library of Congress, Madison Building, Washington. Information: (202) 638-0252.

April 17-18—35th annual Broadcast Industry Conference, sponsored by *San Francisco State University's Broadcast Communication Arts department*. University campus, San Francisco. Information: (415) 469-1148.

April 17-19—*Pratt Center for Computer Graphics in Design* seminar. Mark Hopkins, San Francisco.

April 18—*National Association of Telecommunications Officers and Advisors* regional conference. American hotel, Atlanta. Information: (202) 626-3250.

April 18—*Television Bureau of Advertising* regional sales conference. Crystal City Marriott (Arlington, Va.), Washington.

April 18-20—*Kentucky Cable Television Association* general membership meeting. Ramada Inn, Maysville, Ky.

April 18-20—*Society of Professional Journalists, Sigma Delta Chi*, region two spring conference. Quality Inn Commonwealth, Richmond, Va.

April 18-21—Presentation of fourth annual Alcoholism and Communications Marketing Achievement Awards, sponsored by *National Foundation for Alcoholism Communications*. Awards ceremony to be held during *National Council on Alcoholism* convention. St. Francis hotel, San Francisco. Information: (206) 282-1234.

April 18-21—*Associated Press Television-Radio Association of California-Nevada* 39th annual convention. Speakers: Bob Moon, AP Network News, and Howard

FREEZE FRAME BROADCASTING

Colorado Video offers three unique solutions to the effective, low cost delivery of visual information:

- **Subcarrier transmission** of "still-frame" color images in 8 seconds over a 10 kHz channel. Use FM radio, television or satellite.
- **Vertical interval multiplexing** in a conventional television signal.
- **Time division multiplexing** of single frames into a normal TV program (or mix four separate programs onto a single channel with slightly reduced motion reproduction).

Selective addressing may be used to allow special routing to individual locations. Computer image storage and retrieval provides exceptional programming convenience.

Call us for more information.

Colorado Video Inc. SEE US AT THE NAB
BOOTH 3447

Box 928 Boulder, Colorado 80306 USA

(303) 444-3972 TWX 910-940-3248 COLO VIDEO BDR

Rosenberg, media critic, *Los Angeles Times*. Disneyland hotel, Anaheim, Calif. Information: Rachel Ambrose, (213) 746-1200.

April 18-20, 22-27—*Global Village* 12th annual documentary festival. Grants are made by *New York State Council on the Arts and National Endowment for the Arts*. Global Village is nonprofit video resource center. Public Theater, New York. Information: (212) 966-7526.

April 21—Telecast of Academy of Television Arts & Sciences "Television Hall of Fame." NBC-TV.

April 22—"Audio Location Recording Techniques," seminar sponsored by *International Television Association, Philadelphia chapter*. Philadelphia Electric Co., Philadelphia. Information: (215) 546-1448.

April 22—*International Radio and Television Society* newsmaker luncheon. Speakers: Ted Turner, Turner Broadcasting System, and Jack Valenti, Motion Picture Association of America. Waldorf-Astoria, New York.

April 22-24—*Television Bureau of Advertising* management seminar, "Marketing Your Station for Success." TVB headquarters, New York.

April 22-25—"Videographics" seminar, sponsored by *Poynter Institute*, nonprofit educational institution. Institute building, 801 Third Street South, St. Petersburg, Fla. Information: (813) 821-9494.

April 23—Presentation of fourth annual Lowell Thomas Award for excellence in broadcast journalism, sponsored by *Marist College*, Poughkeepsie, N.Y. Helmsley Palace, New York. Information: (914) 471-3240.

April 23-27—Fourth annual National Hispanic Media Conference, sponsored by *National Association of Hispanic Journalists*. Omni International hotel, Miami.

April 24—*Illinois Broadcasters Association* seminar at Southern Illinois University, Carbondale, Ill.

April 24-29—22nd annual *MIP-TV*, international television program market, Palais des Festivals, Cannes, France. Information: David Jacobs, (516) 364-3686.

April 25-27—*National Federation of Local Cable Programmers* Southwest regional conference. Sheraton Crest hotel, Austin, Tex.

April 25-27—*Texas AP* 25th annual awards banquet and convention. Marriott, Corpus Christi, Tex.

April 26—*National Hispanic Media Conference*, sponsored by Hispanic Academy of Media Arts and Sciences, National Association of Hispanic Journalists, National Association of Hispanic Publications and Florida Association of Hispanic Journalists. Omni International hotel, Miami. Information: (818) 509-1066.

April 26—Presentation of ninth annual Boston/New England Emmy Awards. Host: Ted Knight, actor. Presenters of news awards: INN's Morton Dean and CBS *Nightwatch* anchor Charlie Rose. Boston Marriott Copley Place.

■ **April 26**—"Is Network News Dying/The Future of Local News," seminar sponsored by *Graduate School of Journalism, University of California*, Berkeley. Keynote speaker: Jeff Greenfield, ABC media critic. Other speakers include: Tom Wolzien, vice president, NBC News; Stanley Hubbard, president, Hubbard Broadcasting and Conus; John Corporon, president, Independent Network News; and Peter Herford, producer, *CBS Sunday Morning*. Information: (415) 642-3383. University of California, Berkeley.

April 27-29—*Cabletelevision Advertising Bureau* fifth annual conference. Sheraton Centre, New York.

April 27-30—*Public Broadcasting Service/National Association of Public Television Stations* annual meeting. Loew's L'Enfant Plaza hotel, Washington.

April 27-30—*Broadcast Financial Management Association/Broadcast Credit Association* 26th annual conference. Keynote speaker: Brandon Tartikoff, president, NBC Entertainment. Century Plaza, Los Angeles.

April 27-30—*Telecommunications Policy Research Conference* 14th annual meeting. Airlie House, Airlie, Va. Information: (212) 431-2160.

Errata

Picture on page 38 of March 31 issue was not of CBS's Neil Derrough as identified, but of Joe Reilly, president, New York State Broadcasters Association.

April 27-30—*Washington State Association of Broadcasters* annual meeting. Pan Pacific Vancouver hotel, at Canadian Pavilion, Vancouver hotel, Vancouver, B.C.

■ **April 28-May 2**—*Ohio University's Communications Week*. Theme: "Communication, Gender and Society." Keynote speech: Charlayne Hunter-Gault, reporter-commentator, PBS. Memorial Auditorium, Ohio University, Athens, Ohio. Information: (614) 594-6885.

April 30—*Broadcast Pioneers, Philadelphia chapter*, presentation of the "Person of the Year" award to Dick Vermeil, CBS sportscaster. Adam's Mark hotel, Philadelphia.

May

May 1—*Academy of Television Arts and Sciences* forum luncheon. Speaker: Frank G. Wells, president and chief operating officer, Walt Disney Co. Sheraton Premiere hotel, Universal City, Calif. Information: (818) 763-2975.

May 1—*Illinois Broadcasters Association* sales managers seminar. Pere Marquette, Peoria, Ill.

May 1—*Connecticut Broadcasters Association* spring sales and management seminar. Sheraton Waterbury, Waterbury, Conn. Information: (203) 775-1212.

May 1-2—"Teleconferencing: Steps to Take, Moves to Make," sponsored by *National University Teleconference Network*. George Washington University, Wash-

ington. Information: (405) 624-5191.

May 1-3—*National Translator Association* convention. Capri Hotel Plaza, Denver. Information: Fern Bi-beau, (505) 243-4411.

May 3—*Michigan Associated Press Broadcast Association* annual convention and awards banquet. Sheraton hotel, Lansing, Mich. Information: (313) 965-9500.

May 4-5—*Minnesota Broadcasters Association* spring convention and sales seminar. Thunderbird motel, Bloomington, Minn.

May 4-7—*Central Educational Network* annual conference. Presentation by FCC Commissioner James Quello. Amway Grand Plaza hotel, Grand Rapids, Mich.

May 6—*Women in Communications, New York chapter*, annual Matrix awards luncheon. Waldorf-Astoria, New York. Information: (212) 370-1866.

May 7—George Foster Peabody Awards luncheon, sponsored by *Broadcast Pioneers*. Plaza hotel, New York.

May 7—*Caucus for Producers, Writers and Directors* second annual general membership meeting. Chasen's restaurant, Los Angeles. Information: (213) 652-0222.

May 7-8—*Ohio Association of Broadcasters* spring convention. Stouffer Inn on the Square, Cleveland.



Boycott no answer

EDITOR: I must point out that Bob Hansen's "Open Mike" in the March 17 issue, which calls on individuals to voice their objections to scrambling by boycotting Time Inc. products, in no way represents a position held by the overwhelming majority of home earth station industry leaders.

Even SPACE, the home earth station industry's trade organization, recognizes that cable programmers have the right to secure their satellite signals to prevent unauthorized reception.

Unfortunately, the letter tends to reinforce the misconception that "the skies are going dark" for home earth station owners when, in reality, HBO, Cinemax and other scrambled programming services will continue to be among the broad array of viewing options available to backyard dish owners.

Mr. Hansen's energies could be put to better use in developing ways to reduce consumer confusion about the enduring value of home earth stations.—*Larry Carlson, senior vice president, Cinemax, and new business development, HBO Inc., New York.*

Fed up

EDITOR: Boy, am I tired! Tired of trying to dodge shots by the federal government... in particular, the Congress.

So far, I have not been financially hit, wounded or killed by their shots eliminating cigarettes and now smokeless tobacco products. But at some point, at the rate it's going, I'm sure I won't be able to dodge fast enough, and I'll get mine.

Congress's excuse is that the feds can control tobacco advertising on radio and television because they hold our licenses. But let's

be fair. Why not use their other powers, if reduction of tobacco use is their true aim? Why not tell magazines and newspapers they must pay first-class postal rates if they carry the ads? Why not dictate to the states—as they do with the 55-mile speed limit and tandem trucks—that if the state allows billboards promoting tobacco along roads and highways built or maintained with federal funds, all federal funds would be withheld?

And wouldn't it be nice to close the loophole allowing political candidates to voice the ad disclaimer and get the lowest station rate? Do newspapers and billboard companies reduce rates if his picture appears? The intent was to get the candidate to talk about issues in his ad... not tell us who's paying for it.

It surely would be nice not to feel like a second-class citizen again.—*Willis L. Stone, president/general manager, WEVA(AM) Emporia, Va.*

What's next?

EDITOR: While listening to a sex-talk program on WLS(AM) Chicago, I got a great idea for the next stellar radio format.

Fifty percent of programming would be sex-talk, and for the rest of the day announcers could read case stories of the most hideous, gruesome murders every committed. Think of it! Great shock value, lots of vivid imagining. The only drawback is, what would stations do in a couple of years when the appeal of this grew boring and dull for listeners?

If AM has truly become this desperate, it's time to pull the plug. I can think of several viable options—none of which involves prostituting ourselves.—*Terry Clevenger, tcConcepts, Fairway, Kan.*

Why WTTG is America's Number One Independent.

#1

**INDEPENDENT STATION
IN AMERICA**

SIGN/ON – SIGN/OFF FOR
6 CONSECUTIVE SWEEPS

#1

**INDEPENDENT
NEWSCAST IN AMERICA**

HIGHEST-RATED

#1

**PM MAGAZINE
IN AMERICA**

PRIME-TIME

#1

**PRE-SEASON
FOOTBALL IN AMERICA**

HIGHEST-RATED
LOCAL SERIES

#1

STATION IMAGE

WINNING INTV AWARD
TWO YEARS IN A ROW

#1

**WASHINGTON'S
MOST-WATCHED STATION**

NET WEEKLY CIRCULATION

When your foundation is solid, the sky's the limit.



WASHINGTON, DC

And we did it Independently.

REPRESENTED BY KATZ  INDEPENDENT TELEVISION

Source: Nielsen Top 100 Markets Feb. '86, Nov. '85, May '85, Feb. '85, Nov. '84, May '84 Viewers in Profile;
Nielsen Meter Market Service 8/85.

Broadcasting Apr 7

Vol. 110 No. 14

'Mortgaging the future': Goldenson warns against takeovers

Leonard Goldenson, the former chairman and chief executive officer of ABC and now a director of Capital Cities/ABC Inc., warned 1,000 top business executives that recent trends in American business could hurt the long-term health of the economy and even spill over and negatively affect other parts of society.

"We are witnessing a frenzy of activity in business, and on a scale never experienced before," he said. "But it isn't activity that appears to be creating new viewers, new products or new jobs, or for the most part, new competitive leadership—at least, not so far."

Goldenson's remarks were part of an acceptance speech for Pace University's Leaders in Management Award, presented at a dinner on April 3 at the Waldorf-Astoria hotel in New York. Pace also awarded Goldenson an honorary Doctor of Humane Letters degree.

Goldenson's speech is possibly the nearest any senior member of the Fifth Estate has come to openly criticizing the mergers and acquisition frenzy of communications companies over the past two years. Goldenson said he was speaking "not as a philosopher, but as a businessman—and a man who took the American Broadcasting Companies into a merger with Capital Cities Communications."

According to Goldenson, part of the problem in American

business today—and this is no less true, maybe even more so regarding communications/media companies—is that the "future depends on creating new ventures and expanding successful ones—not on refinancing or dismembering those that already exist. We seem to be forgetting that, if it's cheaper to buy a company than start a new one, we will invest only in the past and mortgage the future."



While business deals have moved up from the back pages to the front pages of newspapers, Goldenson said that is not necessarily good news. "Our major economic focus is simply round after round of mergers and acquisitions of companies that already exist. And what these mergers and acquisitions appear to be producing, for the most part, is little more than growing legions of investment bankers and deal makers—and a bottomless ocean of debt."

But Goldenson emphasized he did not want his remarks to be interpreted to include the Capital Cities-ABC merger.

That merger, he pointed out, came about because "I felt it was essential to insure the continuity and future of the broadcasting company that has been an important force in American life for more than three decades—and the life's work of myself and many of my colleagues. I chose to do so because I was deter-

Continues on page 36.

FCC prescribes major treatment for AM ills

Among suggestions open for comment: reducing clear channel protection, relaxing ownership restrictions and duopoly rule, allowing licensees to buy and sell interference rights, studying ways to allow nighttime operation for daytimers, approving translators and multiple transmitters

The FCC last week agreed to release its much-anticipated "Report on the Status of the AM Broadcast Rules."

Copies of the report may not be generally available for a week or so. They had yet to be printed last Friday (April 4).

Judging from an advance copy obtained by BROADCASTING, the 106-page report may not contain a panacea for the industry, but it will give the industry plenty to chew on for months to come.

If all goes as planned, notice of the report will be published in the *Federal Register* soon, and the public will be invited to comment on its findings and proposals until July 1. After that, the FCC Mass Media Bureau will summarize the comments for the commissioners, and, under their guidance, issue

the first round of rulemaking proposals stemming from the study some time next fall.

The report may not contain good news for all AM broadcasters. It gives operators of AM clear channel stations reason for pause. "The widespread growth of FM service and the continued assignment of additional AM stations have substantially reduced the numbers of persons dependent at night upon secondary (skywave) AM service," the report said. "This makes it appropriate to consider whether, particularly east of the Mississippi River, it is justifiable to protect skywave service areas of Class I clear channel stations at distances from their transmitters where they are able to provide only intermittent, widely fluctuating service. The price of such protection is to curtail the possibilities for improving AM primary (groundwave) service."

Reason for further pause: At the FCC meeting last week where the report was officially presented, Commissioner James Quello, who identified himself as "a strong clear channel man in the past," said: "It's time for us to revisit the whole thing."

The other commissioners also had good things to say about the report. Chairman

Mark Fowler said he thought it represented "a good step toward the print model," at least for AM radio. "The day will come when we will regulate only technically and only in the narrowest sense, and treat everything else as newspapers are treated," Fowler said. "The antitrust laws will apply. If somebody wants to own two FM's and three AM's in a market, it may be possible in New York that that [is] very pro-competitive. So I think this is a very good step, and it has some very innovative thinking in it, particularly the idea of permitting stations to buy and sell interference rights, which makes a lot of sense from a public interest standpoint as well."

Among the areas the report targets for exploration is possible relaxation of ownership rules for AM radio. The report suggests relaxing duopoly restrictions for AM's. It also suggests considering permitting common ownership of AM and TV stations in the same market, and common ownership of a daily newspaper and an AM station in the same market.

In the text of the report, the bureau said the current AM duopoly rule was "unneces-

sarily impeding the free operation of marketplace forces." Among other things, the bureau said the rule, based entirely upon overlap of 1 mv/m contours, doesn't consider other relevant factors. It's also tougher than the duopoly rule for FM's because the 1 mv/m AM signal, the measure for prohibited overlap, is not equivalent in quality to the 1 mv/m signal of FM stations. One remedy, the bureau said, would be to consider permitting combined ownership of AM's whose 1 mv/m contours overlap. "Easing of existing duopoly restrictions would enable AM broadcasters to take advantage of economies of scale that are not currently possible," the bureau said. The bureau also noted that operation of two AM stations serving a common area may actually enhance competition by permitting AM broadcasters to compete more effectively in the radio marketplace. "The commission permits parties to own and operate AM and FM stations serving a common area," the bureau added. "We do not believe that the ownership of two AM stations in the same market is any different in terms of its effect on competition and diversity of viewpoint from commonly owning AM and FM stations in the same market."

As alternatives, the bureau suggested permitting overlap questions to be considered on a case-by-case basis; setting the prohibited overlap at 2 mv/m contours, or prohibiting the location of a proposed transmitter within the 0.5 mv/m contour of an existing commonly owned station. "This approach

would considerably relax the rule because it is triggered by transmitter site location as opposed to overlapping contours," the bureau said.

On one-to-a-market revisions, the bureau was less enthusiastic. "In view of our recommendation to modify the AM portion of the duopoly rule, we are of the view that no further changes should be made with respect to the one-to-a-market rule," the bureau said. But, "the commission could request comment on whether the current rule should be relaxed to permit the common ownership of VHF and AM combinations to be considered on a case-by-case basis."

On relaxation of the newspaper-broadcast crossownership prohibition, the bureau also appeared unenthusiastic. "Like the one-to-a-market rule, the newspaper crossownership rule places some restraints on marketplace forces in the AM service," the bureau said. "However, the bureau does not believe that those restraints necessitate modification of the rule. If any parties wish to seek modification of the newspaper crossownership rule, they would be free to come forward with pertinent proposals."

The bureau also recommended that synchronous transmitters and satellite stations that broadcast the same programs at the same time as main stations not be counted against a broadcaster's national ownership limitations. "We believe that these new stations could serve as useful adjuncts to traditional AM stations and would enable AM broad-

casters to compete more effectively in the radio marketplace," the bureau said. The bureau also said that the "fewer restrictions the commission places on the use of multiple transmitters, the greater the possibilities that broadcasters will be able to use them innovatively to the benefit of the radio audience."

In another proposal, the bureau suggested considering permitting AM station licensees to buy and sell interference rights. "It may be timely to consider inviting comments on rule amendments that would empower AM station licensees to enter into agreements with each other under which, for a valuable consideration, they could accept interference at a level generally prohibited under the present inflexible rules," the bureau said. "This would relieve radiation restrictions calculated under national formulas that do not take into account whether, in individual cases, the service so protected falls entirely within or partly outside of areas that are populated or in which a significant audience of the protected station is found. Marketplace considerations could permit a redistribution of protected service that more realistically corresponds with local realities."

The bureau also said that studies of two ways to reduce barriers to nighttime operation of daytime-only stations appeared to be warranted. "One is possible curtailment of nighttime protection afforded to the secondary (skywave) service areas of Class I AM stations by co-channel Class II stations," the

Continues on page 38.

Continued from page 35.

mined ABC would never fall under the control of any company or individual who would not uphold its public trust.

"We became prey to the specter of unfriendly takeover attempts, and to the prospect of a successful raid by people who might then try to make a quick killing by dismembering the company and selling parts of it off."

Goldenson zeroed in on Wall Street arbitrageurs, investment bankers and corporate raiders for creating havoc in the American business economy and disrupting enterprises that took lifetimes to build—for the sake of increasing their own wealth. "What are the consequences of an economic climate that refuses to recognize that a company may have any value beyond transient stock market prices? What does it mean to deny that corporations represent any long-term value as ongoing institutions—or that they have any obligations that extend beyond their shareholders? These shareholders, let me add, are often arbitrageurs who may own a company's stock for a few hours or a few days, and who nonetheless have rights that take precedence over those of employees who've been part of a company for years."

Even more ominous than the wave of mergers and acquisitions is the increasing way in which many of these transactions are financed, Goldenson said. He warned that when companies assume large amounts of debt and are in hock up to their ears, they cannot afford the capital to spend on programming and community service.

On the other side of the coin, Goldenson criticized the use of high-risk "junk bonds" that many companies are issuing to raise equity to finance their acquisitions or takeovers. He said financial institutions mix junk bonds with high-grade bonds "and in doing so, these high-grade bonds are converted into junk themselves. Without warning, investors in quality bonds can find that a takeover artist and compliant financial institutions have bled much of the value from their investments."

While there is no doubt in Goldenson's mind that such Wall Street wizardry is pernicious to American business because it gambles the future on a risky proposition, he said it is even worse for the broadcasting and communications industries because they are charged with public service.

"I fear that one of the most insidious by-products of the current merger mania may be the loss of the sense of stewardship," he said. "Stewardship is a value that has governed the growth and continuity of American companies from generation to generation." He added that "stewardship is also a value to which those of us in broadcasting have always been acutely sensitive. Because our business is more than a business. It is a public trust. We are entrusted with the power to communicate...to provide every American with news, information and entertainment programming on which they rely to know their world."

"In the larger context of broadcasting, I have concerns about the future for many companies. I see a growing possibility that television and radio stations could be flipped from owner to owner for quick profit, with little commitment to their communities and—burdened with excess debt—little to invest in creativity and community affairs."

The unfortunate conclusion, according to Goldenson, could be that the diversification of media ownership could shrink into a few large hands because, as the pitched frenzy of station trading continues to push up the value of those properties beyond "any further investment value," only the large and wealthy conglomerates can afford to be in that business.

Then, said Goldenson, the light from the picture tube would fade.

"These will have to be companies with deep pockets, as well as the ability to operate broadcasting properties profitably through economies of scale. Should this day come, there is a danger of finding a communications community characterized by the increasing blandness that is sometimes the counterpart of diminishing diversity."

McKinney's insight on AM report

James McKinney, FCC Mass Media Bureau chief and guiding light behind the "Report on the Status of the AM Broadcast Rules," said last week that the case for reviewing AM regulation is simple. "There is no other service for which such a review is more appropriate," McKinney said, in formally presenting the report to the commissioners last week. "AM broadcasting already is more than 60 years old, and while we have made great strides in updating the AM rules, some of the basic assumptions are little changed from the earliest days of the commission. Thus, the purpose of this report is to explore the full range of AM broadcast regulation. We believe it is important to recognize the far-reaching changes that have taken place in AM broadcasting, and it is important to continue the effort to create a competitive and unregulated marketplace. Our overall goal in this exercise is to relieve radio broadcasters of outdated licensing and regulatory constraints, thereby freeing their entrepreneurial ingenuity to compete more effectively in the marketplace. This, in turn, will enable them to better serve the listening public."

At the same time, McKinney doesn't believe the FCC should rejigger its rules to tilt the playing field in favor of AM. And McKinney made it clear that the report may lead to appropriate additional relief for FM as well. "If in the process of going through this exercise, we find rules that should be relaxed or abolished for AM and FM, I can assure you we will propose rulemakings for both," McKinney said. "It is not our desire to tilt the playing field at all."

In presenting the report, McKinney emphasized some areas of the report. On assignment principles, McKinney said "a new approach to channel and station classification could lead to more efficient channel use given recent changes in international systems of classification. A rule change in the definition of a community could facilitate service not possible under the current definition. . . . Also, in view of the widespread growth of FM as well as AM, a question exists as to the continuing need to protect a Class I station's 0.1 mv/m groundwave signal or to provide protection to the skywave signals of these stations, especially in areas east of the Mississippi, where there's so much AM and FM service."

On engineering standards, McKinney said that the availability of computers offered an opportunity to perform skywave calculations with more accuracy and greater flexibility than before. "For the first time, it would be possible to discontinue the 50% exclusion practice and take other approaches to these calculations to more accurately reflect the impact of multiple interfering signals," McKinney said. "Man-made interference continues to be a concern, and we believe that comment should be sought on a possible strengthening of RF noise limitations or improvements in receiver performance standards," he added.

On operating requirements, McKinney said: "Although the commission does not have programing rules as such, it does have rules which inhibit licensee ingenuity in developing the best programing approach in a given market. Among the examples identified are the minimum operating schedule and the requirement that a fixed percentage of programs originate locally. New opportunities also are available in the use of AM for foreign language programing or for the station to use its main carrier to transmit ancillary services when the station is not broadcasting."

On ownership restrictions, McKinney said that further action appeared warranted to "deal with the anomalous situation in which one party could, for example, own an AM and an FM station in a given area but not two AM stations even though it

[ownership of the two AMs] could have a lesser impact on competition. Likewise, the current rules give no recognition to the more restrictive ownership prohibitions that occur because of AM signal propagation conditions. Simply stated, an individual may, under the present rules, own more FM or TV stations in a given area than AM stations, simply because AM waves travel farther."

McKinney also emphasized report proposals for possible further relief for AM daytimers. "Just as the commission has proceeded to provide nighttime operation for all daytime-only stations on foreign Class I-A clear channels, it could consider such a possibility for Class III daytime-only stations on regional channels," McKinney said. "Finally, there are important opportunities to extend AM service and make it more competitive through the use of synchronous operations or the establishment of AM satellite stations or AM/FM translators."

In an interview with BROADCASTING, McKinney said he thought the clear channel/daytimer issues would be among the most controversial raised by the report. "Clearly, we'll see a lot of industry churn on the issue of protection for clear channels," McKinney said. But McKinney added that east of the Mississippi,

where perhaps one clear channel may be "holding back 100 daytimers from increasing their power, or getting any power at nighttime...should we really be protecting them [clear channels] so much?"

McKinney also made clear that the bureau did not want to launch a single omnibus rulemaking on the some 30 separate issues raised in the report. Instead, the bureau hoped to "pace itself" and launch narrow rulemakings, dealing first with the issues the commissioners deem most important.

McKinney was reluctant to predict just which items would be proposed in the first wave of rulemakings next fall. That will be up to the commissioners, he said. But McKinney added he "wouldn't be surprised" to see proposals aimed at permitting satellite transmitters and synchronous operations in the first round. "They're going to require more time. You not only have to write a rule that changes an old rule, but they may require construction of new equipment, testing, experimentation. So issues like satellite transmitters and use of synchronous operations are things that I think we ought to get along with soon so we can get all the data to make a final decision."

McKinney also hinted that the proposed duopoly revisions may not be so high a priority. "The commission realistically has taken fairly firm positions on duopoly, and I think it's going to be hard to overcome," McKinney said. "That doesn't mean they don't want to do it; it just means it may not be timely at this time. So whether that one would be one of the first to happen is highly questionable."

At a press conference, McKinney also said he believed that man-made noise has had a dramatic impact on AM. "We have allowed, it seems to me, a steady and continuous increase in the overall level of noise that harms the AM band much more than it does the FM band," McKinney said. "It is time to relook at the amount of noise we allow to be created in the band. The FCC has the ability to control the level of that noise."

McKinney, at the same time, warned the industry not to expect an immediate reduction in noise levels, even if the commission decides to upgrade its oversight in the area. "It certainly will take many years, assuming grandfathering should go in," McKinney said. "If we were to increase the limitations, it would take many years to get that old equipment off the market. But we need to start at some point in time."



Continued from page 36.

bureau said. "Another would be removal of the present minimum power restrictions, which would permit daytime stations, including those on Class III channels, to make such nighttime use of available spectrum space in the AM band as would afford due protection to other stations. Because difficulties with daytime-only station operation may be expected to be compounded by adding to their number, there appears to be little reason to foster the creation of new ones."

On multiple transmitters, the bureau said: "In the areas most needing it, crowded conditions in the AM band limit opportunities for improving AM service by the traditional means of increasing power, utilizing directional antennas, or relocating transmitters. It is desirable to consider permitting AM stations to use multiple transmitters for simultaneous broadcast of a station's programs. Several possibilities that merit consideration include the use of additional transmitters operating synchronously, AM satellite stations operating on several frequencies, and the possible use of AM or FM translators."

Another set of recommendations suggests eliminating rules requiring local origination

and specifying minimum hours of operation for AM stations. The same section also suggests permitting AM stations to carry the sound of foreign language programming being broadcast on television, and permitting AM broadcasters to use their AM carriers for nonbroadcast transmissions when they're not broadcasting. "At such times it would not be necessary that the auxiliary service be inaudible on conventional receivers," the bureau said.

On the engineering front, the report asserts that the technical disparity in quality between AM and FM reception can be overcome to a "substantial" degree. "AM stereo... , synchronous detectors, improved design of RF, IF and audio stages of AM receivers could help," the bureau said. "The commission could usefully consider additional emission limitations concerning AM broadcast transmissions, as well as possible limitations on some forms of audio processing that conflict with the emission requirements of AM stations broadcasting higher fidelity signals than in the past," the bureau said.

The bureau also recommended re-examining the "50% exclusion practice" in calcu-

lating the aggregate interfering effect of multiple interfering signals; getting comment on possible emission limitations on incidental radiation devices and considering minimum performance standards for AM broadcast receivers.

On the assignment front, the report suggested discontinuing confining the assignment of the several classes of stations to channels of designated classes; permitting AM broadcasters to define the "focus and timing" of their service more flexibly; eliminating or reducing protection now given to skywave service east of the Mississippi River; providing daytime protection to the 0.5 mv/m contours of Class I clear channel stations instead of to their 0.1 mv/m contours; loosening or abandoning "the rigid limitations against specified signal strength overlap," examining the desirability of modifying both maximum and minimum power levels of AM stations; considering changing present protection ratios, and encouraging improvement of degraded antenna systems and the submission to the FCC of industry data on experience with new antenna designs that should be taken into account in considering rule reforms. □

Payola probe sparks controversy between CBS and NBC

Story on 'Nightly News' suggests CBS Records under investigation; Wyman denies, criticizes report; Gore to hold Senate hearings

Congress is once again focusing its attention on claims of record promotion payola involving the radio industry, and the latest allegations have resulted in a conflict between CBS and NBC News.

Senator Albert Gore Jr. (D-Tenn), who as a congressman headed a 1984 House investigation that found "no credible evidence" of improper activity among independent record promoters, announced at a press conference in Washington on April 2 that the Senate would launch an investigation into payola.

That move is the latest in a series of developments that began with a Feb. 24 *NBC Nightly News* report alleging widespread payola among independent record promoters as well as a purported link to organized crime ("Riding Gain," March 3). That was followed by a New York federal grand jury subpoena of documents from the Recording Industry Association of America concerning the practices of independent record promotion firms, and by the suspension of independent promotion by a number of record labels (BROADCASTING, March 10). Last Monday (March 31), *NBC Nightly News* reported that federal grand juries in both New York and Los Angeles had begun to subpoena documents from major record companies on their use of independent promoters.

"Recent disclosures in the public media as well as announcements by the Justice Department that grand juries have been convened to investigate this and other matters, make it clear that something is wrong," said Gore. The senator said that although he encountered "difficulty in persuading wit-

nesses to speak publicly about the practice" when he headed the House investigation, he found "ample reason to believe that there were illegal practices in the way records were promoted." Congress now has a duty "to take another look, with a full investigation [to be conducted by the Senate Permanent Subcommittee on Investigations] into the nature and extent of the problem."

The March 31 *Nightly News* report also suggested a connection between CBS Records and the payola allegations, drawing sharp criticism from CBS Chairman Thomas Wyman, who called the story a "second-class example of broadcast journalism." NBC Chairman Grant Tinker countered by

saying Wyman's comment was "unfortunate" and his words "ill chosen." NBC News, said Tinker, "does not do second-class work."

The NBC report, anchored by correspondent Brian Ross, said CBS Records "did the most business with the independent promoters now under investigation." It also cited unnamed industry executives as saying that Walter Yetnikoff, president of CBS Records, "had a lot to do with stopping an investigation [into independent promoters] by the RIAA earlier this year."

Yetnikoff, in an April 3 *New York Times* report, said he first opposed a RIAA investigation into independent record promotion, objecting only to the RIAA's proposed approach, but said he later "endorsed" an association investigation. (CBS Records has "curtailed substantially" its use of independent promoters.)

Wyman, in a memorandum sent to the CBS Records Group and other CBS department heads, gave Yetnikoff a vote of confidence, calling the CBS Records president a leader in the industry "in every sense."

Wyman said the memo was written as a confirmation on how "unhappy" CBS is about the NBC broadcast. "There have been questions about the independent promotion business," said Wyman, "but in spite of intensive investigation on our part, we have no reason to believe that CBS people have been involved in condoning or participating in the activities suggested." He said CBS "was exploring whether further steps can be taken to correct the extremely unfortunate misimpressions created by this broadcast."

An *NBC Nightly News* spokesman said NBC "stands behind its report." He added that Yetnikoff was given "repeated opportunities to appear" in the report and declined. □



Gore

NBC edges CBS in February sweeps

Closer analysis of race that appeared to be a dead heat shows NBC nudged ahead of CBS

Network analysis of the Arbitron and Nielsen diary data reveals that NBC squeaked out a small margin of victory over CBS in the prime time ratings. Based on the national overnight prime time ratings collected at the close of the sweep period, CBS and NBC were thought to have tied in February (BROADCASTING, March 3). But a closer look at the diaries shows that NBC won its first February sweeps in its history (a year earlier it won the demographics but lost the households to CBS). In addition, both CBS and NBC improved upon their year-ago performance, while ABC was off several percentage points.

An NBC analysis of both Arbitron (223 markets) and Nielsen (223 markets) data shows that NBC was up 9% in Nielsen and 7% in Arbitron over the February 1985 sweeps. NBC delivered an average 15,797,000 households per quarter hour in prime time based on Nielsen diaries, and 15,062,000 households based on Arbitron diaries.

NBC said that ABC was down 7% in Arbitron with 12,859,000 households, and CBS was up modestly (2%) from a year earlier with 14,902,000 households. In Nielsen, ABC was off 4% with 13,225,000 households and CBS was up 4% with 15,655,000 households.

A CBS analysis of 214 Arbitron February

1986 diaries—CBS traditionally does not perform analysis of the Nielsen diaries—showed that NBC boosted its delivery by 7.5% to 14,864,000 households. CBS was up 2.3% to 14,799,000 households and ABC was down 6.7% to 12,740,000 households.

The CBS analysis also said that combined network viewing increased 1.1% to 42,403,000 households per prime time quarter hour. However, since the overall U.S. households population has also increased slightly (1.2%), that nets out to a virtually flat performance compared to last year.

Using data based on 151 Arbitron-defined markets in which each of the networks has a full-time affiliate, CBS said that its affiliates were first in 68.5 markets during prime time, compared to 67.5 markets for NBC and 15 markets for ABC. In second place, CBS had 57.5 markets, NBC 54 markets and ABC 39.5 markets. Third place saw ABC in 96.5 markets, NBC in 29.5 markets, and CBS in 25 markets. (In the case of a two-way tie, each affiliate was awarded half a point).

That compares with 48 first-place finishes for NBC in February 1985, 64 for CBS and 35 for ABC.

NBC's analysis of the Arbitron markets had NBC ranked first in 93 markets, six fewer than a year ago. CBS led in 95 markets, 11 more than last year, and ABC was first in 30 markets, 10 fewer than a year ago. In Nielsen, NBC was first in 90 markets, 10 fewer than a year ago; CBS led in 101 markets, 23

more than last year, and ABC was first in 28 markets, 13 fewer than it had in February 1985.

According to CBS's analysis of Arbitron data, since February 1985 CBS affiliates increased their prime time delivery in 91 markets, slipped in 69 and showed no change in 22. NBC affiliates improved their audience in 109 markets, declined in 54 and recorded no change in 13. The ABC stations moved up in 36 markets, fell in 124 markets (70%) and held steady in 17.

Although starting with the same data, the networks present different numbers, usually with only slight differences. Questions such as whether to measure prime time programming that runs outside that daypart (such as overruns) and how to measure stations with multiple affiliations are responsible for the differences.

The following chart was developed by BROADCASTING from compilations of Arbitron market-by-market reports supplied by CBS. Household numbers are in thousands (000) per average quarter hour (8-11 p.m., Monday-Saturday; 7-11 p.m., Sunday). Boldface numbers indicate the market winner. A dash (—) indicates no primary affiliation in the market. An asterisk shows a new station in the market or an affiliation change between February 1985 and February 1986. A dagger (†) indicates a city included by Arbitron in another ADI. Not included are markets that Arbitron does not measure, including those in Hawaii, Alaska, and St. Thomas, Virgin Islands.

ADI (rank)	1986 households (000)			ADI (rank)	1986 households (000)		
	ABC	CBS	NBC		ABC	CBS	NBC
Abilene-Sweetwater, Tex. (155)	18	22	25	Cedar Rapids-Waterloo, Iowa (73)	56	53	65
Albany, Ga. (150)	4	—	61	Charleston, S.C. (106)	36	50	41
Albany-Schenectady-Troy, N.Y. (51)	83	103	88	Charleston-Huntington, W.Va. (43)	72	92	124
Albuquerque, N.M. (62)	69	53	89	Charlotte, N.C. (32)	102	146	61
Alexandria, La. (163) *	6	—	41	Charlottesville, Va. (197)	—	—	9
Alexandria, Minn. (172)	—	40	—	Chattanooga (80)	50	50	57
Alpena, Mich. (213)	—	6	—	Cheyenne, Wyo. (202) *	—	17	—
Amarillo, Tex. (118)	37	27	28	Chicago (3)	518	411	502
Anniston, Ala. (193)	—	13	—	Chico-Redding, Calif. (140) *	29	25	8
Ardmore-Ada, Okla. (173)	16	21	—	Cincinnati (29)	102	128	126
Atlanta (15)	173	203	205	Clarksburg-Weston, W.Va. (162)	—	26	23
Augusta, Ga. (105)	44	45	28	Cleveland (11)	249	255	264
Austin, Tex. (79)	39	59	46	Colorado Springs-Pueblo (99)	37	37	41
Bakersfield, Calif. (148)	22	26	25	Columbia, S.C. (87)	32	46	89
Baltimore (21)	174	179	189	Columbia-Jefferson City, Mo. (137) *	20	28	28
Bangor, Me. (153)	17	26	21	Columbus, Ga. (115)	51	46	18
Baton Rouge (91)	64	58	46	Columbus, Ohio (33)	98	134	138
Beaumont-Port Arthur, Tex. (122)	34	40	44	Columbus-Tupelo, Miss. (135)	11	27	50
Bend, Ore. (208)	—	5	—	Corpus Christi, Tex. (121)	32	30	28
Billings-Harding, Mont. (165)	15	18	11	Dallas-Fort Worth (8)	244	274	237
Biloxi-Gulfport-Pascagoula, Miss. (180)	37	—	—	Davenport, Iowa-Rock Island-Moline, Ill. (74)	51	60	62
Binghamton, N.Y. (134)	11	50	23	Dayton, Ohio (48)	70	106	74
Birmingham, Ala. (47)	109	43	114	Denver (19)	145	145	180
Bluefield-Beckley-Oak Hill, W.Va. (147)	27	—	34	Des Moines (66)	57	78	66
Boise, Idaho (136)	21	25	31	Detroit (7)	295	278	342
Boston (6)	317	289	332	Dothan, Ala. (160)	7	46	—
Bowling Green, Ky. (196)	24	—	—	Duluth, Minn.-Superior, Wis. (120)	31	32	34
Bristol, Va.-Kingsport, Johnson City, Tenn. (86)	25	54	73	El Centro, Calif.-Yuma, Calif. (182) *	—	4	9
Buffalo, N.Y. (35)	102	109	105	El Paso, Tex. (104)	35	32	46
Burlington, Vt. (98)	11	54	43	Elmira, N.Y. (167)	14	—	14
Butte, Mont. (189) *	—	13	7	Erie, Pa. (138)	25	26	46
Casper-Riverton, Wyo. (185)	15	8	2	Eugene, Ore. (133)	28	33	17

ADI (rank)	1986 households (000)			ADI (rank)	1986 households (000)		
	ABC	CBS	NBC		ABC	CBS	NBC
Eureka, Calif. (184)*	—	10	7	Norfolk-Portsmouth, Va. (46)	73	96	93
Evansville, Ind. (88)	52	46	46	North Platte, Neb. (212)	—	—	9
Fargo, N.D. (102)	32	32	37	Odessa-Midland, Tex. (144)	26	30	23
Flagstaff, Ariz. (206)	—	—	7	Oklahoma City (36)	80	115	99
Flint-Saginaw-Bay City, Mich. (54)	81	47	98	Omaha (70)	68	67	73
Florence, S.C. (145)	22	66	—	Orlando-Daytona Beach, Fla. (27)	116	119	143
Fort Myers-Naples, Fla. (107)	22	43	38	Ottumwa, Iowa-Kirksville, Mo. (204)	19	—	—
Fort Smith, Ark. (149)	18	34	17	Paducah, Ky.-Cape Girardeau, Mo. (75)	36	72	63
Fort Wayne, Ind. (93)	40	42	39	Palm Springs, Calif. (183)	8	—	7
Fresno, Calif. (64) *	50	60	59	Panama City, Fla. (175)	17	—	25
Gainesville, Fla. (170)	18	—	—	Parkersburg, W.Va. (198)	—	—	9
Glendive, Mont. (214)	—	2	—	Peoria, Ill. (100)	39	39	44
Grand Junction, Colo. (177)	8	18	—	Philadelphia (4)	483	426	464
Grand Rapids-Kalamazoo, Mich. (41)	89	88	108	Phoenix (22)	107	152	133
Great Falls, Mont. (178)	14	13	—	Pittsburgh (12)	238	254	202
Green Bay, Wis. (68)	65	58	68	Portland, Ore. (25)	98	120	126
Greensboro-Winston Salem-High Point, N.C. (50)	87	106	90	Portland-Poland Spring, Me. (76)	50	46	58
Greenville-New Bern, N.C. (97)	26	55	60	Presque Isle, Me. (205)	—	9	—
Greenville-Asheville-Spartanburg, S.C. (37)	81	106	124	Providence, R.I.-New Bedford, Mass. (42)	91	92	113
Greenwood-Greenville, Miss. (168)	32	14	—	Quincy, Ill.-Hannibal, Mo. (152)	—	32	30
Hagerstown, Md. (194)	—	—	16	Raleigh-Durham, N.C. (38)	98	112	45
Harrisburg-Lancaster-Lebanon-York, Pa. (44)	63	79	120	Rapid City, S.D. (161)	23	—	15
Harrisonburg, Va. (200)	19	—	—	Reno (125)	28	23	26
Hartford-New Haven, Conn. (24)	122	183	91	Richmond, Va. (63)	66	92	70
Helena, Mont. (210)	—	—	7	Roanoke-Lynchburg, Va. (72)	43	81	69
Houston (10)	247	211	222	Rochester, N.Y. (71)	56	62	63
Huntsville-Decatur-Florence, Ala. (89)	51	52	48	Rochester, Minn.-Mason City, Iowa (142)	25	19	28
Idaho Falls-Pocatello (159)	11	18	20	Rockford, Ill. (112)	31	35	36
Indianapolis (23)	112	142	143	Roswell, N.M. (181)	—	17	—
Jackson, Miss. (85)	29	64	62	Sacramento-Stockton, Calif. (20)	122	139	184
Jackson, Tenn. (190)	29	—	—	St. Joseph, Mo. (188)	20	—	—
Jacksonville, Fla. (61)	50	89	57	St. Louis (18)	158	198	204
Johnstown-Altoona, Pa. (81)	1	59	90	Salinas-Monterey-San Jose, Calif. (110)	42	24	45
Jonesboro, Ark. (178)	31	—	—	Salisbury, Md. (166)	13	22	—
Joplin, Mo.-Pittsburg, Kan. (119)	32	37	27	Salt Lake City (39)	92	100	110
Kansas City, Mo. (30)	115	133	127	San Angelo, Tex. (192)	—	13	—
Knoxville, Tenn. (60)	72	95	48	San Antonio, Tex. (45)	70	107	86
La Crosse-Eau Claire, Wis. (127)	12	34	41	San Diego (26)	89	117	98
Lafayette, Ind. (191)	—	13	—	San Francisco (5)	259	313	307
Lafayette, La. (111)	41	63	—	Santa Barbara-Santa Maria, Calif. (113)	29	26	20
Lake Charles, La. (171)	—	—	42	Sarasota, Fla. (157)	21	—	—
Lansing, Mich. (100)	—	63	47	Savannah, Ga. (108)*	22	47	39
Laredo, Tex. (199)	3	4	4	Seattle-Bellingham-Tacoma (13)	157	155	206
Las Vegas (96)	28	37	45	Selma, Ala. (210)	—	30	—
Laurel-Hattiesburg, Miss. (164)	—	—	32	Shreveport, La.-Texarkana, Tex. (53)	76	78	68
Lexington, Ky. (77) *	44	69	51	Sioux City, Iowa (129)	31	14	34
Lima, Ohio (195)	—	—	20	Sioux Falls-Mitchell, S.D. (95)	41	59	26
Lincoln-Hastings-Kearney, Neb. (90)	27	51	16	South Bend-Elkhart, Ind. (84)	43	58	63
Little Rock, Ark. (55)	75	76	82	Spokane, Wash. (78)	48	54	58
Los Angeles (2)	530	521	624	Springfield, Mass. (103)	31	—	45
Louisville, Ky. (49)	57	109	105	Springfield, Mo. (83)	23	55	64
Lubbock, Tex. (141)	20	27	22	Springfield-Decatur-Champaign, Ill. (69)	49	65	67
Macon, Ga. (132)	16	41	20	Syracuse, N.Y. (67)	54	84	83
Madison, Wis. (109)	36	49	44	Tallahassee, Fla. (130)	13	54	8
Mankato, Minn. (209)	—	13	—	Tampa-St. Petersburg (17)	162	206	188
Marquette, Mich. (186)	—	21	—	Terre Haute, Ind. (131)	11	39	40
McAllen-Brownsville, Tex. (117)	30	32	25	Toledo, Ohio (65)	56	87	90
Medford, Ore. (156)	12	20	29	Topeka, Kan. (143)	14	31	23
Memphis (40)	73	119	115	Traverse City-Cadillac, Mich. (139)	16	41	36
Meridian, Miss. (174)	24	9	6	Tucson, Ariz. (82)	37	42	49
Miami (14)	159	181	176	Tulsa, Okla. (52)	85	76	74
Milwaukee (28)	105	111	130	Tuscaloosa, Ala. (187)	—	11	—
Minneapolis-St. Paul (16)	171	195	169	Twin Falls, Idaho (202) *	—	10	—
Minot-Bismarck-Dickinson, N.D. (146) *	5	26	34	Tyler, Tex. (154)	48	10	—
Missoula-Butte, Mont. (176)	—	13	17	Utica, N.Y. (158)	14	—	26
Mobile, Ala.-Pensacola, Fla. (57)	64	95	78	Victoria, Tex. (207)	6	—	7
Monroe, La.-El Dorado, Ark. (114)	16	62	26	Waco-Temple, Tex. (94) *	18	48	37
Montgomery, Ala. (116)	21	—	64	Washington (9)	212	255	251
Nashville (31)	93	144	138	Watertown-Carthage, N.Y. (169)	—	22	—
New Orleans (34)	91	140	116	Wausau-Rhineland, Wis. (128)	27	40	14
New York (1)	976	1,120	1,133	West Palm Beach-Ft. Pierce, Fla. (56)	45	27	64

ADI (rank)	1986 households (000)			ADI (rank)	1986 households (000)		
	ABC	CBS	NBC		ABC	CBS	NBC
Wheeling, W.Va.-Steubenville, Ohio (124)	—	48	46	Wilmington, N.C. (151)	33	8	61
Wichita-Hutchinson, Kan. (59)	51	74	66	Yakima, Wash. (123)	20	33	27
Wichita Falls, Tex.-Lawton, Okla. (126)	24	27	27	Youngstown, Ohio (92)	44	57	62
Wilkes Barre-Scranton, Pa. (58)	105	64	93	Zanesville, Ohio (201)	—	—	11

Ampex, Sony join forces on video recording front

But Matsushita isn't taking the news lying down; it may have NBC as trump card in planned introduction of new half-inch M-II format

An unexpected alliance between Sony and Ampex—the two largest sellers of broadcast video recorders—has turned the long-escalating rivalry over small-format video between Sony and fellow Japanese manufacturer Matsushita into a full-scale war which could well encompass the entire range of broadcast video recorder formats.

In announcements made in anticipation of next week's National Association of Broadcasters annual equipment exhibition in Dallas, Ampex said last Thursday it had agreed to license Sony's Betacam half-inch video format and design equipment to an enhanced version of Betacam dubbed "SP." Sony also said Thursday it will join Ampex in standardizing an Ampex-developed composite digital technology and intends to build studio videotape recorders to the format.

Ampex representatives described the agreements as a "cross-licensing arrangement of sorts," and the agreements appeared to carry the elements of a mutual arrangement, with Ampex receiving support for its controversial nonstandard composite digital technology (international standards efforts have centered on component digital) in return for providing Sony's Betacam with a critical second source with which to increase its domination of the still slow-growing small-format market.

A Sony spokesman denied, however, that the agreements between the two companies, which together already are believed to control as much as 80%-90% of the U.S. broadcast videotape recording market, were related, and said the timing of the announcements was purely "coincidental."

For a brief period following the announcement, it appeared Matsushita could be outflanked by the two companies, just as its U.S. arm Panasonic was preparing the release of first details on its new half-inch M-II format product family. M-II is to be marketed both as a newsgathering tool and as a studio product to replace the commonly used one-inch Type C studio format.

But Matsushita, Japan's largest corporation, appears to remain determined to penetrate the U.S. broadcast market and may have found what could become a powerful foothold with which to win penetration in the U.S. market. NBC's Michael Sherlock, executive vice president of operations and technical services, told BROADCASTING last Friday that the network expects to end its 18-month search for a new video format this week and gave strong indications it is lean-

ing toward the selection of M-II to fulfill its desire for a "universal" video format.

M-II is of little interest as a video format to Capacities/ABC, however, according to Julius Barnathan, president, Broadcasting Operations and Engineering. Barnathan instead praised the Ampex-Sony announcements as "wonderful" and "healthy for the marketplace," and although he said the network had made no commitment to Betacam, he seemed greatly encouraged there were now two manufacturers of the format. (One network, CBS, already decided last year to purchase Betacam equipment from Sony.)

Matsushita is making its own effort to find additional sources to manufacture its M-II line, which will initially include a studio and field recorder and camera available next fall and a portable field edit package available in 1987. At least one manufacturer, JVC, of which Matsushita owns a controlling interest, will affiliate with the company to manufacture and market the gear.

The Ampex decision to re-enter the half-inch arena was apparently prompted by developments of an enhanced version of Betacam, which Sony plans to demonstrate in a prototype version at a technology exhibit at NAB next week. Earlier in the 1980's, Ampex marketed Matsushita-manufactured camera-recorders using M-II's precursor, M-format, but it sold few, if any, of the units, and has since argued half-inch could serve only as an "interim" format.

Mark L. Sanders, vice president and general manager of Ampex Audio-Video Systems Division, told reporters at a press conference in New York last Thursday that, based on the enhanced version of Betacam,

"Ampex has become convinced that Betacam is the format of choice." Ampex still maintains, however, that half-inch is an "interim" format and that Sony would agree—eight millimeter digital will ultimately be the industry's standard small format.

Although Sony's worldwide sales of Betacam have reached 25,000 units, with 5,000 to 6,000 sold in the U.S. market for an estimated 16% penetration of the ENG market, Sanders said the existing three-quarter-inch U-matic format has remained "ubiquitous," primarily because, despite the advantages of new formats, there have been "too many choices."

The Betacam SP (superior performance), like Matsushita's M-II, will use a metal particle video tape formulation in place of existing metal oxide tape, gaining improvements in cassette play time, luminance (monochrome) bandwidth and signal-to-noise ratio. But unlike M-II, which is incompatible with Matsushita's M-format products, the new Betacam SP and existing Betacam products are essentially interchangeable, with SP tapes playable on both lines and the only limitations being the inability of Betacam to record or edit on SP tapes.

In order to maintain that compatibility, however, some say Sony has had to make certain trade-offs for the format that Matsushita did not—for example, Sony's Betacam SP long-playing 90-minute cassette is apparently larger in size than the standard cassette used by M-II and so less likely to be appropriate for field use.

Sony has set its goal for production models of Betacam SP for 1987, although it has not yet decided how broad the product line



Format foray. Sanders of Ampex (at podium) announcing video format agreements at press conference in New York last week. Also present from Ampex were (l-r) Michael D'Amore, director of worldwide marketing, Joachim (Jock) Diemann, business manager, video recording, and Philip Ritti, director of marketing, Magnetic Tape Division.

will be. Ampex will probably show its first Sony-manufactured Betacam products within six months, and expects to begin manufacturing its own Betacam SP products, including studio and ENG recorder, as well as video cameras, in about one year.

The decision by Sony to accept the Ampex digital technology licensing offer made to recorder manufacturers in March, may vindicate Ampex's controversial choice to make a composite digital format. The move has been the center of a debate over digital standardization since before Ampex's official announcement in January of plans to introduce the nonstandard technology in its new generation ACR-225 commercial spot player to be shown on the NAB exhibit floor next week.

In support of the choice, Ampex had cited such advantages to composite digital as relative ease of implementation in existing broadcast plants using the NTSC analog composite format, as well as the lower cost of the composite digital technology and one-third longer cassette times.

Opponents of the move had argued, however, that the use of nonstandard machines ignores carefully worked out agreements by international bodies, which have nearly completed the approval of a recording standard based on an already-standardized component digital studio signal. The step will also delay the spread of and increase the cost of component machines, it is argued.

Sony, whose agreement with Ampex provides for the two companies to work together in an attempt to standardize the composite digital format, stressed its continued support for the component digital standard, and said any developments in composite digital would not be at the expense of component. The company will be introducing the first commercial component digital product, its DVR-1000 VTR, at the NAB exhibit next week. □

Colino at odds with U.S. and Intelsat board over Israeli satellite system

Intelsat's Director General Richard Colino may be heading into a major new controversy with the U.S., this one involving an Israeli proposal to launch a domestic satellite. And this time, Colino might be taking on a substantial majority of the board as well. For Intelsat's executive organ is understood to have informed Israel that a previous technical coordination of its proposed AMS (Africa, Mediterranean system) is no longer in effect—unless the system is to conform to the information regarding it that Israel had submitted originally. And such an instruction would appear to run counter to an action of the Intelsat board of governors, one that had been engineered by the U.S.

The question regarding the status of the technical coordination of Israel's AMS led to a relatively minor dispute—but one that lent itself to talk of anti-Israel politics—at the board's meeting in March. Israel's proposal for its AMS system had been successfully coordinated on a technical basis at the board's 61st meeting, in December 1984. But since then, Israel had twice made significant changes in the system's parameters—and since November has failed to respond to requests for information Intelsat said was needed to begin a new coordination process. Colino, reflecting the apparent annoyance of the executive organ, recommended that the board rescind the original coordination and begin the coordination process anew.

That would deny Israel's claim to the authority it had received under the original coordination; the slate would be wiped clean. And some in the U.S. government reported-

ly saw the move as an effort by Colino to increase his authority and establish a precedent that could be used in delaying coordination of the separate systems the U.S. has conditionally authorized; a change in parameters requiring recoordination could lead to rescission of the coordination that had been achieved. There was also a report some in the U.S. felt Colino's proposal reflected the kind of anti-Israel politics that Arab and other countries play at the United Nations. Intelsat officials brushed off those charges as baseless. Still, the U.S. managed to win the support of a substantial majority of the board—where voting is weighted according to use of the Intelsat system—to reject Colino's recommendation, and simply to call for recoordination in light of the changes in Israel's proposal.

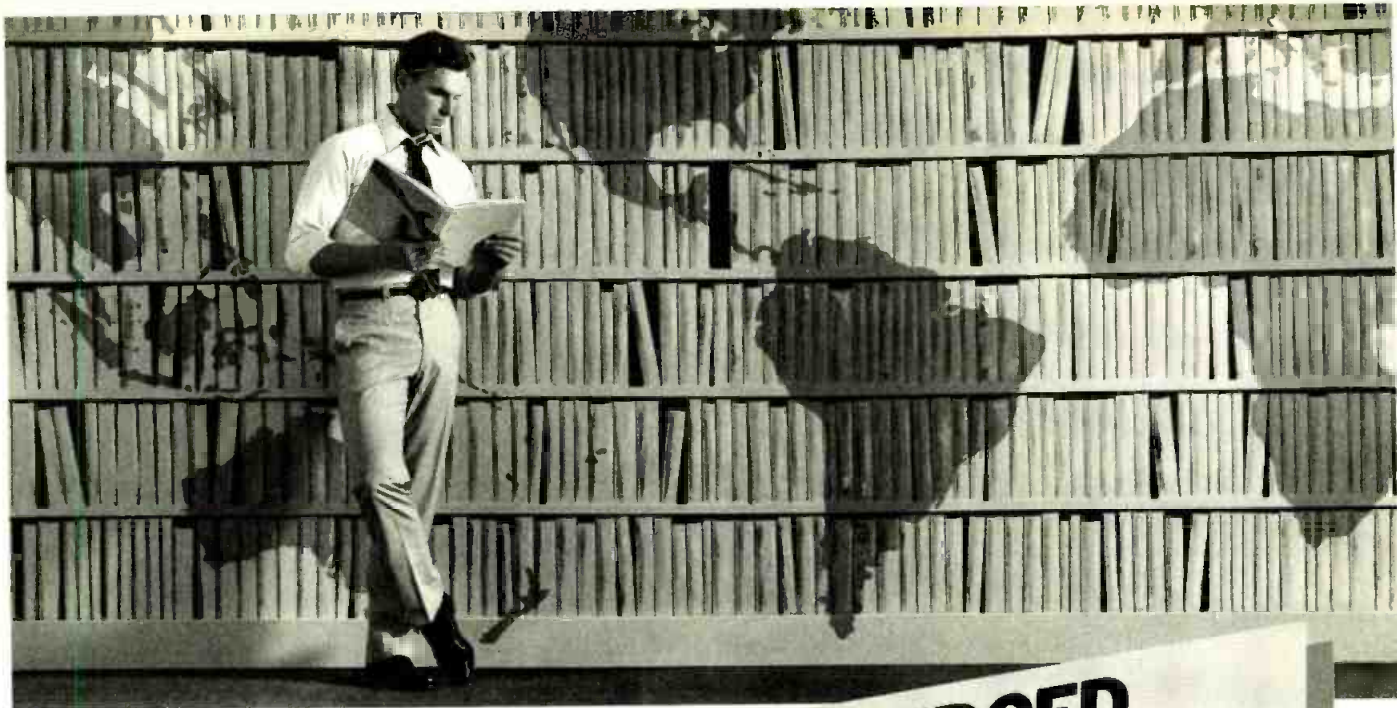
Now, in spite of the board's vote, Israel, sources say, is being told that a new consultation under Article XIV(c) of the Intelsat Agreement is required for the AMS if it does not conform to the information on which its coordination with Intelsat was concluded. And if that is the case, sources say, Intelsat maintains that the previous coordination is no longer in effect—presumably canceled.

U.S. officials as of Friday apparently had not heard of the direction Colino is understood to have taken. But sources contacted indicated there may be trouble ahead. A State Department spokesman said "there was no decision [by the Intelsat board] that the previous consultation need be withdrawn." If it is, he added, "it would be a bad precedent, and we would not agree with it." At the National Telecommunications and Information Administration, an official put what could be a coming conflict succinctly: "If the board thinks things were handled one way, and the executive organ wants to charge off in another direction. I suppose it would raise a question as to who is in charge of this railroad." □



Geneva bound. Members of the U.S. delegation to the western hemisphere conference planning the expansion of the AM band assembled at the State Department last week for a meeting with Ambassador Diana Lady Dougan before departing for Geneva. Shown above (seated, l-r): William Jahn, State Department; Wilson LaFollette, FCC; James McKinney, delegation chairman, FCC; Dougan; Wallace Johnson, Moffet, Larson & Johnson, consulting engineers, and Harold Kimball, National Telecommunications and Infor-

mation Administration. Standing (l-r): Louis C. Stephens, FCC; Elizabeth L. (Betty) Dahlberg, Washington, consulting engineer; Francis (Frank) Williams, FCC; Jonathan David, FCC; John Wang, FCC; Steven D. Selwyn, FCC; Norbert Schroeder, U.S. Information Agency; Fred Matos, NTIA; Larry W. Olson, FCC; John Moddero, State Department, and Fernando Oaxaca, Coronado Communications Corp., Los Angeles. Donald G. Everist, of Cohen & Dippell, consulting engineers, also in the delegation, was in Geneva.



AP TV THE UNABRIDGED EDITION OF THE NEWS.

If you have more reporters than anybody else, and you have them in more places, then you can do a better job of covering the news.

That's one reason 300 of the nation's top newsrooms use the AP TV Wire.

AP TV gives you access to more than 2,800 reporters, strategically spread throughout all 50 states, and in 83 foreign news bureaus.

Which explains why we routinely get to the big stories first.

There's another reason for using AP TV.

AP delivers the news over two 1,200-word-per-minute circuits, via state-of-the-art printers or computer selectors.

One circuit for world and national news, features and advisories.

The other circuit delivers regional news and sports.

AP TV is designed so that you can select the news that's actually delivered to your newsroom. It enables you to manage the flow of information easily.

And AP TV ensures that you get all of the regional events that are

particularly important to your ADI, as well as all of the world's top news.

Something else.

Every news item that AP TV delivers is backed with AP's 138-year-old reputation for getting stories right.

And if that's what you're looking for in news programming, call Jim Williams of AP Broadcast Services at 1-800-821-4747. And ask about the AP TV Wire.

Because when it comes to providing fast, reliable, and unabridged reports from around the world, AP wrote the book.

**AP Associated Press Broadcast Services
Without A Doubt.**



High Tech in the High Country.

Grass Valley Group is situated in the Sierra Nevada foothills in Northern California on 500 acres of wooded 'campus'. If you like elbow room, the outdoors and a healthy space for kids to grow—and would be proud to work for a world class high tech firm—GVG may be just the company you've longed for. At present we are interested in individuals with expertise in the following areas:

ENGINEERING

Senior Software Designer—BSCS or MSCS and three to five years experience with real-time control systems. Requires a working knowledge of unix, C and 68000 assembly, and in-circuit emulators. Knowledge of broadcast/video design and digital hardware design is desirable.

Real-Time Software Systems Designer—Seven to ten years experience in real-time systems implementation and high level language programming. Familiarity with 68000 family processors helpful.

Post Production Systems Engineer—Requires experience in building, operating and maintaining production facilities plus familiarity with switchers, editors and VTR's.

Video Hardware Designer—Design experience in digital video signal processing and/or transmission of video signals. Broadcast television experience is preferred.

Audio Hardware Designer—Must be experienced in the design of audio amplifiers, oscillators, and audio signal processing and distribution.

Digital Video Designer—Background in digital image processing, computer graphics and/or animation and an understanding of 3D video image transformations and real-time adaptive digital filtering techniques. Requires a working knowledge of unix, C and 68000-Family assembly language programming.

MARKETING

Product Marketing Manager—Requires a technical background and related marketing education and experience with a technology based manufacturer. Previous product line responsibility in terms of planning and implementation of pricing, promotion, training and support; familiarity with broadcast and professional video markets.

SALES

Inside Sales Engineer—Position requires a strong technical background equivalent to two years of technical trade school or an AA degree in electronics. Position will be based in a field office after training.

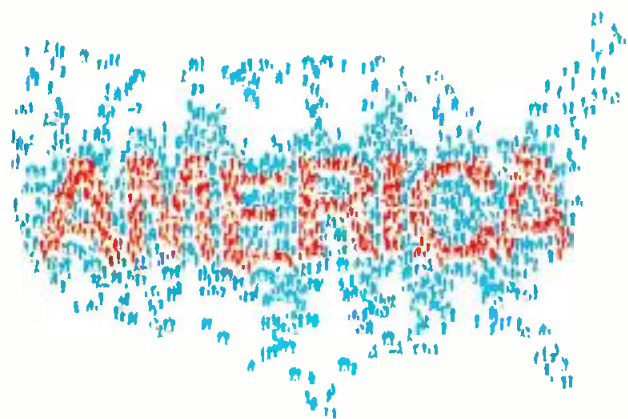
Outside Sales Engineers—Position requires professional sales experience with a proven track record in television broadcast sales.

LET'S MEET AT NAB IN DALLAS!

If you feel you qualify for any of these positions please bring your resume to our NAB booth #3112. An employment representative will be on hand throughout the convention. Resumes may also be mailed to The Grass Valley Group, Inc., Dept AA147, P.O. Box 1114, Grass Valley, CA 95945. An equal opportunity employer. M/F/H/V

Grass Valley Group
A TEKTRONIX COMPANY

TUNING IN



NAB 86

NAB 86

NAB 86

The dawn of at least one technological era—digital video recording—and the high noon of another—small-format video—will be witnessed by the thousands attending the 1986 equipment exhibition of the National Association of Broadcasters next week in Dallas. Major new products, and a surprising joint effort by leaders on both of those fronts, can be expected to dramatically alter each market.

Also having their moments in the sun will be radio broadcasting, with new and improved FM stereo transmission techniques; satellite newsgathering and TV stereo, two relatively new and rapidly expanding marketplaces; computer graphics, with its gradually maturing technologies; transmission, with new high efficiency developments, plus scores of other new radio and television hardware on the exhibit floor. A preview of some of the show's highlights follows.

Lots of action on the video format front

The small-format video market may never be the same after this year's NAB exhibition, with several new developments about to alter the half-inch field dramatically and other small-format options shifting in importance. And for purveyors of future digital video generations, surprise announcements last week may reshape the way in which the digital era will emerge (see "Top of the Week").

On the small-format video front, Sony's announcement of an improved, metal-particle tape version of Betacam, along with Ampex's agreement to join in designing and manufacturing a line of the new product, will likely have a profound impact on the growth of the market, ending as it does potential buyers' past concern about purchasing product from a single source.

The joint Ampex-Sony move could also deal a potentially serious blow to Matsushita's U.S.-based Panasonic, on the verge of unveiling its own family of new M-II half-inch products. The M-II format, shown last year only with the AU-600 studio recorder, is being marketed not only as a superior half-inch newsgathering tool, but as a potential studio format equalling the quality of the dominant studio format, Type C one-inch video. Panasonic has consistently declined, however, to provide details on the new product family prior to the convention.

Matsushita will clearly suffer one major drawback in selling M-II against the Sony-Ampex "SP" Betacam. While both formats use metal-particle tape formulation in place of traditional metal oxides to achieve varying degrees of quality improvement, M-II, unlike the SP Betacam, is not compatible with the half-inch equipment already in the field. (Sony this year is also showing the improved "SP" [superior performance] U-matic system, which is already available on the European market. Although there has been some interest in the compatible three-quarter-inch format, particularly from ABC, which has been testing prototypes since late last year, Sony clearly believes the days of broadcasters buying U-matic are nearing a close.)

Matsushita will also be fighting an attempted outflanking on the studio marketing side with a second Ampex-Sony agreement allowing the two to standardize Ampex's composite digital format, set for its first showing at the exhibit as the recording system of Ampex's new ACR-225 digital commercial spot player. Digital recorders using the already-standardized "D-1" component video format will also have their first public presence this year, with Sony introducing the DVR-1000 digital machine, expected to sell at first to sophisticated post-production operations.

Other manufacturers, such as Bosch and Hitachi, have given at least verbal support to the continued development of the D-1 format,

although none so far have plans to show products. The effect that composite digital standardization will have on the spread of the component format into broadcast circles remains to be seen.

Another past player in the small-format market, quarter-inch video, has all but disappeared from the scene, suffering from the disappointment of last year's failed standards effort. One system proponent, Bosch, will display its Quartercam camera-recorder for the first time since last spring, but the recorder will still not be for sale in the U.S. market until the success of European marketing efforts can be gauged by the West German manufacturer.

A future small-format option, 8 mm, has surfaced, although some argue not in its final form, from the other past proponent of quarter-inch, Hitachi Denshi. Hitachi has backed off its Quarter Recorder products altogether and instead put its chips on the recently developed 8 mm CV-One component analog camera-recorder and studio playback system, which uses and improves upon the company's quarter-inch developments, but currently is limited by the cassettes' 11-minute recording time.

Other manufacturers working on 8 mm as a professional format, including Ampex and Sony, believe 8 mm will ultimately use some form of digital recording, rather than Hitachi's analog format, but such a system appears at least several years from development.

Meanwhile, the format wars have helped spark the commercial spot player market back to life in the past couple of years. That liveliness is due, in no small part, to the introduction in 1984 of the first new-generation cart machine in years, Sony's half-inch Betacart system, 100 of which are now in the field. Ampex, loathe to lose its large percentage of the market it has dominated with RCA since these systems first became available more than a decade ago, this year is introducing the previously mentioned ACR-225 digital composite spot player as the replacement for its ACR-25.

Taking over for RCA since its demise in the struggle to retain spot player market share is Odetics, the manufacturer that had designed RCA's new Silverlake system's robotic, cassette-grabbing arm. Odetics is hedging its bets by offering its TCS-2000 system with both M and Betacam recorders.

In addition to other full-system cart machines being offered by Panasonic, Asaca and others, a number of lower-end cart products are also scheduled for introduction. Broadcast Systems Inc. will

the new DC-80 automatic video cart machine with up to 24 transports and stereo audio, a low-cost DC-8E/P version of its DC-8 automatic video cart machine, as well as an automatic program system allowing television stations to automatically delay incoming program material.

FMX could be needed boost for FM sound; compatible transmission technology on display in Dallas would increase range of stereo signal

The news in radio at this year's NAB convention may well be FMX, broadcasting's answer to the compact disk and other advancements in high-fidelity audio. FMX is a new FM stereo transmission system that eliminates much of the noise inherent in conventional FM stereo broadcasting and is compatible with the millions of conventional FM stereo radios now in use.

FMX, so called because it extends the range of FM stereo broadcasts to that of FM mono broadcasts, is the invention of Emil Torick of the CBS Technology Center and Tom Keller, senior vice president, science and technology, National Association of Broadcasters, but it was brought to fruition by the CBS Technology Center, which is handling the licensing of the technology.

Although the FMX signal is compatible with conventional radios, a special FMX receiver is needed to capture the FMX signal and enjoy the improved audio. To get into FMX, a radio station needs to buy and install an FMX stereo generator.

At the NAB convention, FMX will be demonstrated in a convention center ballroom along with other "high-tech" developments. A CBS prototype of an FMX generator and a prototype of an FMX receiver developed by NAD Electronics, a high-end consumer electronics manufacturer, will be used for the demonstration. Out on the exhibit floor, meanwhile, prototypes of FMX generators are expected to be shown by four companies, Orban, CRL, Inovonics and Apex Systems Ltd.

Assuming all goes well in over-the-air tests now being conducted at three stations, Torick said last week, FMX receivers should start hitting the market in large number in about a year and a half. A domestic manufacturer is now developing the FMX receiver chips

HDTV: How suite it is

Some of the most spectacular technology at the NAB may not be on the exhibition floor but in a special demonstration suite set aside for the television industry's state-of-the-art in high-definition television. The 10,000-square-foot demonstration, organized by Sony Corp. and including HDTV gear from more than two dozen manufacturers, is expected to be the largest HDTV show, with more equipment and more companies participating, of any since the earliest held at the beginning of the decade.

According to project manager Larry Thorpe of Sony, the demonstration, which focuses exclusively on the U.S.-proposed world standard 1,125-line, 60 hz HDTV system, will be the industry's first to attempt to display working HDTV subsystems, with the exhibit divided into studio origination, with a camera set, several cameras and live blue-screen composites; display, with four electronic projection systems ranging from 100-inch to 180-inch and a film projector showing recent work on Sony's electron beam recorder; post-production, with full edit suite, film-to-tape transfer and graphics capabilities; routing, and transmission. Among the companies taking part in the display and their areas of contribution are:

- **Asaca Shibasoku:** HDTV projection system, monitors, test equipment, sync generators and digital still store.
- **Barco:** HDTV monitors.
- **Bosch:** HDTV camera.
- **Canon:** HDTV optics.
- **Cinema Products:** HDTV optics and camera accessories.
- **Dynair:** HDTV distribution amplifiers.
- **Eidophor:** HDTV projection system.

- **Fantastic Animation, Raster Technology:** HDTV graphics.
- **Fujinon:** HDTV optics.
- **General Electric:** HDTV projection system.
- **Eastman Kodak:** Test slides for HDTV telecine.
- **Grass Valley Group:** HDTV routing switcher, distribution amplifiers, fiber optic link and two switchers (modified 300 switcher and new HDTV prototype model 100 switcher).
- **Magni Systems:** HDTV programmable test equipment.
- **Nikon:** HDTV lenses and optics.
- **New York Institute of Technology:** HDTV compatible transmission system display.
- **NHK:** MUSE HDTV transmission system display.
- **Panavision:** HDTV optics and accessories for cameras.
- **Quantel:** Paintbox graphics system.
- **Rank Cintel:** HDTV telecine.
- **Sony:** HDTV cameras, complete operating three-machine HDTV edit suite with switcher, special effects system and new "frame grabber" frame store system (also tentatively planned is a showing of a research model optical disk recorder).
- **Symbolic Graphics:** HDTV graphics system.
- **Tektronix:** HDTV component waveform monitor.
- **Ultimate:** HDTV blue screen compositing system.
- **Utah Scientific:** HDTV routing switcher.

The exhibit is scheduled to open on April 13, although it may begin earlier, Thorpe said, and will continue through April 16. Hours will be approximately the same as those for the NAB equipment exhibition.

necessary for mass production of receivers, he said, but it'll be another 11 months before it will have chips available and another four months before the manufacturers can design receivers around the chips and begin producing them in large quantities.

The other big story may well be the mounting evidence that the future of radio stations' recording and playback will be in the digital domain. Not only will compact disk players and accessories be ever more pervasive, but other digital recording and playback devices will also be offered. At least two companies are promoting computer-based digital record/playback devices as an alternative to analog cart machines. CompuSonics Corp. will show the DSP-1500, a floppy-disk-based system capable of storing and playing back up to eight minutes in stereo or 20 minutes in mono. The system, a broadcast-oriented version of the more capable DSP-2000 series systems shown last year, will be at the booths of CompuSonics and Allied Broadcast Equipment. Microprobe Electronics Inc. will return with its Digisound, which can handle up to 25 minutes of stereo sound or 50 minutes of mono. Advanced Music Systems, of Lancashire, England, will demonstrate AudioFile, a computer with a hard-disk design to record and play back audio in mono or stereo. The system features SMPTE time code, allowing synchronization with conventional audio or video recorders.

To radio stations deep into compact disks, Sony is offering the CDK-006 Auto Disc Loader, sort of a professional-quality CD juke box. The device stores up to 60 disks and loads any one of them into a player in 16 seconds. It's designed to be controlled by an external microprocessor-based controller. Sono-Mag Corp. is introducing a prosumer for random access of compact disks.

Several manufacturers will be pushing AM stereo gear—for both of the existing incompatible formats, Motorola's C-Quam system and Kahn Communications' single-sideband system. Kahn will feature a Kahn AM stereo exciter and modulation monitor and, for the first time, a signal generator for receiver manufacturers, which was developed in cooperation with Boonton Electronics. Joining Motorola in the manufacture and sale of C-Quam exciters and monitors are Broadcast Electronics, TFT and Delta Electronics. Leader will introduce a C-Quam signal generator (LSG-245) at the show.

The market for SNG gear begins to 'fly away'

The newest weapon in the battle among local newscasts for ratings points is the SNG van or truck. Such vehicles, equipped with Ku-band satellite uplinks, allow stations to generate live news feeds from virtually anywhere in their market or, for that matter, anywhere in the nation.

At the NAB, several companies will be selling SNG trucks and vans as well as so-called fly-away systems that can be packed in a few cases and sent from place to place in an airplane or in the back of a station wagon.

Hubbard Communications, a subsidiary of Hubbard Broadcasting, has been supplying the SNG trucks for members of Conus Communications, the SNG consortium founded by Hubbard and now comprising some three dozen stations. But Hubcom is eager to

sell trucks to non-Conus members. It will introduce its new fly-away package at the show, the Video Fly Pac. The uplink, with 275-watt transmitter, can be broken down and packed into seven 70-pound "suitcases." An eighth suitcase, containing a communications package, is also available.

Among those challenging Hubcom in the new market is BAF Communications. It has sold a number of trucks, including, most recently, one to Group W Television, which will use it at Group W stations in Pittsburgh, Philadelphia and Baltimore. BAF will show its truck at the NAB. The 340T features a 2.3-meter antenna, redundant 300-watt amplifiers and a communications package.

Midwest Communications Corp. may be offering more SNG options than any of its competitors. It has six vehicles and a fly-away package. The vehicles range from the S-25 built on an Italian-made Iveco truck with 2.4-meter antenna, 300-watt amplifier and communication packages to the S-20, a trailer-mounted unit with a 3.5-meter dish.

A newcomer to the marketplace will be Spectra Communications. Like Midwest, it is developing a variety of SNG vehicles—a fly-away system, a system built into a Ford Econoline "stretch van" and a system built in an Iveco truck. The man behind Spectra is Vincent Walisko, who helped develop the trailer-mounted SNG system for GEC McMichael, which was shown at last year's NAB. GEC McMichael, a British firm, has since gone out of business.

Another newcomer is Ethereum Scientific Corp. It's offering two SNG vehicles, an Isuzu van with a 2.8-meter dish and a vehicle linked to a 3.5-meter dish mounted on a trailer.

Dalsat Inc. is offering an array of SNG vehicles with antennas ranging from six feet to 4.5 meters. Microdyne will return with its QuickLink, a system in which the 3.66-meter antenna is mounted on a 20-foot trailer. QuickLink also features a communications package. Modulation Associates will offer the KU 02 Suitcase Uplink, a small stand-alone Ku-band uplink for remote stereo audio broadcasts and for off-air SNG communications between SNG trucks and vans and the home base.

GTE Spacenet will not be selling any hardware at the show, but it will be offering satellite services including News Express, satellite time for SNG feeds packaged with a voice communications service to facilitate the SNG process. GTE also will be offering a turnaround service for converting Ku-band signals to C-band signals and vice versa. Such turnaround facilitates the distribution of satellite signals, allowing stations with either Ku-band or C-band earth stations to receive them.

Stereo TV equipment marketplace keeps expanding

TV stereo is still the big news in the television audio field, two years after the first stereo station took to the air in the summer of 1984. More than 220 other stations have since followed in offering the service to the vast majority of TV households, while dozens more broadcasters are nearing the final stages of conversion, NBC, ABC, CBS and PBS have all offered differing degrees of stereo programming to stations, and receiver manufacturers are projecting rapid growth in sales of stereo sets.

With the growing level of activity, new niches have been opened in the equipment industry, both for new types of professional stereo products and for existing products modified for those broadcasters going stereo. The bulk of sales so far have been for TV stereo generators, with a handful of companies fighting for shares, such as top-selling Orban Associates, Modulation Sciences, Broadcast Electronics, Circuit Research Labs and Marcom.

But broadcasters are getting increasingly anxious about the lack of availability of stereo monitoring and test gear with which to evaluate their stereo service, so an increase in action in that field may be in order at this year's show. Tektronix has been pursuing this line since last year, and plans to display further developments in the units previously displayed as prototypes, including the 751 BTSC aural modulation monitor-decoder, the 760 stereo audio monitor and the AVC-20 audio vector converter, which turns NTSC vectorscopes used with VTR's into stereo audio monitors.

New precision monitors are expected from TFT, which will have its model 851 baseband-input BTSC aural modulation monitor, and from Belar, which is supplementing its existing BTSC stereo TV



Hubcom's Video Fly Pac

TOWNSEND.

**An American Pioneer
in Television Transmitters.
Since 1963.**

**When You Do Just One Thing
For Over 20 Years...
You Get To Do It
Very Well.**

Booth #3418



The Television Transmission Specialists.

TOWNSEND

79 Mainline Drive, Westfield, MA 01085 413-568-9581

reference decoder-monitor with a BTSC stereo TV program monitor and a precision TV aural demodulator-monitor. Modulation Sciences is also showing its SRD-1 TV stereo reference decoder, Marcom will have its 730 TV stereo metered receiver monitor and Potomac Instruments has its QuantAural audio program analyzer.

For checking stereo phase, B&B is introducing compact, modified versions of its existing Phasescope, Ram Broadcast System is showing a similar monitoring unit, and Howe Audio Productions has a 180-degree phase flipper enhancement for its Phase Chaser audio time base corrector. Telemet has a new TV broadcast demodulator, model 3713, with wideband stereo audio capability and quadrature output for incidental phase measurement, and Audio Engineering Associates will have new stereo microphone accessories for mono-stereo predictability problem in TV production. Program monitors to be introduced include Videotek's new APM-8RS eight-input audio program monitor and a new single-point-source studio monitor for stereo TV mixing from Cetec Gauss.

Stereo synthesizers, already widely used by stations to provide viewers with a pseudo-stereo sound when true stereo programming is not being aired, will also make a showing on the floor. Orban Associates, which has successfully sold a less-expensive unit, is now going to make available a new model 275ATV stereo synthesizer, which uses two mono recognition methods, single-channel and mono-stereo, to determine when to synthesize mono-to-stereo and when to bypass true stereo. The unit also has two synthesis modes, one narrow for dialog and for general program material, one wide for music. Studio Technologies will also show its AN2 stereo simulator, now with a companion RCU mono recognition unit, and Kintek has a new Stereogard model KT-933 system.

Stereo recording will be an option with Sony's new one-inch VTR using two PCM (pulse code modulated) digital audio channels for stereo recording, while Ampex will have a user-installable VPR-2 VTR stereo upgrade kit developed by Kudelski of Switzerland. Broadcast Systems will have a new stereo audio distribution system and Hedco will show a new 12x12 video and stereo audio routing switcher.

Several new audio consoles and studio products are also slated for introductions. Rupert Neve, bought by Austrian electronics conglomerate Siemens late last year, will show the new 32-mic-line audio console for TV production, post and multitrack teleproduction recording, as well as its new V-series of multitrack production and post consoles. Sony will display its first broadcast console, the MXP-2000, as well as the new MXP-29 8-channel mixer for audio-video post. Shure Bros. will introduce its FP32 stereo ENG mixer and FP42 stereo production mixers, and, for audio peak processing, Aphex will display Studio Dominator, a three-band limiter.

The new and improved among TV graphics, special effects and production equipment

It is hard to keep up in the graphics and production ends of the television equipment marketplace. Developments in graphics generators, image manipulators, special effects generators, character generators, switchers and editors are so rapid that any company that isn't constantly improving its particular products or at least lowering its prices is on its way out of the business.

Those at the NAB convention next week will find Ampex trying to grab an even bigger share of the graphics and effects market. Last week, it announced it has purchased a 20% interest in Cubicomp Corp. and, with it, the right to market Cubicomp's PictureMaker, a low-cost, three-dimensional graphics system. PictureMaker complements Ampex's ADO, a high-end graphics manipulator. Under the three-year agreement with Ampex, Cubicomp will continue to market PictureMaker as well as ModelMaker, a three-dimensional "modeling graphics" system.

Quantel will be back with its array of graphics and effects generators headed by Paintbox, sophisticated high-end graphics machines, and Harry, a complement to Paintbox for animating and otherwise enhancing the Paintbox images. It will also show Mirage and Encore, which it calls "image manipulators," and Cypher, a highly capable character/effects generator. Grass Valley Group, best known for its switchers, will introduce a special effects generator this year, the DPM-1. Sony plans to try the low end of the special

effects market with the SEG-2550. It will sell for \$9,800.

Colorgraphics Systems Inc. will introduce ArtStar III-D, a three-dimensional high-end graphics system that can simulate lighting, camera zooms and pans and spline curve motions. It can be coupled with the VTR to produce animated graphics. Artronics will have two new products: the VGA-3D video graphics animator and the VPL video paint system and image store. Aurora will show a videographics system based on an IBM PC/AT, the Aurora/220. Robert Bosch will show Illustrator, a three-dimensional paint system.

Like graphics systems, the new character generators, regardless of price, will be more capable this year. Chyron Corp. will introduce the 4200 generator with motion. Media Computing will show its ANGIS generator that can be fed information through IBM personal computers or from a wire service. The device is said to be ideal for generating display with continually changing information such as election returns. Mark Electronics promises a new character generator, and Mycro-Tek is offering a new production font as a standard feature on its Ernie model.

CMX, a leader in the editing system marketplace, will replace its popular 340XL editing system this year with the 3100. Shown for the first time at the Society of Motion Picture and Television Engineers convention last October, the CMX 3100 has a number of enhance-



Cubicomp's PictureMaker

ments, including multiple EDL files, an expanded EDL memory, Autoclean, Match-Cut Calculate, learn keys, short-cut wipe and dissolve and simplified switcher memory.

Sony plans to introduce a new editor, the BVE-900, capable of working with any combination of Sony videocassette or videotape recorders. Control of the unit is through a keyboard and a menu-driven display. Adams-Smith will show for the first time the Model 2600 A/V double-system editor, which permits simultaneous off-line video editing on VCR's and on-line audio editing on audio tape recorders. United Media will feature its Comm-ette, a low-cost, three-VTR, A/B roll editor. EECO Inc. will return with the IVES II desktop editing system and the EMME system, but both will have additional capabilities and enhancements.

Shintron Co. will feature the Empress C-2000, a component production switcher with an Andromeda 3000 component framestore DVE unit and downstream keyer/chromakeyer. Intergroup Video Systems, formerly ISI, will introduce a new line of 10- and 20-input production switchers. Vital Industries will also have a new production switcher. Omicron Video has come up with a new master-control switcher, the Model 507, promising high quality at "an affordable price."

TV cameras being reshaped by computers, CCD's

The past year's demise of the once-dominant RCA and a new joint effort by European electronics giants Philips and Bosch focusing on camera and other video product development are among the factors that are slowly transforming the video camera business, as have been the innovations made in the field by Japanese manufacturers and others in computer control and CCD technology.

One new product, announced by Sony last week and sure to attract the attention of exhibit attendees, is a new lightweight CCD version of its Betacam camera. The company, which manufactures the CCD chips to be used in the three-chip camera, has previously limited its

**This season,
plant an evergreen...**



and watch your

Introducing *Dennis the Menace*.®

It's the most exciting evergreen to spring up in years: an all-new animated program built on that loveable evergreen character—Dennis the Menace!

Kids have loved Dennis for years, and today he appears in 1,000 newspapers with 75 million circulation.

- Produced by DIC Enterprises, Inc., the largest animation producer in the world.
- 65 first-run episodes.
- Available September 1986.

Ask now how you can get our newest evergreen program in your '86 line-up. It'll be the ratings blockbuster you've been hoping for!

Plus *Scooby-Doo* and *The Flintstones*.

Two of the most consistently popular programs ever! Lots of kids' programs come and go, but these evergreens never fade.

- Rated #2 and #5 over the past two seasons.



© 1985 HKE.



© 1985, Hanna-Barbera Productions, Inc.

ratings grow...

- Over 150 top-rated half-hours each. These proven favorites belong in your line-up for a ratings breakthrough in '86.

Woody's coming in '88!

Soon we'll be able to offer you one of the most enduring, well-loved characters in animated programming—Woody Woodpecker! Kids have an affection for Woody that makes this program a legend, season after season. It's more than just popular; it's a truly rare property.

- Rated #4 in '83—'84.
- Moved up to #3 in '84—'85.
- 360 cartoons of first-rate, theatrical grade animation.
- Available January, 1988.

For details contact DFS
Program Exchange, 405
Lexington Ave., N.Y., N.Y. 10174
(212) 661-0800.



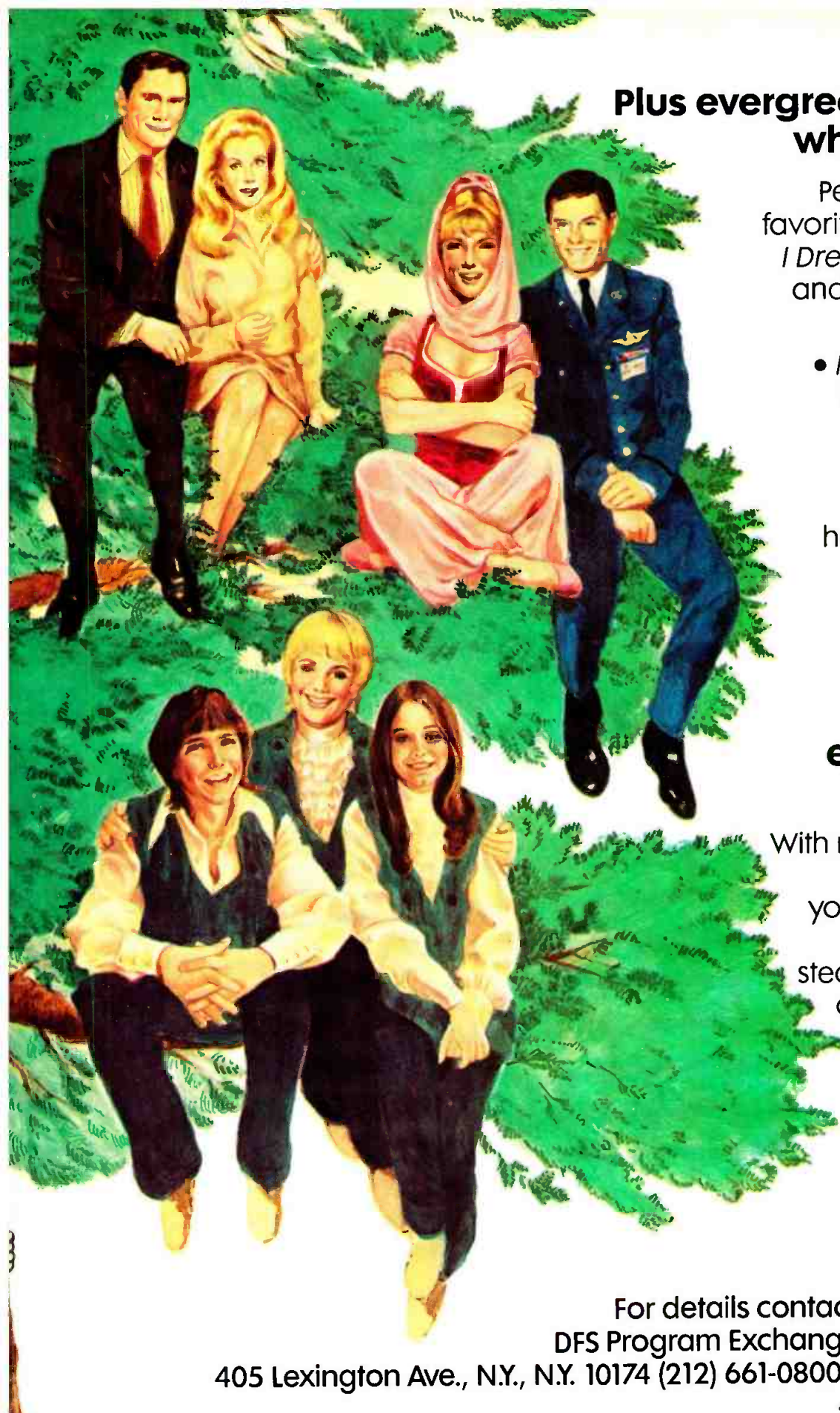
...and grow.

Even more evergreens for kids.

We've got more of the great, classic kids' shows. And most are strippable. Choose from these 16 evergreen programs to fill your '86 children's line-up with proven winners.

- *Bullwinkle*
- *Rocky & His Friends*
- *Underdog*
- *Tennessee Tuxedo*
- *Roman Holidays*
- *Dudley Do Right*
- *Devlin*
- *Bill Cosby's Picture Pages*
- *Wheelie & The Chopper Bunch*
- *Valley of the Dinosaurs*
- *Inch High, Private Eye*
- *Uncle Waldo*
- *Space Kidettes*
- *Young Samson*
- *Sealab 2020*
- *King Leonardo*





Plus evergreens for the whole family.

Perennial family favorites: *Bewitched*, *I Dream of Jeannie*, and *The Partridge Family*.

- Major stars like Larry Hagman and Elizabeth Montgomery.
- Over 90 half-hours each.
- Consistently high ratings.

Get your evergreens now!

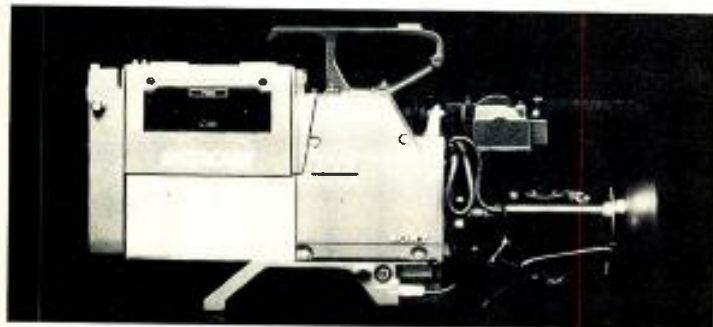
With no cash outlay, you can start your ratings on a program of steady growth. All of these classic, ever-popular programs can add up to a towering ratings success!

For details contact
DFS Program Exchange,
405 Lexington Ave., N.Y., N.Y. 10174 (212) 661-0800.



participation in the CCD market to one-chip industrial and consumer units, but apparently felt that with the disappearance, at least temporarily, of RCA's frame-transfer CCD unit, the time was ripe for its entry. NEC also remains in the market with its own CCD unit.

The Bosch-Philips announcement that the two will jointly form the West Germany-based European Television Systems with Bosch gradually assuming its leadership, raises the prospect of enhancing future camera development from the two companies, both of which



Sony's BVW-105/CCD Betacam

already have made attempts at penetration in the U.S. market. Philips Television Systems this year, for instance, is adding to its studio camera line with new versions of its LDK-6 and LDK-25 productions and is also introducing a portable LDK-54A universal camera recorder. Bosch will introduce its new microprocessor-based studio camera, the KCM-125, this year and is also selling in the U.S. the front-end camera of its Quartercam camcorder.

A new studio camera, HK-323, will also be introduced by Ikegami, while Hitachi, flush from its multimillion-dollar field camera sale to CBS Television, will be showing its SK-970 Computacam line.

Camera accessories to be introduced this year include new lenses from Angenieux, Fujinon, Schneider, with new attachments for Schwen's Gyrozoom field zoom lens. New battery products will be shown by Frezzolini and PAG America, which also will show an ENG laser camera that can view a scene at 300 feet in complete darkness in black and white. Several new teleprompters, increasingly taking advantage of personal computer technologies, will be shown for the first time by Q-TV, Listec, Computer Prompting Corp. and Telescript.

Transmission wares in an RCA-less market

Transmitters and transmission antennas will not be the sexiest products on the exhibit floor, but they'll attract many broadcasters looking to upgrade or replace their transmission facilities and would-be broadcasters looking to get on the air.

This year, the transmission marketplace will be marked by the absence of RCA, a leading manufacturer of UHF and VHF transmitters and antennas until it announced it was going out of business last October. RCA's exit from the market created a vacuum that companies like Harris, Comark, NEC America, Townsend and others will try to fill.

Comark may turn some heads with the introduction of a 60 kw UHF transmitter that uses a Klystron instead of a Klystron in the final amplifier stage. According to Comark, the Klystron transmitter is far more efficient than existing Klystron transmitters, giving users more RF output for each watt of electrical input. The Klystron is manufactured by Varian's EIMAC division.

Comark also believes the use of Klystrons obviates the need for the multiple-depressed-collector high-efficiency Klystron now being developed by Varian Associates with funding from NASA, the NAB and the Public Broadcasting Service.

More of what's new in television antenna seems to be coming from the smaller companies. Townsend Associates, which was bought by the Avenir Group earlier this year but which is under the same management as last year, will add a 15 kw VHF transmitter to its line of television transmitters at this year's show. Acrodyne Industries will introduce a line of externally diplexed VHF transmitters, ranging from 20 kw to 60 kw and featuring remote control interfaces and

stereo-ready exciters. Acrodyne also promises to have new 1 kw and 5 kw UHF transmitters. EMCEE Broadcast Products will have three new transmitters: a 5 kw VHF transmitter; a 100 watt, solid-state UHF transmitter, and a 1 kw UHF single-bay transmitter.

On the FM side, Broadcast Electronics will introduce new single-tube 35 kw (FM-35A) and 10 kw (FM-10A) transmitters, and Continental Electronics will round out its line with new single-tube 60 kw (817A) and 4.3 kw transmitters. Harris will match Broadcast Electronics' introduction of a 35 kw transmitter with one of its own, the FM-35K. Beaveronics Inc. will feature a new line of Energy-Onix FM transmitters, ranging from 40 watts to 30 kw. Elcom Bauer will have a new 1 kw transmitter and a new FM exciter.

In addition to displaying other transmission hardware, Dielectric Communications will show the line of UHF and VHF transmission antenna that it bought from RCA after the latter got out of the broadcast products business. Cetec Antenna Co. will show for the first time a television version of its cavity-backed dipole FM antenna, which debuted at the last NAB. Shively Labs will have three new specialty antennas, one designed to limit radiation in the immediate area surrounding the antenna; a vertically polarized FM antenna designed to limit interference with VHF channel 6, and a FM antenna designed to allow for custom horizontal/vertical ratios.

The best of the rest: test equipment, lighting, signal processing and fiber optic products

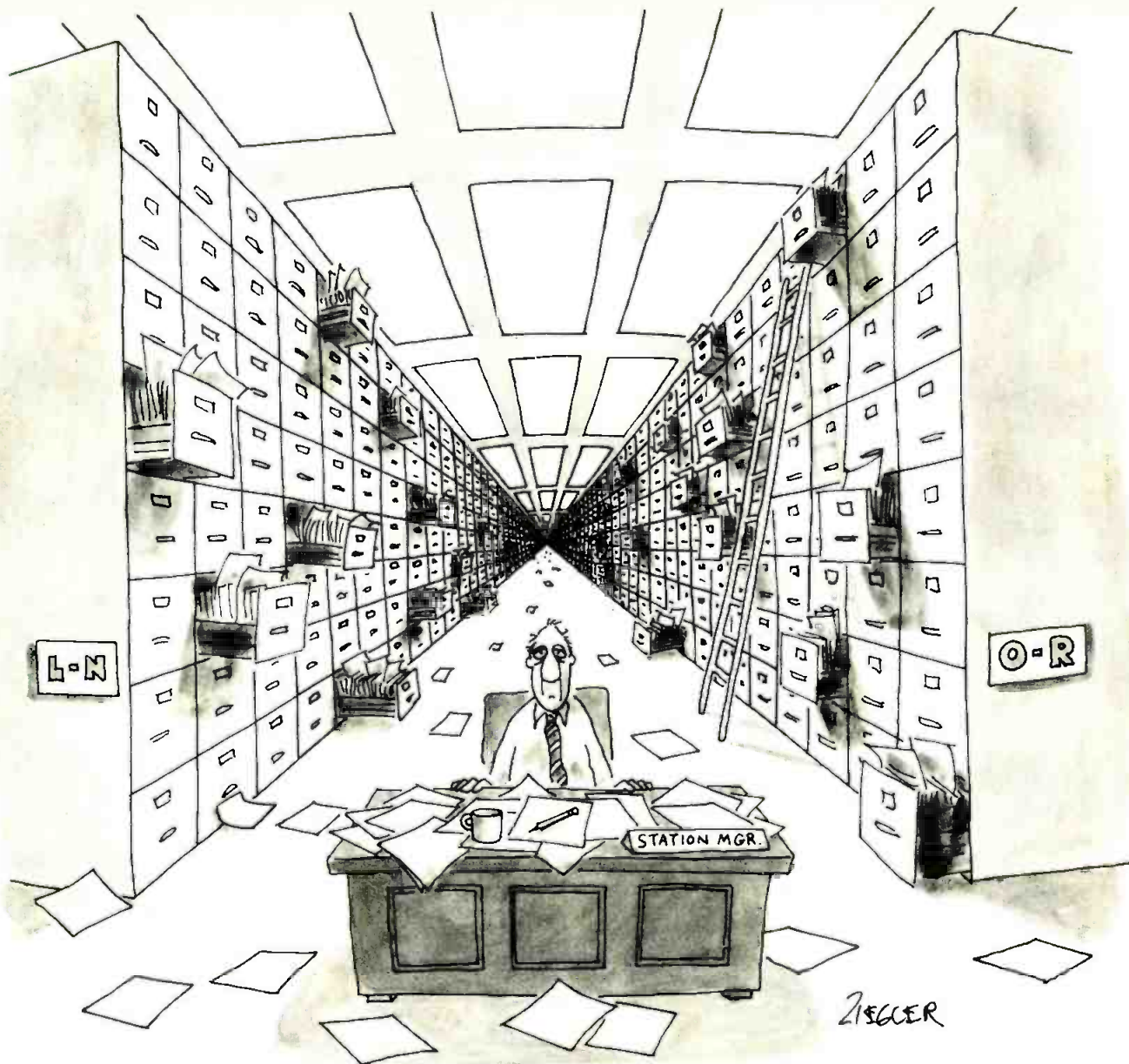
Test equipment companies, including industry giant Tektronix, are moving to take advantage of newly developing needs, such as for component video measurement, while other manufacturers are using microprocessor developments to speed often-tedious picture monitor set-up procedures.

Tektronix has moved steadily on component developments, previously showing test equipment prototypes and, this year, production models of the WFM-300 CAV waveform monitor and TSG-300 CAV test signal generator. The biggest push from the company this year, however, may come for its new 1730 Waveform Monitor and companion 1720 Vectorscope, which will replace its existing waveform-vectorscope combination, on the market for the past 15 years. Among the new units' features, according to the company, are a bright line selector with onscreen read-out of the line and field, four automatic front panel recalls, two-channel operation on screen simultaneously, and x-y inputs for stereo audio display on the vectorscope. Tektronix also said they will cost less than previous models they replace.

Two companies, Conrac and Sony, are expected to show automatic monitor set-up systems, both of which radically shorten the time required for the operation. Conrac will show the new Micromatch microprocessor-based color monitor system, which uses an optional photometer for automated monitor alignment in as little as 20 seconds. A similar concept for automatic monitor set-up has also been developed by Sony Broadcast, which last spring showed a prototype of a system aligning its BVM-1900 (using a PC-board retrofit) in 90 seconds, with delivery on the set-up unit beginning last January.

Among other test products to be introduced at the exhibition are a new VSM-60 broadcast vectorscope, a 19-inch broadcast master color monitor and a 13-inch color monitor with audio from Videotek, a new SCH-7000 subcarrier-to-horizontal phase monitor and 2500 series test products for studio, transmitter and component video from Leitch Video, and from Magni Systems, a new model 1527 integrated measurement package with SCH phase measurement, waveform, vectorscope and test signal generation. RE Instruments Corp. will also show its new RE201 dual channel audio analyzer and Holaday Industries plans to introduce its new HI-5000 SX broadband meter for measuring RF exposure.

Several new routing and signal processing products will make their introductions in Dallas, including a new router and video and audio distribution amplifiers from Bosch and new master control and routers from Intergroup Video Systems. BSM Broadcast Systems will also show a smaller version of the Modula routing switcher introduced at last year's show. Broadcast Video Systems will have new component downstream keyer, composite and component color correctors, RGB-component translators, various filters and video delays, while Faroudja Labs will also show new video signal processing equipment.



Without BMI, you'd have a lot more paperwork.

Keeping up with the contracts of individual songwriters can fill endless hours—and a lot of filing cabinets. In fact, if you had to do it yourself, you'd never have time (or room) to do anything else.

That's why there's BMI. We have the staff, time and facilities to make sure that every nuance of every contract of every one of our 48,000 songwriters is handled exactly as it should be. So using our services makes it easier for you to use *their* music.



We handle the paperwork. So you can concentrate on the business of broadcasting.

Wherever there's music, there's BMI.

RADIORADIO'S CBS NEWS GIVES US "THE BEST OF BOTH WORLDS."

We have the best of both worlds—the complete resources of CBS News and a dedicated staff of CBS RADIORADIO journalists who relate well to our demographic target.

**Tom Pope, News Director
WHUR (FM), Washington, D.C.**

AND THAT'S ONLY PART OF IT...

RADIORADIO'S CBS News complements our local newscasts well. The reports are concise, yet deliver the facts of the major national stories; the delivery is adult-oriented, with all the credibility and authority of CBS News.

Carl Brenner, Executive Vice President and General Manager, WQSR (FM), Baltimore

The major incentive for our affiliation with CBS RADIORADIO is the resources at CBS News. Its reputation rubs off on our reputation.

Steve Huntington, Program Director WAVE (FM), Tampa

RADIORADIO'S CBS News makes the most of every actuality. They're more than voices—they help deliver the impact of the stories.

Tom Chauncey II, Station Manager KOOL-FM, Phoenix

The CBS identity is very important to our station. It's times like these that we couldn't function without RADIORADIO'S outstanding news coverage.

John Schaller, General Manager WVUD (FM), Dayton

Our listeners relate much more to national news than world events. The thrust of CBS RADIORADIO news reports fits our needs like a glove.

Mark Edwards, Program Director WTPI (FM), Indianapolis

CBS RADIORADIO helps our news department sound larger than life. It goes where we can't.

Cynthia Canty, News Director WDTX (FM), Detroit

RADIORADIO'S CBS News gives us a lot of news in a short, fast-paced format. It's the kind of news our target audience seeks out.

Gene Boivin, Vice President & General Manager, KRQX, Dallas

RADIORADIO'S CBS News blends in like an extension of our own newscasts and brings the national stories to life with great actualities.

Joe McCoy, Program Director WCBS-FM, New York



Suddenly, professionals have realized that Ampex is serious about the switcher business. Here's why:

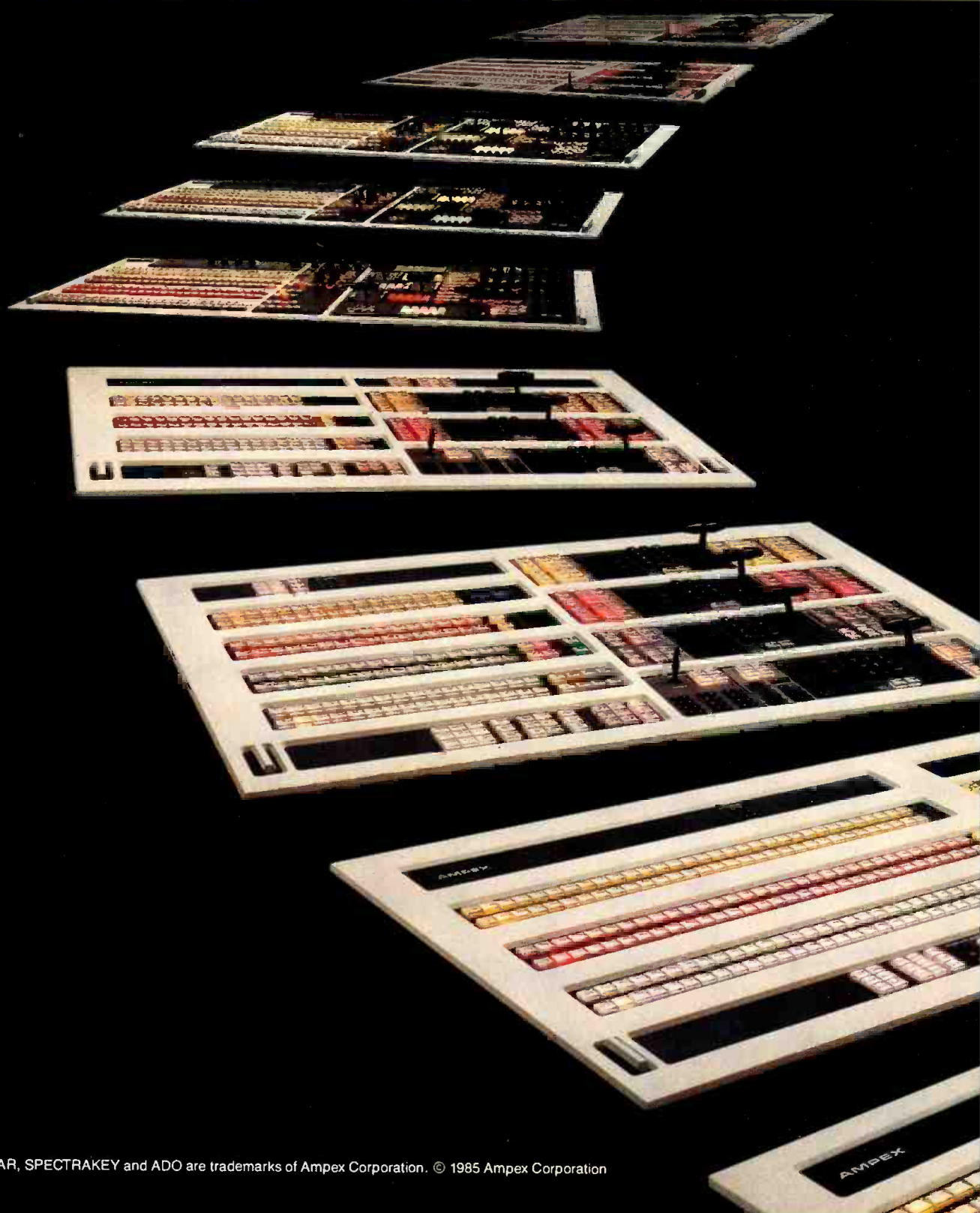
1 All Ampex switchers provide three unrestricted, full capability keyers per M/E, so you can introduce any type of key on any keyer.

2 The cost effective 4100 Series can handle five levels of video in one M/E. Only our own AVC Series can match that.

3 The AVC Series offers over 100 keypad selectable patterns that can be coupled with Ampex exclusive pattern modifiers for dazzling effects.

4 Both the AVC and 4100 Series switchers have simple controls and straight-forward A-B operation to reduce costly errors and retakes.

5 The AVC offers exclusive features such as Panel-STAR™ and X-STAR™ memory, Key



Memory, SPECTRAKEY™ and Border Modify.

6 You can team an AVC or 4100 with an Ampex ACE editor, ADO™, AVA, ESS, and Ampex VTRs for the ultimate in video magic and control from a complete Ampex post-production system.

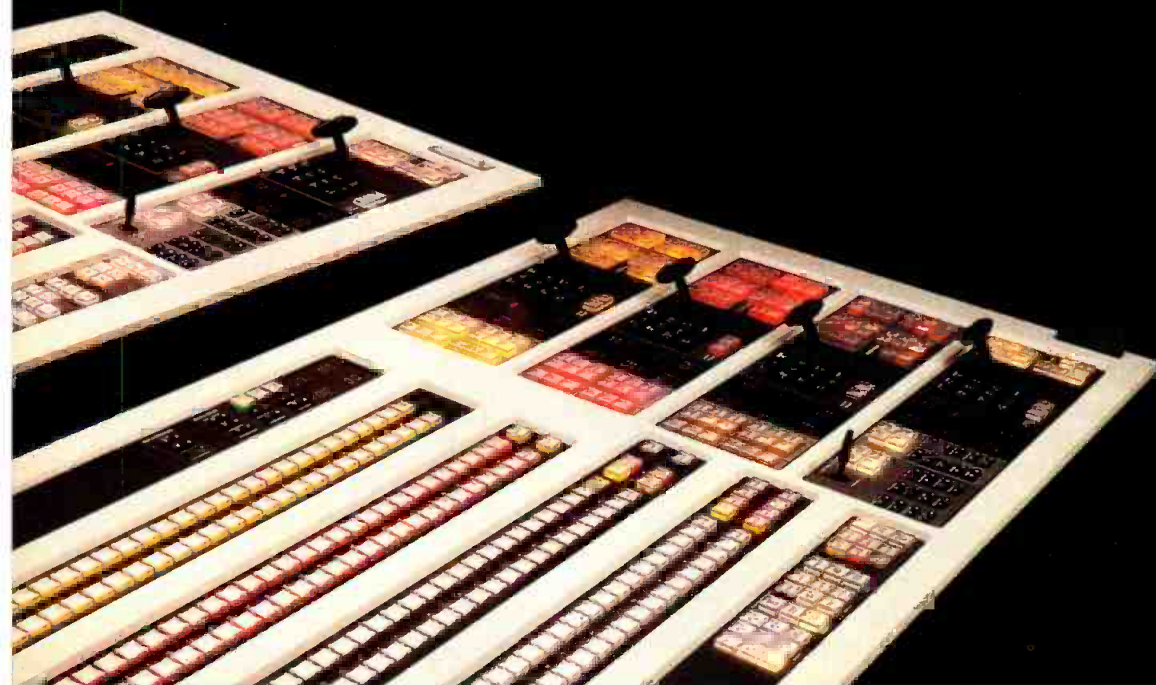
7 Ampex product support and service, worldwide.

Seven excellent reasons here, and dozens more when you call an Ampex sales engineer to find out why facilities everywhere have turned to Ampex switchers.

Atlanta (404) 491-7112 Chicago (312) 593-6000
Dallas (214) 960-1162 Los Angeles (818) 240-5000
New Jersey (201) 825-9600
(In New York (212) 947-8633)
San Francisco (415) 367-2296
Washington, D.C. (301) 530-8800
Canada (416) 821-8840

AMPEX
Ampex Corporation • One of The Signal Companies 

Bet you didn't realize
that more and more
leading facilities
are buying Ampex
switchers.
For seven good reasons.



The NAB exhibitors from A to Z

The following is a list of exhibitors for the NAB convention at the Dallas Convention Center. An asterisk denotes a product new to the market.

Abbott & Co. 2479
1611 Cascade Dr., Marion, Ohio 43302

Abekas Video Systems 3527
353A Vintage Park Dr., Foster City, Calif. 94404

A62 digital disk recorder, A42 digital still store system, A52 digital special effects and digital effects combiner. **Staff:** Yeshwant Kamath, Junaid Sheikh, Phil Bennett, Martha Lash, Lance Kelson, Harris Rogers, Bill Ludwig, Mark Pinkel, Art Shifrin.

Accu-Weather 2529
619 W. College Ave., State College, Pa. 16801

Graphics, color satellite images*, color radars*, database, WeatherMate 350*. **Staff:** Dr. Joel Myers, Lee Gottschall, Gordon MacMillan, Jeff Bertram, Jess Goodman, Evan Myers, Maria Myers.

Acrian Inc. 2458
490 Race St., San Jose, Calif. 95126

Acrodyne Industries 3521
516 Township Line Rd., Blue Bell, Pa. 19422

Externally duplexed high power VHF television transmitters from 20 to 60 kw*, UHF television transmitter, 1 kw UHF transmitter. **Staff:** Marshall Smith, Tom Creighton, Dan Traynor, Tim Hulick, Joe Wozniak, Ron Briggs, Bill Barrow.

Adams-Smith 2495
34 Tower St., Hudson, Mass. 01749

2600 A/V double-system audio/video editor*, 2600 CC compact controller*, 2600 time code, tape synchronizer and transport control products for production and post-production. **Staff:** H. Adams, J. Junker, G. Lester, A. Simon, S. Strassberg, H. Williams.

ADC Telecommunications 2819
4900 W. 78th St., Minneapolis 55435

Patch kit and S.A.I.L.S. kit, audio and video patchbays, coaxial components, patching accessories. **Staff:** Mike Hopkins, Lonnie Pastor, Joan Pastor, Lloyd Mitchell, Frank Glass, Greg Shane, Terri Pettit, Dave Grady, Rick Jahnke, Pat Gallagher, Larry Johnson, Bruce Bailey, Paul Berendes, Sue Saltarelli.

ADM Technology 3266
1626 E. Big Beaver Rd., Troy, Mich. 48064

Audio console with personal computer control. **Staff:** Robert Bloom, Murray Shields, Larry Mandziuk, Rick Fisher, Dennis Bennett, Gordon Peters, Chuck Ross, Gene Swope, Dave Wills, Lee Nicola, Jim Wright.

Advanced Designs Corp. 2419
924 W. 17th St., Suite 3, Bloomington, Ind. 47401

Doprad II doppler weather radar sys-

tem*, Doprad II high resolution display unit, RCD-1000 remote color weather radar display unit, Doprad I retrofit system. **Staff:** Martin Riess, Brian Frederick.

Advanced Music Systems 2919
AMS Industries Park, Billington Rd., Burnley Lancs, UK

Digital audio processing systems, DMX 15-80S dual channel digital delay line/pitch changing system with keyboard interface, RMX 16 digital reverberator, A/V sync audio/video delay compensator, Timeflex stereo time compression/expansion device, AMS audiofile digital recording and playback system demonstration*. **Staff:** Stuart Nevison, Jeremy Bancroft, Harry Harris.

AEG Bayly 2700
167 Hunt St., Ajax, Ont. L1S 1P6

100, 500 and 1000 w FM transmitters solid state, RF coaxial changeover unit, professional audio tape recorders, shortwave transmitters. **Staff:** Allan Proctor, Bill Jones, Mike Nolan, Jurgen Graaff, S. Malow, Roger Alexander, Doug Carl, Rainer Zopf, Larry Lamoray.

A.F. Associates 3141
100 Stonehurst Ct., Northvale, N.J. 07647

Pegasus systems commercial presentation system*, Marconi B3410 line array telecine*, Pegasus 5100 commercial compilation system, Audix access digital intercom, assignable audio console, A.F.A. turnkey systems and mobile units, standards converters, cameras, VTR's and studio products. **Staff:** Arnold Ferolito, Louis Siracusano, Tom Canavan, Richard Lunniss, Marc Bressack, Meryl Altman, Bud Pearson, Rick Gross, John Dale.

Agfa-Gevaert 2815
275 North St., Teterboro, N.J. 07608

PE 616/816 bulk audio cassette tape*, half-inch VHS studio performance*, audio cassette, mastering, and video-tape, Broadcast Plus U-matic videocassettes, tapes packaged and in bulk, and duplicators. **Staff:** Maria Curry, Andrew DaPuzzo, Joe Tibensky, John Matarazzo, Teri Sosa, Bob Zamosciany, Peter Jensen, Bob McNabb, Chris Emery, Mike Caputo, Barry Biddell, Mark Barrows, Steven Leader, Elaine Mosera, John Palma.

AKG Acoustics 2521
77 Selleck St., Stamford, Conn. 06902

Alamar Electronics 2582
36 Railway Ave., Campbell, Calif. 95008

Low end kart system*, TL-2500 tape library control system*, SC-2000 random access controller*, MC-1050 six-channel automation system*. **Staff:** Douglas Hurrell, Joe Hering, Dana Gilliam.

Alden Electronics 2759
40 Washington St., Westboro, Mass. 01581

C2000M color weather radar display system, satellite/graphics system and dis-

play system, single-picture color weather radar display system. **Staff:** Michael Porreca.

Alexander Mfg. 2924
1511 S. Garfield Pl., Mason City, Iowa 50401

Alias Research 2497
111 Queen St., East, Toronto, Ont. M5C 1S2

Allen Avionics 2724
224 E. Second St., Mineola, N.Y. 11501

Video and pulse delay lines, video filters, hum eliminators.

Allied Broadcast Equipment 3414
625 S. E. St., Richmond, Ind. 47374

Staff: Roy Ridge, Dave Burns, Judy Spell, Tony Mezey Jr., Walt Lowery, John Grayson, Pat Hurley, Tom Lewis, Peter Koenig.

Allied Tower 3432
12450 Old Galveston Rd., Webster, Tex. 77598

AM/FM, TV, microwave towers, portable utility buildings. **Staff:** Bud Duvall, Jeff Philippe, V.G. Duvall Jr., Rich Jessup, David Little, Mike Lancaster, Ronnie Miller, Doug Moore, Bill Parker, Patrick Feller, Carol Duvall, Gail Feirno, Manuel Camposano, Joan Camposano.

Alpha Audio 102
2049 W. Broad St., Richmond, Va. 23220

Acoustical treatment products. **Staff:** David Walker, Eric Johnson, Kathy Fitzgerald, Mike Binns.

Alpha Automation 203
2049 W. Broad St., Richmond, Va. 23220

TEH boss automated audio editor system. **Staff:** David Walker, Bob Tulloh, John Harlow.

Alpha Electronics 153
1365 39th St., Brooklyn, N.Y. 11218

Alpha Video & Electronics 2524
28 E. Mall Plaza, Carnegie, Pa. 15106

Wide band direct color U-matic VTR with onboard TBC, plug-in time code generator for VO-6800 and type 5 VTR's. **Staff:** Henry Lassige, Terance Lassige, Vince Ferry, Dan Reynolds, Len Laabs, John Tomini, Gary Craig, Brian Conley.

Alta Group 150
535 Race St., Suite 230, San Jose, Calif. 95126
Digital production systems.

Alternative Programing 2493
2501 Oak Lawn, Suite 365, Dallas 75129

Altronic Research 146,47
Box 249, Yellville, Ark. 72687

Omegaline RF coaxial load resistors. **Staff:** John Dyess, Ann Dyess, Tim Roper, Debbie Roper, Ken Hemphill, Keith Parry, G.C. Melton, Teresa Johnson, Alice Milligan, Marc Milligan, Russ Hensley, Jerry Villneff, Linda Markle.

Amber Electro Design 2741
4810 Jean Talon West, Montreal H4P 2N5

YOU CAN WATCH THE FOUR HIGHEST RATED NEWSCASTS IN WASHINGTON...



...AND NEVER CHANGE THE CHANNEL.

Local Washington Newscasts Mon-Fri Program Average

1) WDVN Eyewitness News 11 pm	15/31
2) WDVN Eyewitness News 6 pm	15/26
3) WDVN Eyewitness News 5 pm	13/26
4) WDVN Eyewitness News Noon	12/40
5) WRC 11 pm news	12/26
6) WJLA 11 pm news	11/23
7) WRC 6 pm news	10/16
8) WRC 5 pm news	8/16
9) WJLA 6 pm news	8/14
10) WTTG 10 pm news	8/12

Source: NSI February 1986



A WORLD OF DIFFERENT VOICES
WHERE FREEDOM SPEAKS

THE ONE & ONLY

WDVN-TV WASHINGTON D.C.



Represented Nationally by *mut* Sales, Inc.

5500 programmable audio measurement system, stereo phase and DC volts measurement, application software*, distortion and noise measuring system. **Staff:** Dennis Dolan, Wayne Jones, Guy Lemieux.

Amco Engineering 3426
3801 N. Rose St., Schiller Park, Ill. 60176

Communications consoles, styling options, computer desks and desk-top cabinets, EMI cabinet, aluminum structural system, blowers and fans. **Staff:** Floyd Johnson.

Amek Consoles Co. 2558
10815 Burbank Blvd., N. Hollywood, Calif. 91601

APC 1000 assignable production audio console, BC2 broadcast console. **Staff:** Bob Owsinski, Tim Wilson, Toby Sali, Arnold Toshner, Lynn Mazzucchi, Peter Harrison, John Penn, Greg Hogan, Nick Franks, Graham Langley, Julie Wood.

Ameritext 2789
108 Westlake Dr., Valhalla, N.Y. 10595

World system teletext system, origination and receiving equipment.

Amherst Electronic Instruments 107
Box 201, 132 Main St., Haydenville, Mass. 01039

AMP Products Corp. 2764
Box 1776, Valley Forge, Pa. 19399

AMP connectors, electric wire and coaxial cable strippers, taper technique. **Staff:** Jim Chase, Charlie Connor, Mary Beth DiEleonora, Dan Filipow, Pat McKinley, Kathy O'Keefe.

Amperex 2600
Providence Pike, Slatersville, R.I. 02876

Plumbicon television camera tubes, high efficiency klystrons, tetrodes and cavities for TV, AM and FM broadcasting. **Staff:** Jeff Brooke-Stewart, Bob Carlin, Ed Cirri, Pete Fochi, Kent Holston, Ed Feinberg, Greg Gambill, Tom Laury, Lee Nowell, Kipp Rabbitt, Jim Robinson, Greg Murphy, Tom Perry, Vasanth Rao, Greg Smith, Cor Weyer.

Ampex 3108
401 Broadway, Redwood City, Calif. 94063

ACR-225 digital cart spot player*, stereo upgrade for VPR-2 VTR, creative command center demonstrating post-production applications, VTRs, video processors, switchers, editors, still store, graphics and digital effects systems. **Staff:** Roy Ekrom, Charles Steinberg, Mark Sanders, Mark Gray, Jock Diermann, George Merrick, Mike D'Amore, Bob Natwick, Phil Ritti, Don Bogue, R.A. Antonio, Robert Wilson, Arne Bergman, Donald Kleffman, Al Fisher, Willie Scullion, Ridley Rhind, Joe Williamson, J. Cripps, M. Candelier, A. Buhlmann, W. Bjorklund, R. Cripps, J. Major, O. Luna, J. Lazano, W. Lilley, P. Burns, H. Okochi, Roger Miller, Dick Coomes, Frank Rush, Rollin Stanford, Paul Hansil, Frank Nault, Tom Nielson, Dave Detmers, Karen Schweiker, Bob Schwartz.

Amtel Systems 2820
33 Main St., Suite 303, Nashua, N.H. 03060

Soundmaster audio editing system, soundmaster tape synchronizer*, VITC/LTC time code products. **Staff:** Mark Wronski, Peter McDonnell, Gary McKoen, Peter Moore, Shawn Carnahan, Bill Taylor, Andrew Staffer, Robert Predovich, Doug MacKenzie, Mike Martin, Ed Labanowicz, Allan Leon, Tom Oliviero, Don Herring.

Anchor Audio 2426
913 W. 223d St., Torrance, Calif. 90502

Powered and unpowered broadcast monitor speakers, durable headset intercoms, hi-fidelity portable public address systems, battery powered sound system. **Staff:** Jim Van Waay, Jon Peirson.

Andrew Corp. 3098
10500 W. 153d St., Orland Park, Ill. 60462

Broadcast antennas and antenna systems, circular waveguide for broadcast, coaxial cables and waveguides, earth station antennas and antenna systems. **Staff:** Vern Killion, Joe Moscola, Jim Limanowski, Barry Cohen, Carl Van Hecke.

Angenieux 3020
7700 N. Kendall Dr., Suite 303, Miami 33156

State of the art in optics for cine and broadcast television, 14x7 F/1.6 super wide angle ENG/EPF*, 14x8 F/1.6 nonrotating focusing element*, 15x9 HP studio 2/3 broadcast BVP-360 Sony*, 40x9.5 F/1.3 outside broadcast 2/3 inch*. **Staff:** Tony Martinez, Gordon Tubbs, Bernard Angenieux, Joe Abbattucci, Dick Scally, Jacques Durand, Jean Michel Durand, Greg Reilman, Gerard Corbasson, Patrick DeFay, Tang Sum, Charles Stampfli.

Ann d'Eon Incentives 224
8777 E. Via De Ventura, Suite 225, Scottsdale, Ariz. 85258

Media promotional trips, incentives. **Staff:** Ann d'Eon, Malena Albo, Jeff Pordes, Beverly Ginsberg.

Anton/Bauer 2706
One Controls Dr., Shelton, Conn. 06484

Portable battery and lighting equipment for cameras, VTRs, monitors.

Anvil Cases 2706
4128 Temple City Blvd., Rosemead, Calif. 91770

Staff: Ralph Hoopes, Tony Edwards, Bill Polivg, Marge Murphy.

Apert-Herzog 2931
7007 Realm Dr., B3, San Jose, Calif. 95119

H and H2 frame/TBC synchronizers, VDAs, video switcher, A/V stereo switcher, video line driver, satellite feed video delay. **Staff:** W. Herzog, W. Nichols, R. Atchison, M. Alley.

Aphex Systems 2816
13340 Satcoy St., N. Hollywood, Calif. 91605

Studio dominator tri-band peak processor*, high definition FM stereo generator*, compellor dynamic range control-

ler, aural exciter—psychoacoustic audio enhancer. **Staff:** Marvin Caesar, Jon San-serino, Donn Werrbach, Jim Martindale, Johnny Garcia, Paula Lintz.

Apollo Audio-Visual 142
60 Trade Zone Ct., Ronkonkoma, N.Y. 11779

Stage and studio lamps, protection lamps. **Staff:** Lee Vestrich, Harry Charlston.

Applied Research & Technology 236
215 Tremont St., Rochester, N.Y. 14608

Microprocessor-controlled digital signal processing equipment including digital reverberation units, time delays, graphic equalizers, pitch transposer package. **Staff:** Philip Botette, Richard Neatrou, Tony Gombacurta, John Langlois, Peter Beverage.

Arben Design 154
600 W. Roosevelt Rd., W. Chicago, Ill. 60185

Arbitron 3103
1350 Avenue of the Americas, New York 10019

Staff: Ted Shaker, Rick Aurichio, Rhody Bosley, Pete Megroz, Jon Nottingham, Les Tolchin, Janet Baum, Susan Dingethal, Jay Guyther, Scott Herman, Karen Kolvek, Marvin Korach, Barbara McFarland, Marge Meyer, Jim Mocarski, Debbie Priore, Rip Ridgeway, Maddy Schreiber, Bill Shafer, Dick Sheppard, Mark Stephan, Chris Werner.

Aries Industries 8
W229 N2494A Hwy 164, Waukesha, Wis. 53186

Communications mast*. **Staff:** Jim Kunz, Bill Huelsman, Rick Dresang, Jerry Eales, Pete Utecht.

Arrakis Systems 2742
2609 Riverbend Ct., Fort Collins, Colo. 80525

Audio consoles, routing switchers, studio furniture. **Staff:** Michael Palmer, Gloria Palmer, Roderic Graham.

Arriflex Corp. 3553
500 Route 303, Blauvelt, N.Y. 10913

Camera, editing and lighting equipment.

Artel Communications 2920
Box 100, West Side Station, Worcester, Mass. 01602

SL3000 fiber optic video/audio/data communications system*, T134 fiber optic system*, SL2000 LED-based video/audio/data system. **Staff:** Gene Bidun, Dave Monk, Steve Mariuz, Steve Jackson, Rich Stucky, Ron Pretlac, Tad Witkiewicz, Verne Zugenbuhler, Janet Andersen.

Artronics 216
300 Corporate Ct., Box 408, South Plainfield, N.J. 07080

VGA-3D video graphics animator*, VPL/video paint library*. **Staff:** Timothy Cunha, Trent McFadden, Paul McDonald, Anthony Asch, George Uibel, Peter Sauerbrey, Sue Cornejo.

Asaca/Shibasoku 3278
12509 Bearice St., Los Angeles 90066

Take both Harris exits at NAB!

HARRIS

3238

Main floor center aisle

1800 square
feet of video
signal processing
equipment

This year, Harris is hosting a double-barreled NAB exhibit in Dallas. Booth 3238 is reserved for Harris signal processing equipment — time base correctors; frame synchronizers and digital effects systems; still stores; paint and graphics systems; studio and ENG cameras.

Main floor center aisle

HARRIS

3136

Main floor center aisle

6000 square feet of
AM, FM & TV, audio,
microwave & satellite equipment

Just across the aisle, Booth 3136 will be bustling with activity centered around Harris AM, FM and TV transmitters, audio, broadcast microwave and satellite equipment. Remember — you haven't seen the Harris exhibit until you've been through both areas. See you at NAB. Harris Broadcast Group — your broadcast equipment supplier since 1922.

FOR YOUR INFORMATION,
OUR NAME IS

HARRIS

 HARRIS

Video and audio test equipment.

**Associated Press
Broadcast Services 3395**

1825 K St., NW, Washington 20006

AP Election Wire*, AP Business Watch*, AP NewsPower 1200, NewsCable, News-Plus, Network News, TV Wire, Radio Wire, Texas Network, Laserphoto, Photo Color, Music Country Radio Network, Ed Busch Talk Show, American Know-How. **Staff:** Jim Williams, Roy Steinfert, John Reid, Sue Cunneff, Lee Perryman, Mary Clunis, Jim Hood, Rosie Oakley, Kim Price, Brad Kalbfeld, Matthew Hoff, Jim Spehar, Daryl Staehle, John Harris, Doug Kienitz, Ed Busch, Sydney Busch, Dave Alpern, Brad Krohn, Greg Groce, Rob Dalton, John Lumpkin.

Associated Production Music 2650
888 7th Ave., New York 10106

Music library representative, Trade-winds*. **Staff:** Phil Spieller, Cassie Gorieb.

Aston Electronics 212
531 N. Mur-Len East, Olathe, Kan. 66062

Character generators.

AT&T Communications 3212
295 N. Maple Ave., Room 5219F2, Basking Ridge, N.J. 07920

Athans Manufacturing 173
2332 Gravel, Fort Worth, 76118

Auburn Instruments 2836
107 Church St., Watertown, Mass. 02172

Audico 2720
219 Crossen Ave., Elk Grove, Ill. 60007

Videocassette tape loaders, reloaders, timers and rewinders for Umatic, VHS and Beta, tape length verifier*, videocassette cycler*. **Staff:** Bill Hinkle, Norm Deletzke.

Audi-Cord 3433
1845 W. Hovey Ave., Normal, Ill. 61761

Models E and S series record/reproducers and TDS series reproducer. **Staff:** Carl Martin, Duane Martin, Carol Williams.

Audio & Design Calrec 2708
E4480 Hwy., 302, Belfair, Wash. 98528

Audio processors, mixing consoles, microphones.

Audio Broadcast Group 2581
2342 South Division, Grand Rapids, Mich. 49507

Pre-wired studio system, custom cabinetry. **Staff:** Dave Howland, Scott Homolka, Dave Veldsma, Dave Spoelhof, Bob Bont.

Audio Developments 2933
1101 A Airway, Glendale, Calif. 91201

Staff: Anthony Levesley, Ron Fuller, Dale Burkett.

Audio Engineering 2769
1029 N. Allen Ave., Pasadena, Calif. 91104

MS stereo technology*, line level active matrix, battery powered stereo mixer. **Staff:** Wes Dooley.

Audio Kinetics 2506
1650 Hwy. 35, Suite 5, Middletown, N.J. 07748

Eclipse, timelink, mastermix, pacer, pacer pad, 4.10 synchronizer. **Staff:** Paul Duncan, Ian Southern, Sid Price, David Neal, Chris Brackik, Kyle Ellison, Jerry Mahler, James Lucas, Peter Kehoe.

Audio Precision 2560
Box 2209, Beaverton, Ore. 97075

Audio-Technica 2407
1221 Commerce Ave., Stow, Ohio 44224

Broadcast microphones, studionphones, phono pickup cartridges, recorder-mixers, direct boxes, active and passive microphone stands, booms and cables. **Staff:** Mark Taylor, Greg Silsby, Ken Reichel, Jon Kelly, Jeff White, Steve Hebrock, Rock Wehrmann, Don Kirkendall, Bob Herrold.

ATI-Audio Technologies 2508
328 W. Maple Ave., Horsham, Pa. 19044

Vanguard series broadcast consoles*, interfaces, amplifiers, mike, line and turntable amplifiers, monitor amplifiers, microphone processor. **Staff:** Edward Mullin, Samuel Wenzel.

Auditronics 3310
3750 Old Getwell Rd., Memphis, Tenn. 38118

On-air control consoles, production consoles, accessory system, 310 series audio console*. **Staff:** Welton Jetton, Steve Sage, Stovall Kendrick, Bob Jones, Jeff Paullus, Duncan Fuller, Jerry Puckett, Betty Kee.

Aurora Systems 104
185 Berry St., Suite 143, San Francisco 94107

220* and 75 digital videographics system. **Staff:** W. Tom Beams, Richard Shoup, Sheila Ross, Marty Frange, Butch Fadley, Damon Rarey, Nancy Burnett, Richard Sloss, Robin Sloss, Robin Stelling, Lisa Zimmerman, Chuck Kozak, Tom Hahn, Mike Mage, Mike Buettner.

Autogram Corp. 2702
631 J Place, Plano, Tex. 75074

20 R/TV console*, LC-10 console*, IC-10, AC-8, AC-6 and microgram audio consoles, autoclock, autocode. **Staff:** Ernest Ankele Jr., Jim Laird, Neva White, DeLores Ankele, Don Klusmann.

AVS 148
Davis Rd., Chessington, Surrey KT91TT
England

AVS 6500 digital standards converter and signal processor. **Staff:** Nigel Spratling, Mike Ransome, David Beanland, Richard Murray.

B&B Systems 2665
28111 Avenue Stanford, Valencia, Calif. 91355

Stereo audio phase verification systems models AM-1, AM-2, AM-3, MP-4, Phasescope and Imagescope, AM-1B and AM-2B Phasescopes*. **Staff:** William Burnsed, John Bradford, Ramon Patron,

Brenda Robley.

BAF Communications 2544
228 Essex St., Salem, Mass. 01960

BAF 340T SNG vehicle, digital SCPC system, two duplex, one simplex, 1 2400 baud data channel. **Staff:** Kenneth Brown, Dudley Freeman, Charles Angelakis, James Vautrot, Joseph Eicher, William Kavanagh Jr., Gregory Smith.

Barco Industries 2577
Sevenslaan 106, B-8500, Kortrijk, Belgium

Barcus-Berry Elect. 2485
5500 Bolsa Ave., Suite 245, Huntington Beach, Calif. 92649

BBE model 202 professional audio component designed to correct phase and amplitude distortion. **Staff:** William Matthews, Jeanne Vasta.

Bardwell & McAlister 2746
7051 Santa Monica Blvd., Hollywood, Calif. 90038

Modulight line of convertible softlights, lighting kits, B&MC lighting and grip equipment. **Staff:** Bill Norman, Bernie Gibbs, Bruce Belcher, Sharon Evans, Bill Hines.

Barrett Associates 2654
3205 Production Ave., Oceanside, Calif. 92054

Solar powered transmission*, portable tape testing unit*, full trade-in equipment concept*. **Staff:** W. Barrett Mayer, Derri Stanley, Dennis Nelson, Dr. Ronald Barreto, Michel Merger, James Rowles.

Basys 2913
2685 Marine Way, Mountain View, Calif. 94043

Basys Parallel, Dec Vax, Onyx, and PC systems. **Staff:** Dave Lyon, Ed Grudzien, David Simmons, Tina Harrison, Roy Terry, Harn Soper, Jim Cundiff, Jim Romeo, Mike Casserly, Rich Pierceall.

Bayly Engineering 2700
167 Hunt St., Ajax, Ont. L1S 1P6

Beaveronics 2703
8 Haven Ave., Port Washington, N.Y. 11050

Favag QMS series of modular master clock systems, DSK-4-DLB downstream keyer, video production switching systems, FM broadcast transmitters from Energy-Onix*, video hum stop coils. **Staff:** John Busharis, Bob Striker, Bernie Wise.

Belar Electronics 3347
Box 76, 119 Lancaster Ave., Devon, Pa. 19333

BTSC stereo TV reference decoder/monitor, stereo TV program monitor, precision TV aural demodulator/monitor. **Staff:** Arno Meyer, Harry Larkin, Dwight Macomber, Mohammad Olama, Manuel Krangel, Lynd Meyer.

Belden Communications 2926
534 W. 25th St., New York, N.Y. 10001

Lee filters color effect, color correction and diffusion materials distributor. **Staff:** Michael Sheppard, Patrice Sutton, Paul Nielsen, Damian Vaudo.

A LEGEND NOW IN
COLOR



McQUEEN
WANTED
DEAD or ALIVE
94 HALF-HOUR EPISODES



FOUR STAR INTERNATIONAL, INC.
931 NORTH COLE AVENUE
HOLLYWOOD, CA 90038-2675
(213) 469-2102

Belden Electronics 2651
2200 U.S. Hwy., 27 South, Richmond, Ind. 47374

Broadcast cables, TV camera cables.
Staff: Chuck Parker, Jeff Latek, Dave Blish, Frank Stone, Tim East, Mike Mascucci, Mike Kipper, Jerry Dorna.

Benchner 2568
333 W. Lake St., Chicago 60606

M3 graphics stand, copymate camera stand. **Staff:** Jeri Benedict, R.C. Locher Jr., Michael List.

Benchmark Media Systems 2470
3817 Brewerton Rd., N. Syracuse, N.Y. 13212

Audio processing and distribution system with Stereo DA card, Mia-4 mic preamp*, differential interface amplifiers, peak/program meter retrofit. **Staff:** Allen Burdick, Glenn Burdick, David May.

Beyer Dynamic 2823
5-05 Burns Ave., Hicksville, N.Y. 11801

BGW Systems 2825
13130 S. Yukon Ave., Hawthorne, Calif. 90251

Audio power amplifiers, model 2242*. **Staff:** Brian Wachner, Barbara Wachner, Dan Lasley, Dean Norquist, Chuck Prada, Mike Schmitt, Barry Evans, John Pearson, Frank Iaconis, Brian Scott, Mordy Foodym, Sye Mitchell, Chuck Rancillio, Ken Simons.

BHP Inc. 2795
1800 Winnemac Ave., Chicago, Ill. 60640

EnVision videotape editing systems. **Staff:** John Ehrenberg, George Darrell, Bruce Rady, Jack Behrand, May Behrand.

Bird Electronic 3472
30303 Aurora Rd., Cleveland 44139

15 kw and 25 kw load resistors*, STL RF test equipment*, FM broadcast filters and filters/couplers, plug-ins for ThruLine wattmeters, RF measurement components, RF wattmeters, heat exchanger loads, line terminations, digital calorimeters, RF power analyst, calorimetric self-cooled load system. **Staff:** R. Bosler Sr., L. Lesyk, L. Kuklinski, G. Waltz, W. Kail.

BIW Cable Systems 3493
65 Bay St., Boston 02125

Cable, connectors, assemblies and repair services for broadcast cameras, VTR cable assemblies.

Bogen Photo 2405
17-20 Willow St., Fairlawn, N.J. 07410

Tripods, fluid heads, dollies, caddies, light stands, video lights, lighting rail system, gaffing equipment and TSE camera cases.

Bogner Broadcast Equipment 3406
401 Railroad Ave., Westbury, N.Y. 11590

Low-cost, low-wide-load, tower-leg-mounted (panel) version BUI UHF series antenna*, high power UHF TV transmitting antenna, low- and medium-power VHF and UHF slot and dipole transmitting

antennas, circularly polarized FM transmitting antennas, MDS and ITFS transmitting antennas, LPTV transmitters, 800 mhz and 900 mhz base-station antennas.

Staff: Leonard King, Richard Bogner, Robert Piano, Steve Weinstein.

Bonneville Telecommunication 2440
6430 Sunset Blvd., Suite 908, Los Angeles 90028

Boonton Electronics 156
791 Route 10, Randolph, N.J. 07869

Robert Bosch Corp. 2907, 3170
2300 South 2300 W., Salt Lake City 84130

3D illustrator*, video and audio distribution amps*, sync pulse generator*, routing switcher*, KCM-125 camera*, graphic off-line modeling system*, switcher control panels*, X-Y zoom for film-to-tape transfer*, other transfer equipment, color corrector, grain reducer, computer graphics image system, quarter-inch camera and recorder system and playback recorder unit, TAS/TVS 2000 audio/video distribution switcher, master control switcher, custom control panels, production switchers, videotape recorders, video monitors. **Staff:** Erich Zipse, D.K. McCauley, Barry Albright, Dave Spindle, Ron Ferguson, Al Jensen, K. Jayaraman, Jeff Davis, George Crowther, Jerry Jumper, Steve Sedoff, David Brack, Robert Walters, James Skupien, Clay Selthun, Anthony Magliocco, Stephanie Bailin, Larry Riddle.

Bowen Broadcast Service 2522
8343 Lynn Haven Ave., El Paso 79907

Bradley Broadcast Sales 2663
8101 Cessna Ave., Gaithersburg, Md. 20879

Telos 10 digital telephone hybrid, echo digital voice storage/retrieval system*. **Staff:** Art Reed, Neil Glassman.

Bridal Fair 2562
8901 Indian Hills Dr., Omaha, Neb. 68114

Local retail sales and marketing tool. **Staff:** Bruce Thiebauth, Sherry Thiebauth, Dick Lewis, Cary Kruger, Jim Pearson, Mark Nielson, Justina Sears.

BrightStar Communications of America/BrightStar Comm. 2488
1801 Avenue of the Stars, Suite 345, Los Angeles 90067

Global satellite television network distribution system. **Staff:** Ernest Samuel, Gary Worth, Ian Joseph, Bill Page, Maxine Goodless, Ruth Macy.

Broadcast Audio 2615
11306 Sunco Dr., Rancho Cordova, Calif. 95670

Stereo audio consoles, BA 10T/BA 10R aural studio transmitter links*, modular console with six mixers, amplifiers, passive phono preamps, premium DAs. **Staff:** David Evans, John Fernandez, Adie Fernandez, Gary Maggiore, Sonnie Maggiore.

Broadcast Automation 2697
4125 Keller Springs, Suite 122, Dallas 75244

Broadcast Electronics 3226
4100 N. 24th St., Box 3606, Quincy, Ill. 62305

35 kw and 10 kw FM transmitters*, AM stereo modulation monitor*, 6 khz response solid state digital recorder*, single- and multideck tape cartridge machines, audio mixers, FM transmitters, exciters, stereo and SCA generators, AM stereo exciter studio equipment, TV stereo generator, microprocessor program automation system and studio turntables and tonearms. **Staff:** Lawrence Cervon, Curtis Kring, Bill Harland, Tim Bealor, Dave Evers, John Burtle, Mac McEachern, Kirk Walker, Geoff Mendenhall, Rick Carpenter, Ed Anthony, Jim Tucker, El Corujo, Gil Housewright, Kevin Clymer.

Broadcast Engineering 143
Box 12901, Overland Park, Kan. 66212

Staff: Tom Cook, Miguel Chivite, Jerry Whitaker, Paula Janicke, Brad Dick, Carl Bentz, Stephanie Fagan, Duane Hefner, Cameron Bishop, Tom Nilsen, Ann Belle Rosenberg, Joe Concert, Josh Gordon, Herb Schiff, Jason Perlman.

Broadcast Management Plus 2646
Box 5708, Auburn, Calif. 95604

Broadcast Microwave Services 3578
7322 Convoy Ct., San Diego 92111

Portable microwave equipment—transmitters, receivers and antennas—for helicopters and vans.

Broadcast Music Inc. 2632
320 W. 57th St., New York 10019

Staff: Larry Sweeney, Bob Warner, Len Hensel, Paul Bernard, John Alves, Ollie Henry, Joan Yazmir, Ed Cramer, Al Smith, Ted Chapin.

Broadcast Supply West 2743
7012 27th St. W, Tacoma, Wash. 98466

Prodecor studio furniture*, cabinets, console table, audio processing equipment.

Staff: Irv Law, Bernice McCullough, Tim Schwieger, Pat Medved, Jon Ferren, Bob Crawford.

Broadcast Systems 2418
8222 Jamestown Dr., Austin, Tex. 78758

DC-80 automatic video cart machine*, DC-8E/P automatic video cart machine*, BJ-800 stereo audio distribution system*, prewired audio jack panels*, custom master control console*, turnkey television systems design and construction service and field technical support. **Staff:** Donald Forbes, Sarah Salsbury, Byron Fincher, Les Hunt, Chuck Balding, Jim Zeiner, Art Smith, Mike Brunsy, Lisa Whitten.

Broadcast Video Systems 2730
1050 McNicoll Ave., Unit 15, Agincourt, Ont. M1W 2L8

Component downstream keyer with fade to black*, composite and component color correctors with scene store and time code control*, RGB/component translators*, miniature video filter*, zero loss variable video delay*, 20 mhz video de-

lay lines", waveform monitor with line selector", combo calendar, clock and source ident unit", video filters, studio and portable sale area generators, component to NTSC encoder. **Staff:** Bert Verwey, Randy Conrod, Erle Swadron, Tony Frere, Eric Vavasour, Derek Newport, Brian Elliot, David Bryan, Allan Taylor.

Bryston Ltd. 2406
57 Westmore Dr., Rexdale, Ont. M9V 3Y6
Amplifiers.

BSM Systems 2668
Box 19007, Spokane, Wash. 99219

Down-sized version of modula system routing switcher", remote control units", audio distribution amplifiers", small application video and audio routing switchers. **Staff:** Bruce Morse, Mike Fitzsimmons, Dick Myers, Dave Poppe, Wayne Barrington, Marceen Zappone, Jay Turkovsky, Richard Hartman, Ernie Tanner, Thomas Thuling, Maribeth Morse, Helen Fitzsimmons, Cecelia Barrington.

BW Lighting Systems 2922
Box 470162, Tulsa, Okla. 74145

1K and 12K softlights", curtain track systems, track switcher, dimming equipment, fixtures, distribution, grid and miscellaneous equipment. **Staff:** Wally Whaling, Blair Powell, Chuck Parker, Jim Freeman, J. Michael Freeman.

Cablewave Systems 3489
60 Dodge Ave., North Haven, Conn. 06473

Antenna and transmission line system products, low-loss foam coaxial cable. **Staff:** William Meola, Margie Barneschi, Ken Robinson, Wally Brooks, George Gigas, Sherry Rullman, William Sirvatka, Sol Esocoff, Jack Nevin, Steven Aldinger.

Calaway Engineering 149
49 S. Baldwin Ave., Sierra Madre, Calif. 91024

Calvert Electronics 2503
(see Richardson)

Calzone Case 2502
832 N. Victory Blvd., Burbank, Calif. 91502
Travel and shipping cases including video, camera, rack mount, camera, monitor, lighting and editing systems, recording, audio and broadcasting.

Cambridge Products Corp. 2731
244 Woodland Ave., Bloomfield, Conn. 06002

Flush-mounted wall plates, BNC's and TNC's. **Staff:** Alan Horowitz, Joyce Johnson.

Camera Mart 3040
456 W. 55th St., New York 10019

Video production and post-production equipment. **Staff:** Samuel Hyman, Paul Meistrich, Shimon Ben-Dor, Jeffrey Wohl, Leo Rosenberg, Shelly Brown, Herb Browning.

Canare Cable 2523
832 N. Victory Blvd., Burbank, Calif. 91502
Star quad microphone cable, single and multichannel cable configurations, cable reels, BNC prepackages double shield-

ed video cables". **Staff:** Motomi Ebara, Barry Brenner, Kinya Osaka.

Canon U.S.A. 3300
One Canon Pl., Lake Success, N.Y. 11042
Broadcast lenses and support equipment. **Staff:** Jack Keyes, Jim Wolfe, Bob Low, Tom Miller.

Capitol Magnetic Products 3345
6902 Sunset Blvd., Hollywood, Calif. 90028
AA-4 audiopak broadcast cartridge. **Staff:** H.J. Jackson, Edward Khoury, Larry Hockemeyer, Larry Krutsinger, Dick Dunlavy, Dennis Schleich, Gordon Stafford, Jack Jackson, Joe Kempler.

G.A. Carley 2649
4424 W. Mitchell St., Milwaukee, Wis. 53214
Screen process printer of outdoor advertising. **Staff:** Peter Gray, Stan Hesselgrave.

Cascom 248
707 18th Ave. South, Nashville 37203
Staff: Ronald Ellis, Victoria Ellis, Simon Pollack, Wayne Smith.

CAT Systems 3333
401 E. 74th St., New York 10021
Computerized remote control system, multisite cable monitoring and control system", version 4 software". **Staff:** J. M. Soll, T. J. Vaughan, T. Sullivan.

Catel Telecomm. 2585
4800 Patrick Henry Dr., Santa Clara, Calif. 95050

Dwight Cavendish 2662
2117 Chestnut Ave., Wilmette, Ill. 60091
Videocassette duplicator, Copymaster 250", Copymaster QC station for quality control testing", video/stereo audio modular routing switcher. **Staff:** Marshall Ruehrdanz, Jim Dow, Carter Ruehrdanz, Brian Flynt, Dave Jones.

CBS Radio Stations News Service 2178
2020 M St., Washington 20036
Byline magazine with news/information features (12). **Staff:** Allen Balch, Jerome Navies, Nancy Johns.

CCI/Commercial Comm. 2484
7353 Lee Hwy., Chattanooga, Tenn. 37421

Ceco Communications 3383
2115 Avenue X, Brooklyn 11235
Electronic, transmitting, camera, receiving and industrial tubes, transistors and IC semiconductors. **Staff:** Anthony Ianna, Hugh Mullins, Lew Levenson.

CEL Brabury & Electronics 2429
5925 Beverly, Mission, Kan. 66202

Celco Inc. 155
262 A Eastern Pkwy., Farmingdale, N.Y. 11735

Central Dynamics 3080
147 Hymus Blvd., Pointe Claire, H9R 1G1
Total integration of signal distribution system into display controlling signals distributed to master control and production switchers. **Staff:** Peter Brackett, Jim Bastien, Richard Williams, Roy Holmes, Ross Ivett, John Boland, Joe Ryan, Jim Morri-

son, Robert Smith, Steve Broom, Emil Lurion, Patrick Manning, Pietro Censi, Charles Mynott, Graham Pugh.

Central Tower 2799
8200 Roberts Ridge Rd., Newburgh, Ind. 47630

Centro Corp. 3181
9516 Chesapeake Dr., San Diego 92123

Design, engineering and construction for post production, production and broadcast facilities; design, engineering and construction of mobile production, equipment enclosures, satellite news gathering truck". **Staff:** Darrell Wenhardt, Fred Powers, Ken Tondreau, Vince Jakimsak, Rex Reed.

Century Precision Optics 2422
10713 Burbank Blvd., N. Hollywood, Calif. 91601

Lenses.

Century 21 Programming 3452
4340 Belwood Pkwy., Dallas 75234

Staff: Dave Scott, Richie Allen, Sam Taylor, Stuart McRae, Allen Collier, Eddie Davis.

Cetec Antenna 3587
6939 Power Inn Rd., Sacramento, Calif. 95828

TV version of Broadband cavity backed dipole antenna, FM CP antennas, CP TV spiral. **Staff:** Jim Olver, Bill Cunningham, Ali Mahnad, Mark Cunningham.

Cetec Gauss 3394
9130 Glenoaks Blvd., Sun Valley, Calif. 91352

Single point source studio monitor"

Cetec Vega 3394
9900 Baldwin Pl., El Monte, Calif. 91731
Models 66B and 67B pro plus portable wireless microphones receivers". **Staff:** Paul Baughman, Ken Bourne, Gary Stanfill, Stan Fowler.

Channelmatic 2548
821 Tavern Rd., Alpine, Calif. 92001

Totally integrated random access multi-VCR commercial break automation system, PC-controlled operational software and traffic software package", Broadcaster I Automatic videocassette changer system, turnkey versions of five-VCR break sequencer, four-channel ROS break inserter, audio follow switcher unit, stereo switchers, time and/or tone activated VCR/VTR controllers/switchers. **Staff:** Bill Killion, Vern Bertrand, Dwain Keller, Al Taylor, Roger Heidenreich, Wes Hanemayer.

Chisan Photron Trading 2494
Jinguame 6-12-15, Shibuyaku, Tokyo, 150

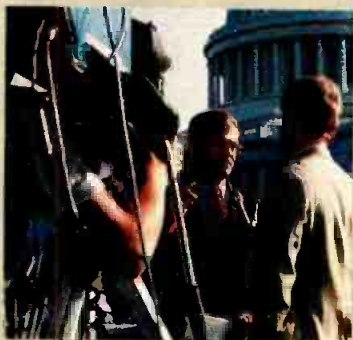
Christie Electric Corp. 3324
20665 Manhattan Pl., Torrance, Calif. 90501

CASP charger/analyzer/reconditioner, bulk-tape degausser, nickel-cadmium batteries. **Staff:** Tom Christie, David Christie, Fred Benjamin, Alan Augusta, Betty Trenberth, Diane Church, Ray White, Howard Durbin.

What could your station cover with News Express?



Sports



Political Events



Fires



Weather



News Exchange



**Live News
as it Happens**

News ExpressSM, the satellite news-gathering service from GTE Spacenet, gives your station maximum flexibility for live, on-the-spot news coverage and news exchange networking. With your transportable uplink, you can move fast and maintain control of news coverage—and "scoop" the competition.

High quality telephone circuits are included for immediate communication—via satellite—between your remote crew and TV station, for production, engineering and coordinating with local talent. Use satellite time as you need it, in feed increments as

brief as 5 minutes. And with news exchange networks, News Express opens up even more programming options.

News Express is just one of the communications services from GTE Spacenet, a leader in satellite technology. Let News Express give you the competitive advantage. Contact our Broadcast Services Marketing Department, GTE Spacenet, 1700 Old Meadow Road, McLean, Virginia 22102.

Marketing Department (703) 790-7700

GTE Spacenet: Getting Down To Business

GTE Spacenet

Chyron Corp. 3072

265 Spagnoli, Melville, N.Y. 11747

Chyron 4200 with motion, high resolution graphics system with digital graphic effects, ultra high resolution text generator, graphics and titling systems, high resolution low prices paint system, low price graphics and character generators. **Staff:** A. Leubert, J. Scheuer, L. Weissman, D. Buckler, R. Witko, W. Hendler, W. Reinhart, T. Finnin, A. Rudden, L. Mincer, M. Ahern, S. Stanco, R. Cerbone, R. Benincasa, J. Mauro.

Cine 60 3428

630 Ninth Ave., New York 10036

Air-cooled on-camera batteries*, sun-gun kits*, battery analyzer, battery belts, packs, batteries, charging systems, sun-guns and sun-gun kits. **Staff:** Robert Kabo, Paul Widum, Don Civitillo, Richard Jenkins, Paul Wildum Jr.

Cinema Products 140

2037 Granville Ave., Los Angeles 90025

Mini-Worrall continuous pan cable drive geared head*, mini-Worrall super*, CP-35E*, Steadigate film gate conversion*, Steadigate TC*, insight vision system, series 75B&W broadcast camera, image intensifier and zoom lens*, Steadicam Universal model III camera stabilization system, mini-mote remote controlled pan and tilt head for film cameras, wireless lens control system, portable prompting systems for film and video cameras, joystick zoom control. **Staff:** Ed DiGiulio, Ed Clare, Jesse Garfield, Chuck Jackson, Robert Auguste, Bern Levy, Susan Lewis, Ian Love, Natalie Samuels.

Cinemills Corp. 2777

3500 W. Magnolia Blvd., Burbank, Calif. 91505

Staff: Wally Mills, Sandy Mills, Linda Roberts, Danny Davis, David Holmes, Haydn Edwards, Eddy Ruffell, Lynn Reiter, Rich Schafner, Steve Mule, Bob Roller, John Melvin, Ralph Young, Pat Holmes, Kim Mills.

Cipher Digital 2605

10 Kearney Rd., Suite 2B, Needham, Mass. 02194

Vertical interval time code products, high resolution character displays.

Circuit Research Labs 2538

2522 W. Geneva, Tempe, Ariz. 85282

Audio processing equipment, stereo and SCA generators. **Staff:** Ben VanBenthem, Ron Jones, Chuck Adams, Stan Salek, Dee McVicker, Ray Updike, James Woodworth, Hank Langlinais.

Clear-Com 3352

1111 17th St., San Francisco 94107

Single/multichannel rack, custom, portable intercoms, multiple channel IFB and ISO systems. **Staff:** Robert Cohen, Peter Giddings, Michael Goddard, Ed Fitzgerald, Bob Tourkow, Bill Fluster, Emil Matignon, Sharon Krentz.

CMC Technology 3340

2650 Lafayette St., Santa Clara, Calif. 95050

Replacement video head for C-format VPR series machines with dynamic parallel tracking video head, Videomax TD-800 bulk tape demagnetizer, quad video and audio head and VTR accessories. **Staff:** Bill Fitts, Tony Mlinaric, Fred Koehler, Tommy Thompson, Bill Zimborski.

CMX/Orrox 3232

2230 Martin Ave., Santa Clara, Calif. 95050

Computer-assisted editing systems. **Staff:** Gary Hinderliter, Sam Goodman, Larry Weiland, Dick Sirinsky, Russ Johnson, Dick DeBeradinis, Ed Bolger, Tom Harmon, John Shike, Christin Hardman, Howard Thayer, Dwight MacPherson, Don Niederhauser, Stan Becker, David Orr.

Coaxial Dynamics 2766

15210 Industrial Pkwy., Cleveland 44135

Peak and C.W. reading portable wattmeter*, frequency counter/wattmeter combination, low and high power directional RF wattmeter, RF loads and filters, power sensors. **Staff:** Robert Scott, John Ittel, Joe Kluha, Art Dinicola, Ron Orłowski, Al Prinz.

Coherent Communications 2675

13756 Glenoaks Blvd., Sylmar, Calif. 91342

SMPTTE time code readers*, generators* and inserters*, time code on film equipment*, miniature video transmitters, radio microphones, portable audio mixers. **Staff:** Ivan Kruglak, Steve DeFeo, Harry Howard.

Colorado Video 3447

Box 928, Boulder, Colo. 80306

Time division video multiplexer*, vertical blanking interval freeze-frame communications*, sync stripper, freeze-frame TV broadcast communications systems. **Staff:** Glen Southworth, Jim Dole, Larry McClelland.

ColorGraphics Systems 3144

5725 Tokay Blvd., Madison, Wis. 53719

Artstar III-D* paint system, 3D animation automation, vector type character generator, weatherline 256 color weather display/animation system*, NewStar computer system, ADP NewsStar's add-on relational automated database system.

Colortran 3598

1015 Chestnut St., Burbank, Calif. 91506

Fresnels.

Columbine Systems 3405

Seven Jackson Bldg., Golden, Colo. 80401

Fixed assets and traffic system for IBM PC*, newsroom management system*, music, traffic and accounting software. **Staff:** Mark Fine, Martha Freeman, Marilyn Decker, Larry Christofaro, Pete Callaway, Gary Renfrew, David Wipper, Murray Goodman.

Comark Communications 3561

Box 506, Colmar, Pa. 18915

60 kw klystron UHF amplifier*, high pow-

er klystron transmitters, medium power tetrode transmitters, 30 kw high band VHF transmitter from Marconi, coax and waveguide transmission lines and components. **Staff:** Richard Fiore Sr., Nathaniel Ostroff, Stuart Kravitz, James DeStefano, Richard Fiore Jr., David Smith, Raymond Kiesel, Andrew Whiteside, Mark Duclos, John Molta, Tom Tomkins, Mark Aitken, Alvin See.

Comex 2829

1645 NW 79th Ave., Miami 33126

MMDS products. **Staff:** Jack Rickel, Beverly Chester, Paul VanDerLoo, Vivian Fernandez, Jim Clark, Gary Brotherson, Dale Hemmie.

Communication Graphics 2423

Box 54110, Tulsa, Okla. 74155

Promotional items—bumper stickers, window decals, T-shirts, jackets, hats and credit cards, media or sales folders*. **Staff:** Donna Allbright, Richard Lawrence, Sandra Berkshire, Vickie Barefoot.

Communication Microwave Corp. 139

Box 69, Mountaintop, Pa. 18707

Solid state ITFS/MDS transmitters, amplifiers, repeaters for video, audio and data—10 w, 30 w, 50 w, 100w. **Staff:** Steve Koppelman, Bill Price, Jim Fisher, Bob Greenfield.

Comprehensive Video Supply 3593

148 Veterans Dr., Northvale, N.J. 07647

Display racks, video supplies, computer cables, lighting systems and accessories.

Comprompter 2630

3340 N. Pine Creek, LaCrescent, Minn. 55947

Compuprompt 2630

940 N. Orange Dr., Los Angeles 90038

CompuSonics Corp. 226, 227

1355 S. Colorado Blvd., Suite 607, Denver, Colo. 80222

DSP-1500 digital disk broadcast recorder/player, DSP-2002 hard disk based computer audio systems. **Staff:** David Schwartz, Hamilton Brosious, Peter Roos, John Stautner, David Clementson.

Computer Concepts 2801

8375 Melrose Dr., Lenexa, Kan. 66214

Broadcast computer systems.

Computer Graphics Lab 2929

405 Lexington Ave., New York 10174

Staff: Bill Taylor, Anne Conroy, Mark Miller, J.J. Larrea, Randy Wiggins, Louis Schure, Audrey Fleisher, John McMahon, V. Cavanagh, K. Ritshie, Bruce Perens.

Computer Prompting Corp. 132

1511 K St., Suite 831, Washington 20005

CPC-1000 computerized teleprompter. **Staff:** Sidney Hoffman.

Comrex 3460

60 Union Ave., Sudbury, Mass. 01776

Two-line frequency extender/sports console*, diverta broadcast coupler, frequency extenders, cue systems. **Staff:** John Cheney, Lynn Distler.

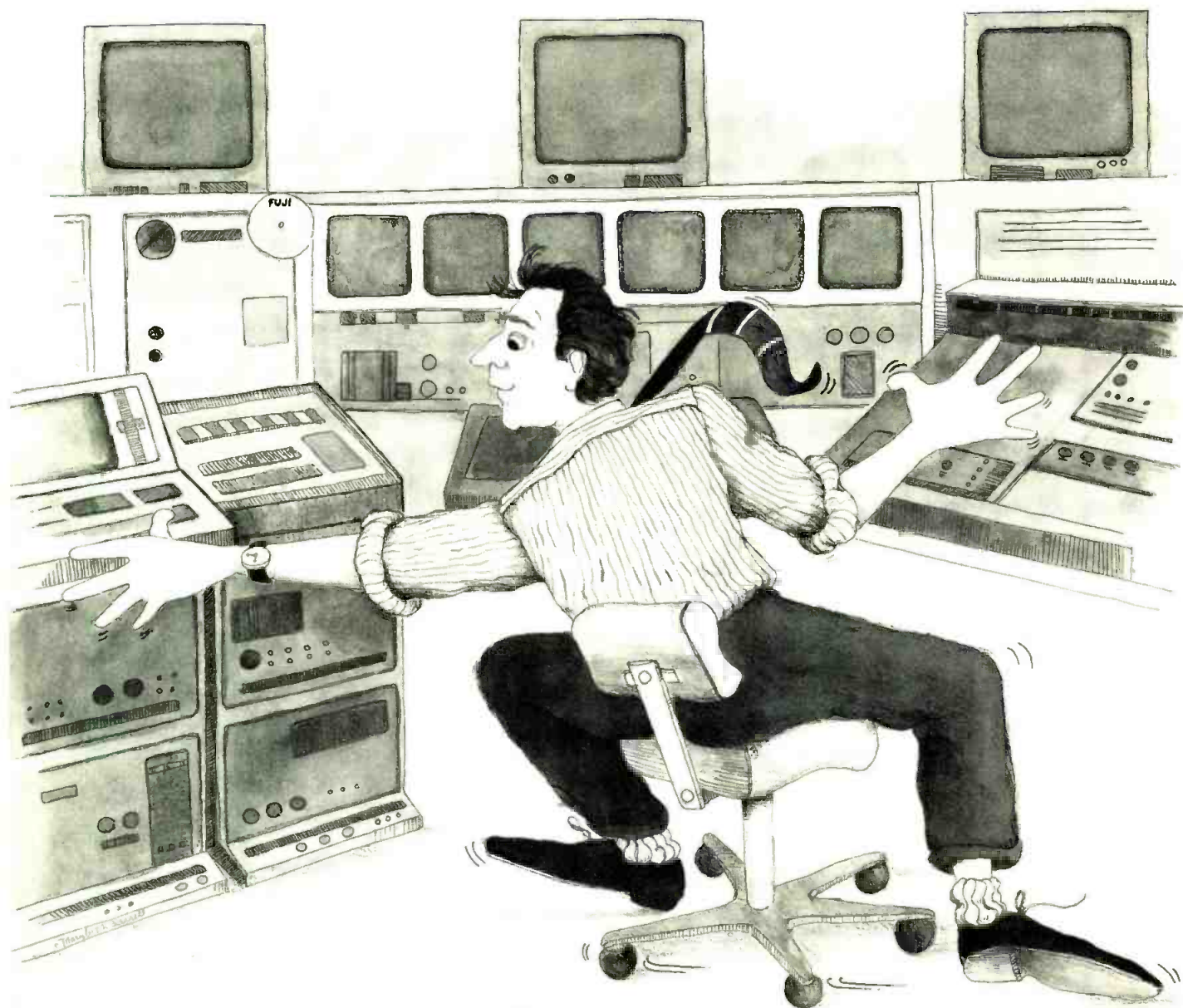
**Fuji invites you
to NAB's only no pay
have-it-your-way,
whatever-you-say,
four-day,
all-day,
don't-go-away,
fully equipped
edit bay.**

What more can we say, except that when you come to Fuji booth 3240, you'll be at a loss for words. Because our edit bay will be the talk of NAB. Not only does it come complete with state-of-the-art equipment, it also comes with a state-of-the-art engineer who will be there all day to demon-

strate everything from edits to dubs. You'll be convinced that the only way to stock your own edit bay is with Fuji tape. So come by the booth with the bay. It's far and away the one that will make your day. O.K.?

 **FUJI** PROFESSIONAL
VIDEOTAPE

Fuji would like to thank the following companies for their assistance and support in constructing our editing facility at the NAB show: Ampex Corporation, CMX Corporation, Merlin Engineering Works, Quanta Corporation, Sony Broadcast Products Company and Textronix Inc.



Comsat World Systems 2482

950 L'Enfant Pl., SW, Washington 20024

Comtek Inc. 2653

357 W. 2700 South, Salt Lake City 84115

MR-182 wireless microphone system for field and studio use, M-72 wireless microphones, off-air audio monitoring personal receivers, wireless communication systems for cueing and IFB, wireless full duplex communication systems. **Staff:** Ralph Belgique, Dana Pelletier, LeeAnne Rickards.

Comtronix 2487

Box 388, Westfield, Mass. 01086

Comwave 139

Box 69, Mountaintop, Pa. 18707

Concept Productions 3334

1224 Coloma Way, Roseville, Calif. 95678

Adult Contemporary, Contemporary Hit Radio, Album Oriented Rock, Country and Contemporary MOR automated or live assist formats. **Staff:** Dick Wagner, Mary Wagner, Dave Nelson, Renee Montero, Larry Anderson, Elvin Ichiyama.

Connectronics Corp. 2403

652 Glenbrook Rd., Stamford, Conn. 06906

Mixing consoles, audio signal processors.

Connolly Systems 2915

100 Water St., New York, N.Y. 10005

Conrac 3124

600 N. Rimsdale Ave., Covina, Calif. 91722

Monitors.

Continental Electronics 3200

Box 270879, Dallas 75227

AM transmitters (from 1 kw to 50 kw), FM transmitters (from 2.5 kw to 60 kw), FM antennas, AM and FM stereo exciters.

Staff: J. Weldon, B. Watson, Tom Yingst, W. Mitchell, Vernon Collins, J.D. Rogers, E.L. King, R. L. Floyd, Steve Clatterbaugh, Bob Dunkin, Paul Kittenbacher.

Control Concepts Corp. 2652

328 Water St., Box 1380, Binghamton, N.Y. 13901

Conus Communications 3385

3415 University Ave., Minneapolis 55414

Satellite-delivered, national and regional news service via Ku band transponders, daily news feed, live and tape coverage of Washington events, portable Ku SNG system. **Staff:** Charles Dutcher III, Anita Klever, Dennis Herzig, Daniel Webster, Ray Conover.

Convergence Corp. 3252

1641 McGaw, Irvine, Calif. 92714

Corporate Communications**Consultants 2753**

4250 Veterans Memorial Hwy., Holbrook, N.Y. 11741

System BM color correction system*.

Staff: Armand Belmares-Sarabia, Stanley Chayka, Kenneth Hultgren, Donald Dutton, Jerry Keller, Mike Ellis.

Corporate Leasing 2413

1710 N. Tower, Plaza of the Americas, Dallas 75201

Countryman Associates 2425

417 Stanford Ave., Redwood City, Calif. 94063

Staff: Carl Countryman, Kevin Dolby, Alan Marzoline, Carolyn Countryman, Greta Lunde, Joan Lewin.

Crosspoint Latch 3533

95 Progress St., Union, N.Y. 07083

6129 AHK compact switcher, 8200 dual time base corrector. **Staff:** Michael Molinaro, Tony Grosboll, James McKay, Don Imbody.

Crown International 2927

1718 W. Mishawaka Rd., Elkhart, Ind. 46517

Power amplifiers, PCC, PZM and GLM microphones, TEF 12 audio analyzer.

Staff: Preskel Gayheart, Tom Szerencse, Bruce Bartlett, Jim Beattie, Herman Mack, Guy Braden, Don Eger, Jim Bumgardner, Tom Lininger, Larry Shank, Bill Raventos, Chuck Gushwa, Tony Satariano.

Cubicomp Corp. 3478

3165 Adeline St., Berkeley, Calif. 94703

Enhanced version of PictureMaker 3D video animation computer graphics system. **Staff:** Harry Taxin, Peter McBride, Stephen Crane, Chuck O'Daniel, Jim Hudman, Henry Lasch, Rick Tears, Amie Slate, Jan Hendricks, Chris Laskey, Henry Dryovage, Carol Byram, Leslie Evans.

Custom Business Systems 2517

Box 67, Reedsport, Ore. 97467

Radio business computer system. **Staff:** Steve Kenagy, Jerome Kenagy, Bob Lundstrom, Mike Povlo, Wes Lockard, Barbara Simon, Ira Apple.

Dago Cases 174

6945 Indiana Ct., Suite 600, Golden, Colo. 80403

Daiwa Manufacturing 2792

Box 170, Yokohama 231-91 Japan

Peter Dahl 222

5869 Waycross, El Paso, Tex. 79924

Three-phase 5 kw plate transformer, 1 and 5 kw modulation transformers and reactors, high voltage rectifiers. **Staff:** Peter Dahl, Gary Komassa, Ozzie Jaeger.

Dalsat 2424

1205 Summit, Plano, Tex. 75024

SNG-25, -10, -8, -6 satellite news gathering vehicles. **Staff:** C.M. Willingham, P. Zilliox, J. Moore, B. Flynn.

Bill Daniels 2631

9101 Bond, Overland Park, Kan. 66214

Illustrated trade references, dealer catalogues, manufacturer's catalogues, literature management, super ads, yellow pages for broadcast*. **Staff:** Bill Daniels, Kathy Daniels, Patricia Hibbs, Charles Wildberge, Patricia Braymer, John Morgan, Jo Kirkham.

Data Communications 3204

3000 Directors Row, Memphis 38131

BIAS PC radio computer based sales/traffic/billing systems, Buylane electronic contract, PC cable for cable ad systems

sales, AOS for more processing power.

Staff: Norfleet Turner, Polly Bolin, Doug Rother, Skip Sawyer, Doug Domergue, Greg Calhoun, Marshall Clark, Cindi Marshall, Dick Dortch, Bob Livingston, David Heckel, Steve Weaver, Dick Bruce, Michael Hunter, Susan Whalen, Robert Anderson, John Schultz, Jerry Eskridge, Michael Bower, Jamie McMahon.

Dateatek 3547

1121 Bristol Rd., Mountainside, N.J. 07092

Video and audio routing systems, monitoring switchers and DAs, machine control data matrices, source ID systems.

Staff: Robert Rainey Sr., Mervyn Davies, Robert Rainey Jr., Richard Rainey, Michael Davies, Daniel Antonellis, Skip Malley, Allen Witheridge.

Dataworld 2779

4827 Rugby Ave., Suite 201, Bethesda, Md. 20814

Broadcast database including AM, FM, TV, LPTV, translators, allocation studies, FCC data, population data base, TV six interference program*. **Staff:** Bob Kircher, Shirley Ostmann, Jack Neff, Hank Brandenburg.

Datum 2408

1363 S. State College Blvd., Anaheim, Calif. 92806

5300 ITP microcomputer-based time processor, video data encoders and readers. **Staff:** Randy Smith, Mike Coffin, Gary Geil.

Davis & Sanford 2496

24 Pleasant St., Box 102, New Rochelle, N.Y. 10802

dbx 2740

71 Chapel St., Newton, Mass. 02195

Digital microwave transmission system for STL applications, audio modular signal-processing systems, audio tape noise reduction systems. **Staff:** David Kennedy, Stan Peters, Scott Berdell, Joe Lemanski, Gregory Green, Gary Soprano, Leslie Tyler, Richard Frank, Paula Polcaro, Barb Bennett.

Delcom Corp. 3580

6019 S. 66th E. Ave., Tulsa, Okla. 74145

Custom consoles and rack units, computerized system cable and tracing program, turnkey video systems. **Staff:** Sam Pate, Tom Roberts, Gerald Whitworth, Martin Brown, Buddy Swartz, Jerry Koerner, Nancy Johnson, Cherridah Pate, Chris Robinson.

Del Compu-Cable Systems 2449

31-1736 Quebec Ave., Saskatoon S7K 1V9

Character generators and titlers. **Staff:** Dale Lemke, Bob Hodgins.

Deloitte, Haskins & Sell 2542

28 State St., Boston 02109

Broadcast financial consulting services.

Delta Electronics 3488

5730 General Washington Dr., Alexandria, Va. 22312

AM stereo exciters and modulation monitors, RF instrumentation products, RF

EASY LISTENING DOES IT AGAIN!

The results of the Fall '85 Arbitron Ratings survey conclusively demonstrate the continuing strength of the Easy Listening format.

CONGRATULATIONS TO THESE MARKET ACHIEVERS

These stations represent 82 percent of Bonneville's Easy Listening clients who ranked in the top 3 positions of their respective markets in the key 35-54 demographic.

KKJY	Albuquerque	WNCE	Lancaster
KBIG	Anaheim	KBIG	Los Angeles
KNIK	Anchorage	KTEZ	Lubbock
WROE	Appleton	WLYF	Miami
WPCH	Atlanta	KBEE	Modesto
KGFM	Bakersfield	WZEZ	Nashville
WLIF	Baltimore	WBYU	New Orleans
WJYE	Buffalo	WFOG	Norfolk
WHBC-FM	Canton	KKNG	Oklahoma City
WDEF	Chattanooga	KESY	Omaha
WLOO	Chicago	WSWT	Peoria
WWEZ	Cincinnati	WEAZ	Philadelphia
WQAL	Cleveland	WSHH	Pittsburgh
KRDO	Colorado Springs	KXL-FM	Portland
WHIO-FM	Dayton	KRVR	Quad Cities
WWLV	Daytona Beach	KNEV	Reno
KOSI	Denver	WEZO	Rochester
WJOI	Detroit	KCTC	Sacramento
KPNW	Eugene	KSFI	Salt Lake City
WOOD-FM	Grand Rapids	KQXT	San Antonio
WHP-FM	Harrisburg	KJQY	San Diego
WRCH	Hartford	KCOZ	Shreveport
KUMU-FM	Honolulu	WLQR	Toledo
KODA	Houston	KJYK	Tucson
WXTZ	Indianapolis	WEAT-FM	West Palm Beach
WTFM	Johnson City	KOEZ	Wichita
KMBR	Kansas City	WKBN-FM	Youngstown
WEZK	Knoxville		



4080 COMMERCIAL AVENUE • NORTHBROOK, ILLINOIS 60062 • 1-800-631-1600

ammeters, impedance bridges, coaxial transfer switches, remote control systems, power and modulation controllers. **Staff:** Bob Bousman, Joe Novak, Mike Hotchkiss, John Wright.

DeSisti Lighting Desmar Corp. 2796
328 Adams St., Hoboken, N.J. 07030

1k, 2k, 5k, 10k spotlights, 575-1200-2500-4000-6000-12000-w HMI spotlights, venture lighting international stage and studio lamps. **Staff:** Mario DeSisti, Frank Marsico, Fred Costantini, Wally Mills, Jorge Montero.

De Wolfe Music Library 2712
25 W. 45th St., New York 10036
Production music library.

Dielectric Communications 3294, 3436
Tower Hill Rd., Raymond, Mass. 04071

Transmission line filters, coaxial switches, combiners, isolation unit, dehydrators, circularly polarized antennas, terminations/loads, duplexers, UHF/VHF TV antennas and shifter system, waveguides and components. **Staff:** Pattiann McCann, Richard Broadhead, Howard Acker, James Beville, Stan Thomas, Noel Luddy, Lauris Waterhouse, Jim Kelly, Dan Schulte, Max Ellison, Chuck Koriwachak, Spencer Smith, Bob Winn, W. Warren.

Digital Broadcast Systems 170
184 Mechanic St., Southbridge, Mass. 01500

Digital Services 3304
3622 N.E. 4th St., Gainesville, Fla. 32609

Staff: John Davis, Jim Seipp, Ann Merideth, Hugh Gillogly, John Barker, Morrell Beavers, Mike Barsness, Gene Sudduth, Chuck Wacker.

Digivision 2527
4980 Carrol Canyon Rd., San Diego 92121

Ebcodec/decoders, video engineering services, enhancers, video noise reduction, security systems.

Di-Tech 3567
48 Jeffry Blvd., Deer Park, N.Y. 11729

Audio follow video routing switchers, audio/video/pulse distribution amplifiers, video equalizers, audio only routing switchers, audio monitor amplifier.

Dolby Laboratories 2705
731 Sansome St., San Francisco 94111

380i*, 390* and 280* spectral recording module, 360 series, XT multichannel noise reduction series, adaptive Delta modulation DT85 encoder. **Staff:** Ray Dolby, Bill Jasper, Gary Holt, Elmar Stetter, Mark Yonge, Bill Mead, Robert Cavanaugh, Stacey Rehm, David Robinson, Kevin Dauphinee.

Dorough Electronics 2602
5221 Collier Pl., Woodland Hills, Calif. 91364

Loudness meter, discriminate audio processor for stereo television. **Staff:** Mike Dorough.

Droid Works 3572
Box CS 8180, San Rafael, Calif. 94912

Staff: Mary Sauer, Don Stulz, Andy

Moorer, Rob Lay, Morgan Martin, Jim Guthrie, Ken Yas, Craig Sexton, Augie Hess, Jeff Taylor, Leigh Yafa, Dorothy Land, Michael Rubin, E. Titherington, Charlie Keagle, Kate Greenfield.

Dubner Computer Systems 3110
158 Linwood Pl., Fort Lee, N.J. 07024

Video graphics generators, color corrector computers, character generators.

DX Communications 2693
10 Skyline Dr., Hawthorne, N.Y. 10532

Dynair Electronics 3409
5275 Market St., San Diego 92114

System 23 SMPTE/EBU EBus, series 1600 ultra wideband switching for graphics and HDTV, audio/video routing switchers, computer controls, A/V distribution equipment. **Staff:** Phyllis Lynch, Jim Meek, Garry Gramman, Bob Vendeland, Bob Jacobs, Tom Meyer, Rich Smith, Al Wilson, Ellie Jett, Bob Wincentsen.

Dynascan 2464
6460 W. Cortland, Chicago 60635

Dynatech Corp. 3144
5725 Tokay Blvd., Madison, Wis. 53719

Eastman Kodak 3208
343 State St., Rochester, N.Y. 14650

Videotapes, imaging products.

ECD Industries 2773
5034 Armacost Ave., Los Angeles 90025

Echolab 2827
175 Bedford Rd., Burlington, Mass. 01803

Color special effects generators, audio switchers.

Econco Broadcast Service 2578
1318 Commerce Ave., Woodland, Calif. 95695

Rebuilt transmitting tubes. **Staff:** Bill Barkley, John Canevari, Dave Elliott, Ray Shurtz, John Sullivan.

Editron Australia 2442
1900 S. Sepulveda Blvd., Suite 354, W. Los Angeles 90025

EECO Inc. 3540
1601 E. Chestnut Ave., Santa Ana, Calif. 92702

IVES II desktop postproduction editing system with new additions and enhancements, EMME computerized editing system with interchangeable editing workstations, time code peripheral equipment. **Staff:** John Ludutsky, George Swetland, Eloy Chairez, Robert Yablonski.

EEG Enterprises 2802
1 Rome St., Farmingdale, N.Y. 11735

Line 21 to teletext transcoder, teletext video data bridge and inserter. **Staff:** Ed Murphy, Bill Posner, Mike Doller.

EEV 2626
7 Westchester Pl., Elmsford, N.Y. 10523

Camera tubes, amplifier klystrons for UHF transmitters, CCD's and CCD cameras, power tubes for AM and FM transmitters. **Staff:** Tom Soldano, Paul Plurien, Mike Kirk, Vijay Patel, Ann Sayers, Walter

Bielinski, Dennis Baker, Harry Kozicki, Jim Comella, Don Rose, Tim Sheppard, Dave Farrar, Dave Wilcox, Kees Van Der Keyl, Roy Heppinstall, Ed Sondek, Geoff Clayworth.

EG&G Electro-Optics 2612
35 Congress St., Salem, Mass. 01970

SS-125 "owl" flashhead, SS-122 controller, SS-124 photocell, LS-159 medium intensity flashhead. **Staff:** Tom Allain, George Mandeville, Steve Wanstall.

Elcom Bauer 3414
6199 Warehouse Way, Sacramento, Calif. 95286

ET portable FM transmitter*, 1,000 w solid state FM transmitter*, FM exciter*, 10,000 w FM transmitter*. **Staff:** Paul Gregg, Richard Noteman.

Elcon Associates 133
1450 O'Connor Dr., Toronto, Ont. M4B 2T8

1200 videotape cleaner/profiler for one-inch broadcast videotape, EA 750 videocassette evaluator for three-quarter umatic cassettes. **Staff:** Bill Walters, Marilyn Walters, Mike Warren, Dick Baker.

Electro Controls 2710
2975 S. 300 West, Salt Lake City 84115

Studio lighting and control equipment.

Electro Impulse Laboratory 3431
116 Chestnut St., Box 870, Red Bank, N.J. 07701

Dry, forced air cooled FM dummy loads, RF calorimeters, attenuators and wattmeters. **Staff:** Mark Rubin, Carol Johnson.

Electro-Voice 3430
600 Cecil St., Buchanan, Mich. 49107

Staff: Michael Leader, Jim Holt, Michael Miles, Rob Boatman, Jim Starin, Paul McGuire.

Electronic Research 2576
108 Market St., Newburgh, Ind. 47630

FM panel antennas, side mount FM antennas, duplexers, field service.

Electronic Systems Lab 2640
120 S.W. 21st Terrace, C-104, Fort Lauderdale, Fla. 33312

EELA broadcast, location, film and post production mixers, reportophones, hybrids, preamps, compressors/limiters, balancing units, phasemeters and recorder test sets, Barth signal processing equipment, Haase hum-killer, Giese complete ADR systems and synchronizers, TC generators, readers, video burn-in units and incremental TV generators, Graff high-speed four-channel in cassette duplicators, CC and videocassette loaders and supplies, cassette duplicator, broadcast on-air console, S 100 B series mixer*. **Staff:** Lutz Meyer, Pieter Bollen, Wolfgang Giese, Heinz Schleusner.

Elicon 2784
940 S. Leslie St., La Habra, Calif. 90631

Remote pan/tilt head, boom arm, gantry. **Staff:** Peter Regla, Elizabeth Regla, William Lee, Carol Contreras, Eric Ratliff,



**CATCH
THE EXCITEMENT AT
NAB BOOTH 3444**

ORBAN DAZZLES DALLAS

Stereo Television

★ **NEW Model 275A Automatic Stereo Synthesizer:** Orban introduces the *Missing Link* for quality Stereo Television—an outstanding package to complete your Stereo TV system. ☐ Mono/stereo recognition and recognition of audio on only one channel. ☐ Smooth crossfades. ☐ Improved Orban stereo synthesis effectively centers dialog. ☐ Reverse-polarity detection corrects out-of-phase problems automatically and unobtrusively. ☐ Noise reduction reduces hiss and hum on mono material by up to 10dB. ☐ Optional full Remote Control. ☐ Priced at \$1895.00

★ **The Orban Stereo Television System: Over 200 systems in the field—more than all other makes combined!**
OPTIMOD-TV Audio Processor (single or dual chassis configuration) ☐ TV Stereo Generator ☐ Separate Audio Program Generator ☐ Pro Channel Generator.

FM Radio

★ **NEW Model 8150A FMX® Stereo Generator:** With the new FMX receivers, your stereo coverage area is improved up to four times! And the Orban Model 8150A adds the special FMX subcarrier to your FM stereo signal with *no loss in loudness*. Model 8150A is designed to work with OPTIMOD-FM Models 8000A, 8100A, 8100A/1 and other audio processors, and is compatible with our 8100A/XT Six-Band Limiter. When coupled to Model 8100A/1, the Model 8150A also improves conventional stereo performance and loudness capability.

★ **NEW Model ACC-22 SCA Filter Card for Model 8100A:** For enhanced SCA protection. Provides 25dB more protection to 67kHz SCA than provided by the standard 8100A or 8100A/1. Also increases average modulation capability by 0.6dB—about the same increase as provided by a composite clipper, but without the trash!

AM Radio

★ **Model 9100A OPTIMOD-AM Audio Processor:** Loud, yet open and dynamic, this processor is becoming the standard for forward-looking AMs who realize that the adult demographic is turned off by the squashed, distorted "loud-at-any-cost" sound of yesterday's "competitive" AM processors. OPTIMOD-AM's superior balance between loudness, brightness, and fatigue is ideal for AM mono, Motorola C-QUAM Stereo, Kahn Stereo, and short-wave broadcast.

orban

Orban Associates Inc. 645 Bryant St, San Francisco, CA 94107 (800) 227-4498 or (415) 957-1067, Telex: 17-1480

FMX® is a registered trademark of CBS Inc.

Ron Scrivner.

EMCEE Broadcast Products 3032

Box 68, White Haven, Pa. 18661

MMDS and LPTV transmitters, ITFS transmitter and repeaters, UHF/VHF medium power transmitters. **Staff:** Bob Nash, John Saul, Frank Trainor, Bob Luka, Perry Spooner, Phil Curtis, Jim Jarick.

Emcor 2402

1600 4th Ave., Rochester, Minn. 55901

Modular electronic enclosure systems, computer support furniture, chassis slides, instrument cases, EMI/RFI emission control cabinets, packaged blowers. **Staff:** John Horton, Tom Regnier, Jim Upchurch, Pat Gibson, Dave Blair, Don MacLaughlin, Bob Crafts, Frank Salmick.

ENG Corp. 3308

2930 Cloverdale Ave., Concord, Calif. 94502

Mobile news vans and cars.

Environmental Satellite Data 2786

5200 Auth Rd., Suitland, Md. 20746

Weather graphics and production systems.

ESE 3470

142 Sierra St., El Segundo, Calif. 90245

Digital clocks, timers, time code generators and readers, master clock systems, programmable timers.

ESS 2469

7838 N. San Fernando Rd., Sun Valley, Calif. 91352

Ethereum Scientific Corp. 207

7641 Clarewood, Suite 336, Houston, Tex. 77036

Satellite uplinking services, transponder time, videoconferencing services and transportable uplinks in C and Ku-bands, satellite news gathering vehicles*. **Staff:** Becky Coyne, Stan Wood, Michael Cordell, Marci King, Dick Wilkie.

Eventide 2830

One Alsan Way, Little Ferry, N.J. 07643

Broadcast delays*, new effects software for SP2016 effects processor/reverb, H949 and H969 harmonizers. **Staff:** Joe Shapiro, Suzanne Langle, Gil Griffith, Jeanne Meade, Richard Factor.

Evertz Microsystems 201

3515 Mainway, Burlington, Ont. L7M 1A9

Chaser time code-based chase synchronizer for audio for video postproduction facilities, emulator intelligent audio transport interface, ev-bloc modular time code system, VITC readers, generators and character inserters. **Staff:** Dieter Evertz, Rose Evertz, Alan Lambshead, Carter Lancaster.

Excalibur Industries 2637

12427 Foothill Blvd., Lake View Terrace, Calif. 91342

Standard, custom and shock absorber cases.

Fairlight Instruments 2460

2945 Westwood Blvd., Los Angeles 90064

Faroudja Laboratories 3408

946 Benicia Ave., Sunnyvale, Calif. 94086

Ferro-Washington 2782

70 Weil Way, Wilmington, Ohio 45177

Transport carts for field production.

Staff: Gordon Shields, Dan Williams, Jim Peeler.

FGV-Panter 2507

Routbuchen Strasse 1, 8 Munich 90 FRG

Fiberbilt Cases 2910

601 W. 26th St., New York 10001

Fidelipac 3092

Box 808, Moorestown, N.J. 08057

Dynamax CTR10 series cartridge machines*, CTR30 series three-deck cartridge machines, ESD10 eraser/splice detector*, CTR100 series tape cartridge machines featuring cartscan and vary speed, other tape cartridges, bulk tape, cartridge accessories, studio warning lights and bulk tape erasers. **Staff:** Roger Thanhauser, Dan McCloskey, Scott Martin, Art Constantine, Mike Sirkis, Amy Welton, Gary Gresham, Fred Buehler, Bill Franklin, Ray Teabo, Rosemary Jukes.

Film House Inc. 2781

24 Music Square West, Nashville 37203

Television commercials for various formatted radio stations. **Staff:** Eric Hahn, Curt Hahn, Mike Watson, Tony Quin, Peter Natalie, Rob Gorstein, Denise Scott, Phil Hahn, Eric Hahn.

Film/Video Equipment Service 2803

1875 S. Pearl St., Denver 80210

Wide Eye I and II wide angle attachments, portable energy products, sealed lead-acid and Ni Cad battery systems. **Staff:** Jane Swearingen, Dean Schneider, Jerry Schneider, Ron Cotty.

Flash Technology 3454

55 Lake St., Nashua, N.H. 03060

High and medium intensity lighting for marking tall towers, beacon and power converters*, controller for remote control operations*. **Staff:** Stan Kingham, Fred Gronberg, Lew Wetzel, Denis Buckland, Rick Sullivan.

John Fluke Mfg. 100

6920 Seaway Blvd., Everett, Wash. 98206

Focal Press 2541

80 Montvale Ave., Stoneham, Mass. 02180

Books on television and radio. **Staff:** Suzanne Oesterreicher, David Guenette, Arlyn Powell.

For-A Corp. 3599

49 Lexington St., West Newton, Mass. 02165

Video switchers, TBC's encoders.

Fort Worth Tower 3360

1901 E. Loop 820S, Box 8597, Fort Worth 76124

Towers and equipment buildings. **Staff:** Tommy Moore, Betty Moore, Fred Moore, Cheryl Moore, Carl Moore, Valinda Moore.

Fortel 3044

2985 Gateway Dr., Suite 600, Norcross, Ga. 30071

Time base correctors, synchronizers, image correction systems.

Fostex 2579

15431 Blackburn Ave., Norwalk, Calif. 90650

Audio to video and video to audio synchronization systems, audio editing using computers, E series mastering recorders with center track SMPTE*. **Staff:** Mark Cohen, Y. Abe, Fred Huang, Bob Hunt, Allen Wald, Maggie Hughes, Sandy Golightly, Jacqueline Dispoto.

Frezzolini Electronics 2716

5 Valley St., Hawthorne, N.J. 07506

Super no memory high capacity rechargeable nickel cadmium battery packs*, RPS-4 AC adaptor*, lightweight location lighting kit*, portable power and lighting equipment and accessories. **Staff:** Jim Crawford, Jack Frezzolini, Jack Zink.

Fuji Photo Film 3240

555 Taxter Rd., Elmsford, N.Y. 10523

Videotapes, VHS and Beta videocassettes. **Staff:** S. Bauer, B. Kuczik, B. Friedrich, G. Brill, T. Daly, J. Hegadorn, T. Kobayashi, K. Kurokawa, G. Kern, T. Shay.

Fujinon 3410

672 White Plains Rd., Scarsdale, N.Y. 10583

A18x8.5 ERM ENG lens*. **Staff:** John Newton, M. Kawamura, Jack Dawson, Mark Schurer, Reno Morabito, Dave Waddell, Jorge Casteneda, Bruce Wallace.

G-M Power Products 2790

943 N. Orange Dr., Los Angeles, Calif. 90038

Battery belts and packs and accessories. **Staff:** Gideon Ben-Akiva, Gerald Meisel, Avi Yaron.

Garner Industries 2648

4200 N. 48th St., Lincoln, Neb. 68504

New 2700 continuous duty degausser for eraser, other audio, video and computer tape erasers. **Staff:** Phil Mullin, Bruce Alderman, Brian Boles.

General Electric 2717

Nela Park-4033, Cleveland 44112

Lighting equipment.

Generic Computer Systems 2818

357 N. Main St., Butler, Pa. 16001

Software for traffic and billing on the Apple and IBM personal computers.

Gentner Engineering 2669

540 W. 3560 South, Salt Lake City 84115

Telephone interface equipment*, audio routing systems, program switchers, intercom system, remote control unit. **Staff:** Russ Gentner, John Leonard, Bill Gillman, Elaine Jones, Brooks Gibbs, David Pedersen, Chris Gentner, Keldon Paxman, Karen Bump.

Gerstenslager Co. 2510

1425 E. Bowman St., Box 390, Wooster, Ohio 44691

Mobile TV vans and trailers.

Giese Electronic 2785

Klaus-Groth-Strasse 84-86, Hamburg 26, West Germany 0

Time code equipment, synchronizers, generators. **Staff:** Wolfgang Giese, Hel-

mut Sket.

Global Systems Corp. 2788
15 Hule St., Haverhill, Mass. 01830

GML Inc. 2546
2323 Corinth Ave., Los Angeles 90064
Staff: C.J. Flynn, Bruce Jackson, Betty Bennet.

GML America Inc. 241
8150 Leesburg Pike, Suite 910, Vienna, Va. 22180

Dual channel, synchronizing digital video effects unit with A/B mixing capability.
Staff: Gary Glover, John Coffey, Tony Stalley, Paula Bowen.

Gold Nugget 2772
10602 Lands Run, San Antonio, Tex. 78230

Alan Gordon Enterprises 3435
1430 Cahuenga Blvd., Hollywood, Calif. 90028

Fax animation equipment, EOS/Fax video animation controller, computer motion controlled fax animation stand.

Gorman-Redlich 2715
6 Curtis St., Athens, Ohio 45701

EBS encoders-decoders, NOAA weather receivers, digital AM antenna monitors.

Gotham Audio 3354
1790 Broadway, New York 10019

Staff: Russell Hamm, Jerry Graham, Juergen Wahl, George Johnson, Bernie Berry.

Graham-Patten Systems 2528
Box 1960, Grass Valley, Calif. 95945

Eight-input edit suite audio mixer*, other edit suite audio mixers, video keying systems, distributions amplifiers, universal equipment control system. **Staff:** Merv Graham, Mike Patten, Bill Rorden, Tim Prouty, Laurie Lewis.

Graland Distributors 2696
Box 45134, Baton Rouge, La. 70895

Grass Valley Group 3112
Box 1114, Grass Valley, Calif. 95945
Kaleidoscope DPM-1 digital effects system*, EZ-Link series 85 fiber optic system, production and postproduction switchers, routing switchers, timing/processing/distribution equipment, Wave-link fiber optic video/audio/data communication systems, master control/automation systems, editing systems, computer graphics systems. **Staff:** Dan Wright, Bob Cobler, Birney Dayton, Randy Hood, Bob Webb, Peter Challinger, Doug Buterbaugh, Louis Swift, Tom O'Connor, Chuck Coovert, Gail Clason, Lee Frisius, Jay Kuca, Pete Mountanos, Bob Johnson.

Gray Communications 3402
404 Sands Dr., Albany, Ga. 31705
Broadcast television equipment, systems installations, mobile production vehicles. **Staff:** Steve Litterest, Norman Schroth, Cliff Scott, Doug Pritchett, Jim Carlisle, Jerome Hoffman, Travis Carter, Harold Cole, Pat Long, Steve Reynolds, Dick Scott, Stan Abadie, Cecil Wood, Jeff

Wall, Kevin McDuff, Karl Lester, Perley Epley Sr., Ray Collins, Kenny Shewmake, Richard Brown, Emerson Ray, Fred McCoy, Russ Abernathy, Russ Thom, Linda Todd, Susan Boyett, Dick Schmidt.

Gray Engineering Labs 2428
504 W. Chapman Ave., Orange, Calif. 92668
Designs and manufacturers SMPTE longitudinal and vertical interval time-code products, video assisted film editing products and safe title generator equipment.

Great American Market 2714
826 N. Cole Ave., Hollywood, Calif. 90038

Grumman Corp. 2481
Mail Stop B39-05, Bethpage, N.Y. 11714
Sync generator and video processing amplifier machine control system.

James L. Grunder & Assoc. 2429
5925 Beverly, Mission, Kan. 66202

GTE Spacenet Corp. 2573
1700 Old Meadow Rd., McLean, Va. 22102
Multisatellite system providing transponder time on C and Ku-band, NewsExpress, turnaround service. **Staff:** Dr. C.J. Waylan, Ivan Riley, Michael Caffarel, Harley Shuler, Harry Mahon, Rick Boylan, Susan Kalla, Marianne Voight.

GTE Sylvania 3393
100 Endicott St., Danvers, Mass. 01923
Staff: Robert Shay, Pat Basile, Paul Berry, Mike Skerry, Steve McClenaghan, Arnie Weslund, Don Richardson, Tim Fohl, Bill Meyers, Ward Powers, Cal Gungle.

Hallikainen & Friends 2925
141 Suburban Rd., San Luis Obispo, Calif. 93401

Transmitter remote control and logging equipment, audio mixing equipment with audio follow video. **Staff:** Harold Hallikainen, Ric Turner, Rita Kinnear, Betsy Ehrler, Frank Calabrese, Rick Smith, Eric Dausman, Gerry Franke, Len Filomeo.

Harris Corp. 3136, 3238
Box 4290, Quincy, Ill. 62305
35 kw FM transmitter*, portable uplink package for satellite newsgathering*, 2/2.5 ghz ENG central microwave receiver*, model 640 synchronizer*, sentinel 48 remote control system*, ESP II still store*, model 634 synchronizer*, 4.5 meter Ku band satellite antenna*, program automation*, model 560 time base corrector*, model VW-3 synchronizer*, model AC 20 dual channel time base corrector*, UHF and VHF transmitters, challenger 6w wideband microwave transmitter, Iris C still store, TV RF switching and antennas, Sentinel 16 remote control system, SX series 1 kw, 2.5 kw 5 kw AM transmitters, 7ghz microstar hot standby STL, 50 kw AM transmitter, FV-40 modulation shelf with SSB subcarrier and ardx telephone orderwire and UDL-634 telephone multiplex, 3.5 k and 25 k FM transmitter, Med-alist 8, 10, 12 and gold audio consoles, TC-85C TV camera, PX-91 turntable pre-amp, phase fixer encoder and decoder, HDE 200D digital effects, AU75 and

AU220 graphics, model 6541 satellite receiver and other satellite equipment, time base correctors. **Staff:** John Delissio, Gary Thursby, Ronald Frillman, Wilfred Bone, Robert Hallenbeck, S. Hawkins, E. Lowder, James Marwood, Mitchell Montgomery, Ivey Raulerson, Donald Taylor, Arthur Silver, Marvin Bredemeier, T. James Woods, Barry Huntsinger, Christopher Kreger, C. Wayne Schuler, Curtis Lutz, Warren Bottorff, Richard Chalk, Roy Giles, John Klecker, Thomas O'Hara, Paul Raymond, Thomas Schoonover, John Borger, James Burger, Shawn Underwood, Gary Johnston.

Harrison Systems 3412
Box 22964, Nashville 37202

Television stereo/mono audio production system, audio routing switchers, video switcher/editor interface, other mixing consoles and production equipment.

HEDCO 2751
Box 1985, Grass Valley, Calif. 95945

GSC-101 general purpose switching controller*, HD-12 video and stereo audio routing*, HDF-50 video and audio routing switcher*, other audio switchers, distribution amplifiers, video switchers, small routing switchers, intermediate routing switcher. **Staff:** Peter Hughes, Sherri Douglas, Ross Shelton, Gary Carter, Dave Swartzendruber, Steve Miller, Mike Carter.

Heie Engineering 2452
2480 S. 52d St., Acala, Fla. 32671

Karl Heitz 2900
34-11 62d St., Woodside, N.Y. 11377

Gitzo video/cine and photo tripods, leveling balls, fluid and counterbalanced heads*, dollies, monopods, microphone fishpoles, lightstands, Gitzo mini tele stud tripod with levelling balls*, Gitzo compact microphone fishpole. **Staff:** Karl Heitz, Sylvia Dellamula, Debbie Thomson, Laval Fuller, Chris Salmon.

Hipotronics 2728
Rt. 22, Brewster, N.Y. 10509
Automatic voltage regulators.

Hitachi Denshi America 3160
175 Crossways Park West, Woodbury, N.Y. 11797

Computacam auto set-up cameras including the Z31P*, HR-230 one-inch type C VTR, CV-ONE, 8 mm small format ENG/EFP VTR system*. **Staff:** J. Tosaka, Bernard Munzelle, Jack Breitenbucher, S. Hotta, Gino Nappo, Robert Russin, James Fadely, Samuel Wright, Karen Sawyer, Fred Scott, Tony Delp, Ed Wrona, Ross DeLacruz, Henry Fukushima.

HM Electronics 2619
9675 Business Park Ave., San Diego 92131
Wireless microphones, intercoms and cabled intercoms, BH720 single channel cabled intercom belt pac headset station*, BH721 two-channel cabled intercom*, RL742 two-channel rack mounted loudspeaker intercom station*. **Staff:** John Kenyon, Tonia Sills, Dan Taylor.

Hoffend & Sons 2641
34 E. Main St., Honeoye, N.Y. 14471

Engineers, manufacturers and installers of stage and studio equipment, Micro Commander II computerized control system for motorized studio rigging*, Omni motorized scenery/lighting batten hoists*, Lighting Hoists for individual lighting fixtures*. **Staff:** Donald Hoffend, Thomas Young, Robert Watson, Donald Hamilton.

Holiday Industries 2737
14825 Martin Dr., Eden Prairie, Minn. 55344

Broadband meters for measuring RF exposure, HI-5000SX system*. **Staff:** David Baron, Burton Gran, Reed Holaday.

Home Shopping Network 2648
1529 U.S. 19 South, Clearwater, Fla. 33546**Horizon Intl. 2491**
3837 E. Wier Ave., Suite 1, Phoenix 85040**Hotronics 2531**
1210 S. Bascom Ave., Suite 128, San Jose, Calif. 95128

Time base corrector and TBC/frame synchronizer with optional freeze frame/field, pixel by pixel drop out compensator and digital SMPTE color bar. **Staff:** Linda Lo, Andy Ho, Ed Manzo, Kenneth Ou.

Howe Audio/BCP 2832
2300 Central Ave., Suite E, Boulder, Colo. 80301

Modular and nonmodular audio consoles, phase chaser audio time base corrector*. **Staff:** Lee Edwards, Terry Sweeney, Bill Laletin.

Hubbard Communications 3286
12495 34th St., NW, St. Petersburg, Fla. 33702

Satellite news gathering systems. **Staff:** Alan Jester, Bud Henley, Tom Kidd, Cliff Benham, John Terhar, John Figley, Mike Haskell, George Orgera.

Hungerford, Aldrin, Nichols & Carter 2534
678 Front St., NW, Grand Rapids, Mich. 49504

Broadcast accounting services. **Staff:** Clifford Aldrin.

ICM Video 2711
Box 26330, Oklahoma City 73126

Video enhancer/processors, video/audio distribution amplifiers, satellite receivers, downconverters and accessories, character generator*. **Staff:** Mike Janko, Judy Dahlquist, David Broberg, Mike Schueder, Wes Crenshaw, Churchill Miller, Kodo Kawamura, Chuck Prada, Keith Holznagel, George Larkin, Joan Miller, Ron Dewell.

IGM Communications 3378
282 W. Kellogg Rd., Bellingham, Wash. 98226

IGM-EC broadcast systems controller*, IGM-SC IBM-PC-based systems controller*, Instacart 48-tray cartridge playback*, G-cart, 24-tray cartridge playback*. **Staff:** Jim Wells, Nick Solberg,

Rick Sawyer, Carl Peterson, Fred Harkness.

Ikegami Electronics 3150
37 Brook Ave., Maywood, N.J. 07607

HDTV telecine and projection systems*, HK-323 3/4-inch and one-inch studio cameras*, PM 9-5 black and white monitor*, HL-95 ENG/EPF color TV camera, HL-79 ENG/EPF camera, ITC-730A ENG/EPF camera, SC-500 studio and field color camera, TKC-990 high performance telecine system with computer control. **Staff:** Nick Nishi, Greg Stoner, Sam La Conte, Yukimitsu Sato, Sam Arnold, John Lynch, John Chow, Harvey Caplan, Thomas Calabro, Frank LoCascio, Mike Aiello, Robert Schindler, Mark Adams, Oscar Wilson, Glen Smith, Kevin Goetz, Bob Johnston, Bud Mills, Frank Heyer, T. Kazuma, Jerry Kraus, S. Yana, N. Narumi, Howard Winch, Robert Estony, Carlos Contreras, Victor Luengo, Jose Cadavieco, Walter Nygaard, M. Sakamoto.

Image Video 2636
705 Progress Ave., Unit 46, Scarborough, Ont. M1H 2X1

Staff: A. A. Vanags, Joseph Gerkes, Brian Mitchell, Jeff Balmer, Murray Porteous, Craig Congrady.

Information Transmissions Systems 2535
16 E. Water St., Canonsburg, Pa. 15317

UHF and VHF exciters, stereo compatible UHF transmitters, MMDS transmitters.

Innovative Television Equipment 3258
Box 681, Woodland Hills, Calif. 91367

Camera support dollies, tripods, pedestals, pan/tilt heads and accessories for studio, ENG/EPF applications, ARO:P2 pedestal*, combination T50 and H50 ENG tripod and fluid head*. **Staff:** Bert Rosenberg, Stanton Hollingsworth, Michael Rosenberg, Rick Low, Mark Rosenberg, Vivien Burrows, Kevin Rynne, Eugenio Borganti, H. Takaoka, Grant Clementson.

Inovion Corp. 2445
195 E. Gentile, Suite 7C, Layton, Utah 84041**Inovonics 2434**
1305 Fair Ave., Santa Cruz, Calif. 95060

Audio recording, signal processing, and instrumentation equipment for broadcast and recording, audio processing for stereo AM and TV.

Integrated Media Systems 2476
1552 Laurel St., San Carlos, Calif. 94070**Integrated Technologies 2758**
3716B Alliance Dr., Greensboro, N.C. 27407

3D graphics, animation, weather, newsmaker*, image-maker*, ani-maker*, ani-maker plus* and weather-maker* systems. **Staff:** Michael Gold, Anthony Watts, Robert McAll, Michelle Simpson, Jack Crutchfield, Kenneth McAll, Richard Volucci, Gordon Peters, Grady

Young, Robert Whitton, Ray Balbes, Sean McAll

Interactive Motion Control 2771
8671 Hayden Pl., Culver City, Calif. 90232

IMC3565 motion control computer, video slide image system*, camera lifter*. **Staff:** Bill Bryan, Joe Parker, Ed Rathbun, Margot Hottum.

Intergroup Video Systems 3312
2040 NW 67th Pl., Gainesville, Fla. 32606

9310 and 9410 production switchers* with 10 input, 9420 production switcher* with 20 input, 8000 master control series*, 1100 routing switcher*, suite 16 video only routing switcher (analog component version)*, matrix wipe generator, downstream key edger, mini master control switcher, distribution amplifiers. **Staff:** Robbie Majors, Doug Akers, David Stanley, Richard Melvin, Steve Dorman, Steve Ingram, Mary Ann Lewis, Fred Fey, Bill McClancey, Ed Miller, Vern Pearson, Jim Moneyhun, Bob Cooper, Gregg Smith, Roy English, Connie Dodd, Kevin Kelly.

International Tapetronics/3M 3052
2425 S. Main St., Bloomington, Ill. 61702

99B, Delta and Omega cartridge machines, dubbing from compact disk, test equipment, ESL V eraser/splice locator* and ScotchCart II broadcast cartridge*. **Staff:** Jack Hanks, Bill Parfitt, John Schaab, Mike Bove, Dave Larimore, Bob Bomar, Chuck Kelly, Tom Becker, Chris Downing, Bill Kidd, Dick Lund, Dave Montgomery, Mark Hill, Charlie Bates.

Itelco USA 2765
1620 W. 32d Pl., Hialeah, Fla. 33012

ITS Corp. 2535
375 Valley Brook Rd., McMurray, Pa. 15317
VHF exciter, UHF back-up system 1 kw transmitter, 10 w MMDS/ITFS transmitter, ICPM corrector, aural IF modulator for multichannel sound. **Staff:** Robert Unetich, Jeffrey Lynn, Ronald Zborowski, Kenneth Foutz.

J&R Film Co. 3450
6820 Romaine St., Hollywood, Calif. 90038

Lokbox, video to film hard lock synchronizer, video moviola film to tape transfer machine, post production equipment and supplies, three-quarter-inch videocassettes cases*. **Staff:** Ron Powell, Joe Szwieg, Joe Paskal, Jim Reid, Jim Frank, Kate Reynolds, Austun Green, Brent Keast.

J-Lab 2828
Box 6530, Malibu, Calif. 92064**JBL/UREI 2727**
8500 Balboa Blvd., Northridge, Calif. 91329

6215 one-rack space amplifier*, JBL studio monitors*, broadcast consoles, studio monitors. **Staff:** Ronald Means, Ken Lopez, Neil Conley, Bill Hamilton, Tom Walter.

NOW VOICE AND DATA GO WHEREVER YOU GO.

If you need to combine unlimited mobility with unlimited voice and data communications, the TCS-9000 Transportable Satellite Earth Station is what you want. In any weather conditions, no matter how remote the location, you can be up and running in fifteen minutes, sending *and* receiving voice and data all around the globe.

It's so indestructible it can be air-dropped. It's so light and compact, you can carry it to any site. And it's so advanced it gives you clarity, reliability, total privacy, and an impressive roster of interface options.

TCS-9000 can keep up with the most demanding situations. Fault isolation, remote control and access, remote diagnostics, and modular design all make this system the mobile communications wonder of today and tomorrow.

The TCS-9000 is a product of TeleSystems, a subsidiary of COMSAT and an innovator in maritime satellite communications.

For information, write to COMSAT TeleSystems, Inc., 2700 Prosperity Avenue, Fairfax, Virginia 22031, or call us today at 703-876-3000.

TELESYSTEMS

A COMSAT Technology Products Company

Come see us at NAB booth #2482.



Jefferson Pilot Data Systems 3440

501 Archdale Dr., Charlotte, N.C. 28210

\$ally PC-based productivity system for TV sales and research*, JDS Core call-out research system for radio*, JDS 1000 sales/traffic/billing system*, JDS 2000 and JDS 500 sales/traffic/billing systems, financial management system, music rotation system, electronic news processing equipment, program management system. **Staff:** John McDonald, Dan Philippi, Steve Jones, John Pearce, Jeff Griffin, Barry Roach.

Jensen Tools 2721

7815 S. 46th St., Phoenix 85044

Tools, tool kits and test equipment, shock mounted electronic enclosures*. **Staff:** Tom Fenzel, Patrick Kennedy.

Johnson Electronics 3451

4300 Metric Dr., Box 4728, Winter Park, Fla. 32793

SCA equipment and related accessories.

JVC Corp. of America 3180

41 Slater Dr., Elmwood Park, N.J. 07407

M1000 mindset titler*, M2000 mindset titling, graphics and animation system*, GX-N8PCU single tube RGB camera*, BR-9000 time lapse VCR*, Procan, digital audio mastering system, CR-850U ¾ inch editing VCR. **Staff:** Daniel Roberts, Juan Martinez, Dave Walton, Mike Messerla, Gary Horstkorta, John Brown, Don Thorkelson, Tom McCarthy, Charles Roberts, Douglas DiGiacomo, Bob McManus, Bob Kelshaw, Larry Boden, Thimas Itoh, Mark Falzarano.

K&H Products Porta-Brace 2532

Box 246, N. Bennington, Vt. 05257

Nylon cases for video and film equipment. **Staff:** Marjorie Robertson, Ken Barry, Bob Howe.

Kahn Communications 2454

425 Merrick Ave., Westbury, N.Y. 11590

AM stereo signal generator*, AM stereo exciter and monitor, Lines-Plus high frequency and low frequency telephone extender. **Staff:** Leonard Kahn.

Kalamusic 169

4200 W. Main St., Kalamazoo, Mich. 49007

Kaman Broadcasting System 3078

1500 Garden of the Gods Rd., Colorado Springs 80933

Demographic research and proposal system*, programing inventory system for scheduling, amortization and payables. **Staff:** Richard Smith, George Beatlie, Bill Phillips, Richard Harper, Bob Hoeglund, Beverly Trentz, Dave Anderson, Vicki Clinebell.

Kangaroo Video Productions 2676

10845 Wheatlands Ave., Suite C, Santee, Calif. 92071

Staff: Steve Sickman, Steve Leiserson, Lynne Domash, Julia Elkins, Mac Heald, Laurence Percz, Pam Satterfield, Gary Webb.

Kavouras 2657

6301 34th Ave., South, Minneapolis 55450

Weatherlink Vista and Weatherlink Metpac satellite communications systems*, Radac 2020 color weather radar receiver, Triton graphics and animation software advancements, data base products*, Mcdas forecasting graphics and maps. **Staff:** Bill Schlueter, John Traynor, Lynn Anderson, Ralph Manuel, Pete Sapanos, Dave Schlueter, Greg Slater, Jim Thole.

Kay Industries 2511

604 N. Hill St., South Bend, Ind. 46617

Rotary phase converters.

Keltec Florida 2435

Box 2917, Fort Walton Beach, Fla. 32549

Kem Elektronik 2467

30 Berry St., San Francisco 94107

Keylite Productions 2432

333 S. Front St., Burbank, Calif. 91502

QuartzColor incandescent HMI spotlights*, Supercrank heavy light stand*, 12000x QuartzColor HMI "Sirio" system, Bambino incandescent lights, location and stage, lighting and grip packages production vans and generators. **Staff:** Edward Carlin, Ron Dahlquist, Carole Carlin, Michael Carlin.

Kinemetrics/True Time 2513

3243 Santa Rosa Ave., Santa Rosa, Calif. 95407

GPS* and Omega* synchronized clocks, other clocks, universal clock driver option. **Staff:** Rick Dielman, Jeff McDonald, John Van Groos, Chet Prater, Ed Petroka.

Kings Electronics 3464

40 Marbledale Rd., Tuckahoe, N.Y. 10707

RF coaxial, twinax and triaxial connectors, video patch panels and patch cords. **Staff:** Fred Pack, Fred Iacono, Bob Braden.

Kintek 2455

224 Calvary St., Walham, Mass. 02154

Stereophonic converter, monogard, stereogard*. **Staff:** Zaki Abdun-Nabi, John Bubbers, Dan Taylor, James Townsend, Roberta Allis.

Kintronic 2780

801 English St., Bristol, Tenn. 37620

AM directional antenna phasing, power dividing and matching equipment, isolocoupler or isolation transformer for STL use. **Staff:** Tom King, Gwen King.

Kliegl Bros. 3581

32-32 48th Ave., Long Island City, N.Y. 11101

Performer IV computerized lighting control console*, ellipsoidal and fresnel lighting fixtures, K-100 dimmer rack. **Staff:** Kori Hansen, Lawrence Kellerman, John H. Kliegl II, John H. Kliegl III, Jose Sanchez, Horst Emmert, Mike Cowger.

Knox Video Products 2611

8547 Grovemont Cr., Gaithersburg, Md. 20877

Video correctors, character generators.

Kobold of America 2834

1905 Amerstone Ct., Silver Spring, Md. 20904

Kulka Smith 2691

1913 Atlantic Ave., Manaquan, N.J. 08736

L-W International 3427

50 W. Easy St., Simi Valley, Calif. 93065

Laird Telemedia 3474

2424 S. 2570 West, Salt Lake City 84119

Character generators.

Lake Systems 112

55 Chapel St., Newton, Mass. 02160

Landy Associates 2429

1890 E. Marlton Pk., Cherry Hill, N.J. 08003

Interphase M-40* and M-41* machine control system, Ikegami HL-79 ENG camera, countdown/safe area generator, character generator, tape editing equipment, Ikegami monitors. **Staff:** Jim Landy, Dave Newborg, Brad Reed, Mike Landy, Dave Raynes, Mike Keller, Fred Majewski, Dick Wills.

Lang Video Systems 2533

547 NE 26 Ct., Pompano Beach, Fla. 33064

Digital video test generators and source identifiers.

Larcan Communications 3314

380 Oser Ave., Hauppauge, N.Y. 11788

Transmitters.

Laux Communications 244

4460 S. Lake Forest Dr., Cincinnati 45242

C and Ku-band TVRO systems. **Staff:** Pat Laux.

LEA Dynatech 3332

12516 Lakeland Rd., Santa Fe Springs, Calif. 90670

Surge eliminators, electronic filtering systems, transient eliminators for studio and transmitter applications. **Staff:** Edward Bellamy, William Paulin, Robert Rozanski, Peter Carpenter.

Leader Instruments 2763

380 Oser Ave., Hauppauge, N.Y. 11788

Staff: S. Hirota, B. Storch, R. Sparks, R. Sileo, G. McGinty, J. Fisher, C. Asfour, M. Reiner, R. Storm, S. Nihei, S. Ohmatsu, S. Tanoue.

Leaming Industries 136

180 McCormick Ave., Costa Mesa, Calif. 92626

Audio subcarrier equipment for broadcast, microwave and satellite, wide dynamic range SCPC modulators and demodulators. **Staff:** Stan Serafin, John Hoge, Jim Leaming, Rob Leaming.

LeBlanc & Dick Communications 2903

14440 Cherry Lane Ct., Suite 201, Laurel, Md. 20707

Broadcast towers and antenna systems, combiners. **Staff:** Jim Wilson, Ray Tattershall, Paul Dickie, George Patton, Keith DeBelser, Larry Penner, Don Cuthbertson, Rufus Baldwin, Roy Jeffrey, Alan Dick, Mike Anders, David Brawn, John Tranter.



AT KAMAN, A PURPOSEFUL RETREAT GAVE BIRTH TO REVOLUTIONARY ADVANCES.

In 1981, Kaman Broadcasting made a monumental decision. They resolved that Kaman would develop a software system for broadcasters that would not only meet station needs more efficiently now, but meet them for years to come.

It wasn't idle talk. Kaman put their dream to work and their company name on the line. In an unprecedented move, Kaman Broadcasting withdrew from the marketplace.

For two intensive years, they labored over

a system that would give broadcasters in-house computer control without dependence on long distance phone lines. They purposed to design a totally interactive system. That meant avails were always actual reflections of the logs and salespeople could sell, book, and rotate schedules with confidence. And they hammered out a hard working family of support programs to extend the system's power beyond just sales and traffic.

The system Kaman envisioned is the system you can actually buy today. This is

the era of the Kaman Broadcasting System

Kaman Broadcast Management

Kaman Accounting

Kaman Films

Kaman Demographics

Kaman Autoswitching Interface

IBM System/38 hardware

All interactive. All in-house. All you could ever need. Call a Kaman representative today. Then you will understand how a purposeful retreat at Kaman produced advances that are revolutionary. Revolutionary indeed.

KAMAN BROADCASTING

P.O. Box 7463
Colorado Springs, CO 80933
303/599-1470

KAMAN

©1986, Kaman Broadcasting

See us at the NAB Convention, April 13-16, Booth 3078.

A few words from who made Conus

"When you get one Conus truck, you're getting 30 more, free!"

"With the resources of Conus, you have a national network with the potential of 30 SNG® trucks."

*Jim West
News Director
WTVT-TV/Tampa*

"I've watched with pride and amazement as our staff grew in stature because of the power of the Conus SNG System. There's simply no way to calculate its benefits to us."



Harold Crump



Joyce Reed



John Spain



Harry Apel

"Our decision to acquire the Conus SNG truck and to become a Conus Member has been one of the most important elements in our success."

*Philip S. Balboni
VP/News
WCVB-TV/Boston*

"First, Conus has had a very positive effect on our people. They enjoy working with the new technology. And second is, of course, our increased capabilities. We now have the ability to cover stories that we couldn't have before. The system has allowed us to become more self-sufficient. I can't believe there are still people out there who don't see the scope of this thing."

*Jim Smith
VP/GM
KRON-TV/San Francisco*

"The cooperation between the member stations in Conus and the staff in Minneapolis is fantastic. And everybody benefits, most of all the viewers."

*Don Ross
News Director
KTXL-TV/Sacramento*

"I have to admit, I get goosebumps whenever I see our Conus trucks out on location, personalizing a story that we might not have gotten or would have gotten a day later. Our stations look good, contemporary, with more network-calibre work."

"Conus is sure doing the job for us."

*Fred Young
Director, Broadcast Operations
Hearst Broadcasting, an operating group of The Hearst Corporation*

"Last year, we had four hurricanes that made six passes over the area. Our competitors were doing phone-ins from motels along the coast. And there we were, with a meteorologist broadcasting live from the eye of a hurricane."

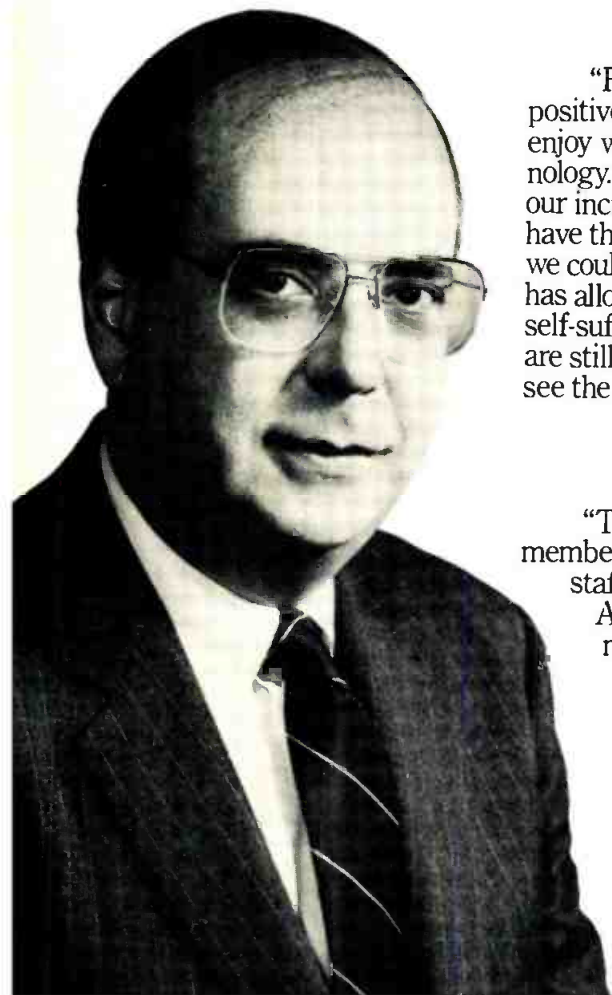
*John Spain
News Director
WBRZ-TV/Baton Rouge*

"With just one phone call, my producers can set up everything necessary to do a live report. Conus people are pros who understand what a local station's news needs are all about."

*Mark Slimp
News Director
KOB-TV/Albuquerque*

"We were the first to go live from Cape Canaveral when the space shuttle Challenger exploded."

Fred Young



from the folks know what it is.

I think we did 57 separate feeds with Conus. So we're extremely pleased with what we're getting with Conus.

"We've been especially impressed with the cooperation among Conus partners—a great rapport has built up, a lot of give and take. And that has worked to everyone's advantage."

*Harry Apel
VP/GM
WTVF-TV/Tampa*

"We're glad KPRC-TV in Houston joined Conus early. How glad? Our instant competitive edge in local news coverage caused us to put Conus in WESH-TV/Daytona Beach-Orlando six months later. Then five months later, WTVF-TV/Nashville became our third station to join Conus. How much do we believe in Conus? Over a million dollars worth!"

*Harold C. Crump
President, Broadcast Group
H&C Communications*

"We don't even own a Conus truck (yet!)."

"But being a member of Conus has permitted us to make SNG an integral part of our newscasts. Viewers watch their anchorman in Washington, D.C., one week and our feature reporter on the Colorado slopes the next. Obviously, the strength of Conus is the working, sharing relationship among its members."

*Joyce Reed
News Director
KYTV-TV/Springfield, Missouri*

"It certainly has done what we wanted it to do. It has brought about a parity situation in our market that we didn't have before. So we're extremely pleased with Conus."

*Cullie Tarleton
VP/GM
WBTV-TV/Charlotte*



Cullie Tarleton

"We get the news first, and we get it fast."

"The satellite access in Conus gives us that. We understand that another station in Houston has ordered a vehicle, but it won't be Conus."

*Bill Goodman
News Director
KPRC-TV/Houston*

"Local news is no longer just local."

"Our viewers are impacted by events that occur all over the

country. Conus gives us the ability to bring those stories to our viewers through the eyes of our own reporters."

*Malcolm D. Potter
VP/GM
WBAL-TV/Baltimore*

"The best thing about it (Conus) is that the other guys don't have it. I know one of them bought a Datsun truck, but they don't have the Conus network."

*Steve Olszyk
News Director
WDTN-TV/Dayton*

There's more, lots more from people who are working with the Conus SNG System.

If you'd like to see what they're talking about, come to our Booth 3385 or our Outdoor Exhibit 24 at the NAB. Or call us at 612/642-4645. Ask for Charles H. Dutcher, III or Dennis Herzig. Conus Communications, 3415 University Avenue, Minneapolis, MN 55414.

And see what a few words with Conus can do for your station.



© Conus Communications 1986

KPRC, Houston • WBRZ, Baton Rouge • WJLA, Washington, D.C. • WESH, Orlando • KRON, San Francisco • WOWT, Omaha • WCSC, Charleston
• KMBC, Kansas City • WBTV, Charlotte • WJTV, Jackson • WTAE, Pittsburgh • KUTV, Salt Lake City • KWTU, Oklahoma City • WISN, Milwaukee
• WBAL, Baltimore • WTVT, Tampa • KSTP, Minneapolis/St. Paul • WCVB, Boston • WTVF, Nashville • WDTN, Dayton • WRAL, Raleigh
• KOB, Albuquerque • WVUE, New Orleans • KCNC, Denver • WRTV, Indianapolis • KTXL, Sacramento • WTVJ, Miami
• KSNW, Wichita • KSNT, Topeka • KSNF, Joplin • KYTV, Springfield, MO • KHJ, Los Angeles

Leasing Concepts 168
3 Radnor Corporate Center, Radnor, Pa. 19087

Leitch Video of America 3559
835K Greenbrier Cr., Chesapeake, Va. 23320

SCH-7000 subcarrier to horizontal phase monitor*, TTG-2500N transmission test*, STG-2500N studio test set*, XTG-2500N transmitter test set*, CTG-2600N component test set*, frame synchronizer, video processing, audio and video distribution, sync pulse generators, master clock systems. **Staff:** Bob Lehtonen, John Walter, Bob Henson, Stan Moote, Don Jackson, Gary Newhook, Dave Strachen, George Adolph, Fay Turner, Gary Stephens, Paul Jenkins.

Lemo U.S.A. 2805
335 Tesconi Cr., Santa Rosa, Calif. 95401
Connectors.

Lenco 3056
300 N. Maryland St., Jackson, Mo. 63755
TBC-450 time base corrector-digital*, PVS-435 NTSC videoscope*, PVS-435P PAL videoscope. **Staff:** Jerry Ford, Don Ford, Max Prill, Bob Bergfeld, Bruce Blair, Mark Hill, Jim Rhodes, Herb Van Driel, Ron Wells, Roberto Orfila, Verna Stovall.

Lexicon 2909
60 Turner St., Waltham, Mass. 02154
Stereo digital audio time compressor/expander systems, digital audio delay synchronizers*.

Lighting Methods 2673
1099 Jay St., Rochester, N.Y. 14611

Lighting control equipment, Concept, Idea, Designer and CH200 control consoles, RD digital dimmer system. **Staff:** J. Nettleton, Tom Maloney, Bill Florac.

Lightning Eliminators & Consultants 164
13007 Lakeland Rd., Santa Fe Springs, Calif. 90670

Vertical or horizontal Chem-Rod rechargeable grounding electrode*, dissipation array system, consulting services*, lightning warning system. **Staff:** Roy Carpenter Jr., E. Alvin Rich.

Lightning Sciences 138
4695 Ulmerton Rd., Suite 200, Clearwater, Fla. 33520

Lightning prevention devices. **Staff:** Bruce Kaiser, Bruce Micek, Charlton Sadler, William Frey, Terri McDonald.

Listec Video 3468, 3579
39 Cain Dr., Plainview, N.Y. 11803

Polar video production switcher*, picture mover* and safe area generator*, Acron NTSC encoder*, pulse generator*, 19-inch CRT on-camera prompter*, nine-inch portable on-camera prompter*, 15-inch CRT on-camera, portable studio/field prompters, scriptwriter electronic prompting system, simplicity II advanced digital prompter, short script table. **Staff:** Jack Littler, Raymond Blumenthal, Paulette DiBona, Than Lien,

Peter Rowsell, Chris Perry, Fred Smith, David Goillen, Tom Keys, Phil Rutter, Jim Lucas.

Logitek 2807
3320 Bering Dr., Houston 77057

Crossfire automated audio crossfade mixer*, stereorack, audiorack and custom audio series consoles, audio DAs, audio power amps, audio preselectors, speakers, timers, LED audio level indicators. **Staff:** Scott Hochberg, Tag Borland, Patti Bellis.

Lowel-Light Manufacturing 2610
475 10th Ave., New York 10018

Location and studio lighting equipment, CM-90 surmountable kit*, CM-10 maxamount*. **Staff:** Marvin Seligman, Amy Carter, Roy Low, Dave Tearle.

LPB 3338
28 Bacton Hill Rd., Frazer, Pa. 19355

Signature, Citation and Alpha series audio consoles, DAs, presunrise transmitters, furniture, tonearms, high power AM transmitters. **Staff:** Charles Sheridan, Richard Crompton, Mary Kiger, Charles Bramhall, Richard Burden, William Jackson.

LTM 2537
1160 N. Las Palmas Ave., Hollywood, Calif. 90038

Luxor Corp. 237
2245 Delany Rd., Waukegan, Ill. 60085

Lyon Lamb Video Animation 2932
4531 Empire Ave., Burbank, Calif. 91505

Animation system, videodisk mastering, computer graphics.

3M 3120
Magnetic Audio/Video products

Broadcasting & Related Products
Optical Recording Project

3M Center Bldg., 225-3s-05, St Paul 55144

Magnetic div.: Recording tapes, 480 one-inch helical, MBRR ¾-inch videocassettes, PB PV and BC/broadcast half-inch videocassettes, digital audio U-Matic, mastering tapes, audio/video accessories. **Broadcasting div.:** Routing switchers, master control systems, machine control systems, component switchers, character generators, paint system. **Optical div.:** Custom mastering and replication for laser videodisks and compact disks.

M/A-Com MAC 3280
63 Third Ave., Burlington, Mass. 01803

Transmit parabolic antenna*, Skypod with Nav-Tack*, transmitters and receivers, 13CP and 13FA systems, G-line fixed microwave equipment, mini-scan antenna, super scan antenna. **Staff:** Yong Lee, Bob Morrill, Fred Collins, David Erikson, Dan McCarthy, Carl Guastaferro, Bill Culbertson, George Hardy, Gary Schmidt, Jack Koo, Norman Cheng, Luis Barzana, John Van, Maureen Martin, Bob Morrisette.

Magni Systems 1298
9500 SW Gemini Dr., Beaverton, Ore. 97005

Integrated measurement package*, options for PC-based test signal generator. **Staff:** Chuck Barrows, Victor Kong, Dave Jurgensen, Ed Kiyoi, John Judge, Greg Sorenson, Phil Fernandez, Mark Wendt, Carl Alelyunas.

Magnum Towers 2901
9370 Elder Creek, Sacramento, Calif. 95829
AM, FM, VHF and UHF towers.

The Management 2512
Box T, Aledo, Tex. 76008

Super Log I, II and III traffic, billing and accounting systems. **Staff:** Pete Charlton, Debra Patrick, Don Stafford, Jean Pitts, Betty Strickland.

Manhattan Production Music 2550
300 W. 53d St., Suite 2A, New York 10019

Marcom 2433
Box 66507, Scotts Valley, Calif. 95066

Model 701-00M modification kit*, 710 television stereo generator*, 730 TV stereo metered receiver monitor*, C.N. Rood BAX and SC-200 series, 516M audio monitor/switcher. **Staff:** Martin Jackson, Ted Tripp, Doug Howland, Greg Morton.

Marconi Instruments 3406
3 Pearl Ct., Allendale, N.J. 07401

Compact portable products for the microwave field service engineer, radio communications test set, microwave frequency counter, digital power meter, analog power meter, insertion signal analyzer, TV interval timer. **Staff:** Ray Munde, John Garthwaite.

Mark Antenna Products 244
2180 S. Wold Rd., Des Plaines, Ill. 60018

Antennas for terrestrial microwave systems, earth station antennas, two-foot dual polarized 18 ghz antenna*. **Staff:** Ed Lamarre, Carlynn Buchanan.

Mark Electronics 2417
4324 SW 35th Terrace, Gainesville, Fla. 32608

Vertical racks, audio monitoring systems, character generator*, automation systems, matrix wipe generator*, audio jackfields. **Staff:** Homer Masingil, Lloyd Walton, Rod Morrill, Zeke Zetien, Dave Strickland, Bob Bachus, Carmelo Catalano, John Williams, Paolo Ginobbi, Roger Curwin, Robert Hansen, Joel Gibson, Wendy Johnson, Brenda Diaz, John Williams.

Markeddyne International 2591
10 S. Riverside Pl., Suite 900, Chicago 60606

Marti Electronics 3496
Box 661, Cleburne, Tex. 76031

MW-500 microwave booster/amplifier for STL use, UPS-12 uninterruptible power system. **Staff:** George Marti, M.E. McClanahan, Rick Neace.

The Breakthrough.

IKEGAMI'S HK-323 1" FIELD/STUDIO BROADCAST CAMERA BEGINS A NEW ERA

Ikegami's newest field/studio broadcast camera achievement has arrived—engineered and designed to provide the user with features beyond expectations.

The HK-323 1" features self-contained operation, numerous auto set-ups in any mode, a built-in encoder and sync generator, high performance prism optics, self-diagnostic functions, a control panel that connects directly to the camera head, a S/N ratio of 59dB and more—all in a camera weighing only 55 lbs.

In addition, the HK-323 1" is equipped with a 7" viewfinder featuring pan and tilt, and special functions that include Chroma Aperture for sharpest picture quality regardless of color or lighting; Highlight Compression Circuitry for broadcast contrast range; Soft Detail to eliminate harsh or overwhelming presence; Auto Beam Control, and more.

A companion hand-held camera is also available and is operational off the same base station.

Optional remote control is available in: triax, multicore and fiber optics.

Compare the HK-323 1" to any camera in its class and find out why the lightest field/studio camera is also the biggest value.

For a complete demonstration of the HK-323 1" and other Ikegami cameras and monitors, contact us or visit your local Ikegami dealer.



Ikegami®

Ikegami Electronics (USA) Inc. 37 Brook Avenue Maywood, NJ 07607

East Coast: (201) 363-9171 West Coast: (213) 534-0050 Southeast: (813) 884-2046
Southwest: (214) 233-2614 Midwest: (312) 834-9774

Matco Control Products 2687
427 Terry Mount Ave., San Jose, Calif. 95125

Matthews Studio Equipment 3220
2405 Empire Ave., Burbank, Calif. 91504

Dollies, dolly track, mounting and grip equipment, reflectors, tulip crane, lighting control scrims and diffusers, stands, griffolyn, car mounts, cam-remote, unit 85 dolly*, Litt briefcase dolly*, super crank*, new boom arms*, auto mount accessories*, gift line. **Staff:** Edward Phillips, Carlos DeMattos, Loet Farkas, Bob Nettmann, Rick Hansen, Fred Farish, Mark Streapy.

Maxell Corp. 3551
60 Oxford Dr., Moonachie, N.J. 07074

Blank audio and video recording tape. **Staff:** Jim Ringwood, Joe Birkovich, John Selvaggio, Dan Maida, Joe Santangelo, Phil Konecki, Mark Stenehjem, Herb Matsumoto, Linda Healy, Pat Byrne, Maureen Ebers.

Maze Broadcast 213
Box 6968, Birmingham, Ala. 35210

McCurdy Radio 3028
108 Carnforth Rd., Toronto M4A 2L4
Audio consoles, switchers, DA's, inter-coms.

Media California 2688
Suite 1064, 220 Montgomery St., San Francisco 94104

Media Computing 2545
4401 E. Kings Ave., Phoenix 85032

Automated news graphics interface system*, wire editor, PC prompter, producers rundown, assignment/archives, script writer. **Staff:** Mike Rich, Kathy Hulka, Larry Baum, Jim O'Brien, Ruth Harris, Janet Goodman.

Media General
Broadcast Services 3335
2714 Union Extd., Memphis, Tenn. 38112

Production libraries, production and sales libraries, contest/promotion packages, advertiser jingles, customized contests and promotions, incentive merchandise, travel packages, syndicated music formats, station ID's, musical commercials, program syndication campaigns, media placement services. **Staff:** Don Robinson, Ed Hartnett, Zack Hernandez, Bob Blow, Dick Denham, Carl Reynolds, John Vaught, Ed Caplan, Ken Theiss, Jack Inman, Chase Hooks, Jim Mays, Suzanne Cheshire.

Medstar Communications 2798
1305 S. 12th St., Allentown, Pa. 18103

MEI Electronics 2620
910 Sherwood Dr., Unit 19, Lake Bluff, Ill. 60044

Digital audio storage unit*, satmaster satellite programmer, reel-to-reel programmer. **Staff:** Dave Collins.

Merlin Engineering 3408
2440 Embarcadero Rd., Palo Alto, Calif. 94303

VTR's and accessories, engineering services for VTR's.

Micro Communications 3438
Box 4365, Manchester, N.H. 03108

Waveguide transmission line, antennas and RF systems, technical services. **Staff:** Tom Vaughan, Howard Bouldry, Dennis Heymans, Cindi Daniel, Jim Banker, Dave Marshall.

Micro Controls 2623
Box 728, Burleson, Tex. 76028

Microwave, remote control and subcarrier paging equipment.

Microdyne 3520
Box 7213, Ocala, Fla. 32672

Automated terminal programable hybrid C/Ku band earth station*, communication information manager data distribution equipment, transportable Ku-band uplink, Ku and C band satellite equipment and antennas. **Staff:** Steve Benoit, Earl Currier, David Alvarez, Louis Wolcott, Tom MacAllister, Dianne Giansante, Barbara Karlosky, Jim Grabenstein, Steve Lovely, Mark Chew, Doug McKay.

Micron Audio Products 2685
210 Westlake Dr., Valhalla, N.Y. 10595

Wireless microphone systems*, CTR-501 mobile system with complementary noise suppression. **Staff:** Paul Tepper,

Our Congratulations to...

KEZK - St. Louis, Missouri
KMJM - St. Louis, Missouri
KSHE - Crestwood, Missouri

These Stations Have Just Purchased the Most Powerful
Single Tube FM Transmitter in the World...

Model FM-35A, 35,000 Watts!



See the New Broadcast Electronics FM-35A
in Booth 3226 at the NAB Convention.

**BE BROADCAST
ELECTRONICS INC.**

4100 N. 24th ST., P.O. BOX 3606, QUINCY, IL 62305-3606, (217) 224-9600, TELEX: 250142

If your ratings
aren't what they should be ...
maybe your news helicopter
isn't either.



You've just hired the best anchor in the business. You've dropped a bundle on the most advanced satellite you could find. Your cameras are state-of-the-art. And when your weatherman predicts rain — it actually rains.

So where are the big ratings?

If your competitor's got them, chances are he also has an Aerospatiale news helicopter. Probably a 350 AStar — the most advanced news ship in the sky. It has flown above every continent of the world and is consistently considered one of the most versatile helicopters ever designed.

AStar and KTVK-TV Phoenix cover the Valley of the Sun

The KTVK news staff needed a fast, totally reliable, full-time ship. One that would give them complete coverage capabilities.

They chose the Aerospatiale 350 AStar.

No matter where a story breaks, whether it's in the Arizona desert or a bordering state, KTVK covers it with the AStar. And usually before anyone else.

More power than the average ship

A KTVK news spokesman stated, "We fly the fastest ship in the Valley of the Sun." The AStar's extra power also permits the KTVK news team to load up with state-of-the-art equipment.

The best production studio in the sky

The reporter sits in the copilot's seat, and can turn to face the back of the cabin and the camera. The sliding door arrangement is available on the left side, right side or on both sides. This means the staff and the pilot can ride in comfort, opening the sliding door only after arriving at the story site.

The 350 AStar . . . a real smooth ride

"The AStar is the smoothest helicopter we've ever flown. And its low noise level allows quality sound reproduction during in-flight broadcasts."

The AStar has also proven itself to be the industry's most reliable news helicopter. This means it's ready when you are.

Quite simply, Aerospatiale makes the finest news ship flying. So, if your numbers aren't what they should be — call this one for sales and leasing information: (214) 641-0000. Ask for Ron LaFleur, Vice President, Marketing, Aerospatiale Helicopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005.



aerospatiale
helicopter corporation

that's special. that's **aerospatiale.**

John Wykes.

Microprobe (see MEI) 2620**Microsonics 2543**

60 Winter St., Weymouth, Mass. 02188

Video delay lines, ultrasonic glass delay lines, oscillators, crystal filters, video filters for stereo TV*, 20 mhz equalized delay lines for HDTV*, micro filter miniature DIL video filter*. **Staff:** Frank Manning, Joseph Killough, Joseph Pavao.

Microtime 3086

1280 Blue Hills Ave., Bloomfield, Conn. 06002

Low cost time base correctors* for NTSC and either PAL B or PAL M applications, T-220 component time base corrector, S-230 TBC/frame synchronizer, TSE120 A/B roll effects system, T-200 time base corrector. **Staff:** Dan Sofie, Chuck Bocan, Ray Bouchard, David Everett, Steve Krant, Jerry Rankin, Langdon Cook, John Kissel, Chris Smith, David Brown, Gene Sarra, Chris Hadjimichael, Michael Montag, Robert Wickland, Julie Adams.

Microwave Networks 166

6515 Corporate Dr., Houston, Tex. 77036

MicroNet 23 communication system. **Staff:** Arthur Epley, David Bolan, W.F. Montgomery.

Midwest 3210

One Sperti Dr., Edgewood, Ky. 41017

Satellite news gathering vehicles. **Staff:** David Barnes, Jay Adrick, Skip McWilliams, John Loughmiller, Chris Summey, Lloyd Hicks, Fred Wood, Brad Nogar, Roy Williams, Pete Rightmire, Chris Siddell, Jerry Willingham, Larry Mason, Ron Bradley, Fred Higbie.

Miller Kaplan Arase 2507

10911 Riverside Dr., N. Hollywood, Calif. 91602

Broadcast accounting services, national composite radio revenue report, 24-month market revenue trend graphs* **Staff:** George Nadel, Jeff Slomick.

Minolta 2810

101 Williams Dr., Ramsey, N.J. 07446

Audio distribution and switching equipment, amplifiers, switcher crosspoint cards, VCA modules, oscillators, equalizers, compressor/limiters, pre-wired jackfields and patch cords, newsroom dubbing and switching units.

Mitsubishi Pro Audio Group 3530

225 Parkside Dr., San Fernando, Calif. 91340

X-850 32-track digital audio tape recorder*, SuperStar production and postproduction audio mixing console*, X-86 two-track digital audio mastering tape recorder*, Westar production and postproduction audio mixing console, Westrex digital master motion control system*, magentic film recorder/reproducer and dual magnetic film reproducer. **Staff:** Tore Nordahl, Cary Fischer, Bill Windsor, Frank Pontius, Bud Bennett, Sonny Kawakami, Bruce Bearman, Adri-

an Bailey, Gerry Eschweiler, Joe Urbanovitch, Kiyoshi Kondo.

Mobile-Cam Products 2594

Box A 82108, San Diego, Calif. 92138

Modulation Associates 2692

897 Independence Ave., Mountain View, Calif. 94043

Ku 02 suitcase portable uplink*, single channel per carrier and subcarrier satellite equipment for audio and data networks. **Staff:** J. Walter Johnson, Tim Scholz, Craig Pak, Don Haight.

Modulation Sciences 2811

115 Myrtle Ave., Brooklyn, N.Y. 11201

STV-784 TV stereo generator, TV sidekick SAP generators, SRD-1 TV stereo reference decoder*, FM sidekick SCA generator, data sidekick for FM and TV*, composite baseband processor, wired STL system for FM and TV aural baseband transmission. **Staff:** Richard Schumeyer, Eric Small, Alan Perkins, Sonny Funke, Will Dresser, Joseph Shapiro.

Modulight

(see Bardwell & McAlister) 2746

Mole-Richardson 3368

937 N. Sycamore Ave., Hollywood, Calif. 90038

Lighting equipment including Solar-spots, risers, fixtures, kits, grip equipment, hangers and adapters.

Montage Computer Corp. 3260

52 Domino Dr., West Concord, Mass. 01742

Series 700, 1200 and 4000 disk system picture processors. **Staff:** Dominic Saccacio, Bob Slutske, Deborah Harter, Martin Soloway, Rick Weisak, Roger Kuhn, Chet Shuler, Ken Kiesel, Paula Sanburn, Ellen Wieser, Chuck Wright, Harvey Ray, Bob Dorsett.

Morton Hi-Tek Furnishings 204

23461 Ridge Route Dr., Laguna Hills, Calif. 92653

Moseley Associates 3202

111 Castilian Dr., Goleta, Calif. 93117

Enhancements to MRC-1600 remote control system*, secure dial-up for remote control*, spectrum-efficient STLs*, transmitter remote control systems, aural studio-transmitter links, telemetry return links, remote pickup links, stereo and subcarrier generators and demodulators, remote control and STL accessories and interface kits. **Staff:** Fred Zimmermann, Paul McGoldrick, David Chancey, Liz Atesman, Daniel Barnett, Glenn Sanderson, Paul Taylor, Jeff Kelm, Jamal Hamdani, Vince Mercadente, Fred Barbaria, W.D. Brewer, Eileen Tuuri.

Motorola AM Stereo 3539

1216 Remington Rd., Schaumburg, Ill. 60195

C-Quam AM stereo exciters and modulation monitors, C-Quam AM stereo receivers*. **Staff:** Steve Kravitz, Jennifer DePalma, Ray Schuilenburg, Greg Buchwald, Frank Hilbert, Oscar Kusisto, Norm Parker.

Motorola Communications 3442

1301 E. Algonquin Rd., Schaumburg, Ill. 60196

Two-way radio communications equipment, paging equipment, cellular units and communications test equipment, display pager printer/charger, portable cellular telephone.

MPO Videotronics 2549

2580 Turquoise Cr., Newbury Park, Calif. 91320

Multi-Track Magnetics 2515

3 Industrial Ave., Upper Saddle River, N.J. 07458

Ultra high speed recorders and reproducers.

Musco Lighting 2448

100 First Ave. West, Box 258, Oskaloosa, Iowa 52577

Music Director**Programing Service 2414**

Box 103, Indian Orchard, Mass. 01151

Music research library*, Basic Gold Pop Oldies library, Record Research publication, country gold oldies library, key promotion. **Staff:** Budd Clain, Carl Drake, Noreen Bennett, Bill Schoenborn, Brenda Clain.

Musicworks 2734

Box 111390, Nashville 37211

Three country music formats, adult contemporary service, Jim Reeves Radio Special, radio special programing. **Staff:** Bill Robinson, Skeeter Dodd, Jeff Miller.

Mycro-Tek 2490

9229 E. 37th St., Wichita, Kan. 67226

Communications package*, production font* and on-line tape storage device* for character generators, Dissolve. **Staff:** Tim Hurley, Mike Burton, Don Paustian, Paula Rothschild, Doug Barton, Fred Godwin.

Nady Systems 2902

1145 65th St., Oakland, Calif. 94608

501 and 601/701 VHF and UHF wireless microphone system, IRT-200/IRM-210 cordless studio monitor system. **Staff:** Peter Kalman, Jim Maloney, Rick Gentry, Eric Schultheis.

Nagra Magnetic Recorders 3453

19 W. 44th St., New York 11036

Portable and miniature recorders, T-audio recorder, synchronizers.

Nakamichi USA Corp. 2456

19701 S. Vermont Ave., Torrance, Calif. 90502

MR-2 professional cassette deck*, DMP-100 digital mastering processor, SP-7 stereo headphones. **Staff:** Jett Logan, Stephen Mascenik, Robert Shoji.

Nalpak Video Sales 2800

1937-C Friendship Dr., El Cajon, Calif. 92020

Mini-test charts*, tubular carrying cases, heavy duty soft case*. **Staff:** Bob Kaplan, Stanley Singer, Jack Eddy, Les Weinstein, Debbie Kaplan, Tracy Eddy.

**Another
Great Motion Picture From ITC**

**Now In
Post-Production**



LORETTA SWIT as US President



PETER COOK as British Prime Minister

**A Whacky Spoof Of
Super-Power Crazies
With Their Finger On
The Button...**

WHOOOPS APOCALYPSE

**LORETTA SWIT
PETER COOK
MICHAEL RICHARDS
and HERBERT LOM
as General Mosquera**

ITC Entertainment presents
A Picture Partnership Production
Loretta Swit Peter Cook Michael Richards
"Whoops Apocalypse"
also starring Rik Mayall Ian Richardson Alexei Sayle Herbert Lom as General Mosquera
Written by Andrew Marshall and David Renwick Produced by Brian Eastman Directed by Tom Bussman

**And There's
More To Come**



Narda Microwave 2551
435 Moreland Rd., Hauppauge, N.Y. 11788

National TV Systems 2472
2419 Rutland Dr., Austin, Tex. 78758

Nautel 2658
201 Target Industrial Cr., Bangor, Me. 04401
Solid state modular ampfet series of AM transmitters. **Staff:** Dave Grace, Kevin Rodgers, Jorgen Jensen.

NEC America 3161
130 Martin Ln., Elk Grove Village, Ill. 60007
Digital video effects, CCD cameras, television transmitters. **Staff:** H. Ono, M. Shimizu, R. Curwin, R. Dienhart, J. Engle, L. Litchfield, G. Schutte, F. Stolten, M. Burleson, J. White.

L.E. Nelson Sales Corp. 2437
5451 Ukiah Cr., Las Vegas 89118
1000 w 120 v par 64 lamps, 1200 w par 64 CID daylight source and 575 w par 46 CID daylight source. **Staff:** L. Nelson, B. Nelson, Dan Imfeld, H. Tilley.

Netcom International 2439
1702 Union St., San Francisco 94123
Satellite transmission services.

Network Production Music 2627
11021 Via Frontera, San Diego 92127
Music production and sound effects library. **Staff:** Michael Anderson, Larry Kessler, Ken Berkowitz.

New England Digital Corp. 134
Box 546, White River Junction, Vt. 05001
Synclavier digital audio system. **Staff:** David Nichtern, Mark Terry, Kevin Maloney, John Mahoney, Steve Zaretsky, Ray Niznik, Vaughn Halyard.

A.C. Nielsen Co. 2787
Nielsen Pl., Northbrook, Ill. 60062

Monitor plus commercial monitoring system. **Staff:** Roy Anderson, Dave Traylor, Bob Paine, Tom Hargreaves, Dave McCubbin, Larry Frerk, Hal Fleig, Leigh Wilson, Carla Thompson.

Normex 2453
55 Montpelier, St. Laurent, Quebec H4N 2G3

Telnox on-air computerized telephone for broadcasters. **Staff:** Jacques Coutellier, Manon Coutellier, Agnes Eder, Michel Ponton, Normand Girard, Alain Clement.

Norpak Corp. 2574
10 Hearst Way, Kanata, Ont. K2L 2P4

Teletext data delivery systems. **Staff:** James Carruthers, Randy Carter, Malcolm Cocks, Louise McLaren, Robert Fitzgerald, Tim Warren, Alfred Lee, Brent Barnett.

Nortronics 3384
8101 10th Ave., Minneapolis 55427

Magnetic tape heads for replacement on broadcast and reel-to-reel drives and OEM product manufacture. **Staff:** Karen Nickolauson, Carole Carlson, James Campeau, Anthony Price.

Nova Systems 2778
20 Tower Ln., Avon, Conn. 06001
Time base correctors.

Fred Nudd Corp. 2672
1743 Route 104, Ontario, N.Y. 14519

Radio, TV and microwave towers, manufacturing and service. **Staff:** Rick Nudd, Galer Wright.

Nurad 3573
2165 Druid Park Dr., Baltimore 21211

SNG antenna for Ku band*, ENG/EJ microwave systems including control receive systems, remote transmit systems, automatic tracking systems. **Staff:** Gordon Neuberth, Vincent Rocco, David Fairley, Stephen Neuberth, Fred Hock, Eric McCulley, R. Merritt, G. Becknell, Lisa Czrljak.

Nytone Electronics 123
2424 South 900 West, Salt Lake City 84119

O'Connor Engineering Labs 3364
100 Kalmus Dr., Costa Mesa, Calif. 92626
Camera support systems including the .155M-A metal tripod*. **Staff:** Chadwell O'Connor, Bruce Frenzing, Kelly Nelson, Mike Thompson, Chuck Caputo, John Healy.

Odetics 3586
1515 S. Manchester Ave., Anaheim, Calif. 92802

TCS-2000 television cart system. **Staff:** Dave Lewis, Dick Petit, Bill Keegan, Tim Crabtree, Phil McFadin, Robert Fairchild, Dwight Kelley, Neil Heller.

H. Ogino & Co. 2792
Box 170, Yokoham 231-91 Japan

Olesen 3550
1535 Ivar Ave., Hollywood, Calif. 90028

Omicron Video 2661
9700 Owensmoor Ave., Unit F, Chatsworth, Calif. 91311

Model 501 10/1 PT video switcher, model 507 master control switcher*. **Staff:** K. Akiyama, M. Akiyama.

Omnimount Systems 2415
10850 Van Owen St., N. Hollywood, Calif. 91605

Omnimusic 2775
52 Main St., Port Washington, N.Y. 11050
Production music library with pop, electronic, specialty industrial, classical, comedy and sports, atmosphere music library. **Staff:** Douglas Wood, Chip Jenkins.

Omnisoft Systems 172
2965 Pickle Rd., Toledo, Ohio 43616

Traffic and billing software*, call-out music research*, music scheduling*. **Staff:** Lew Dickey Jr., L. Dickey, David Dickey, Alfred Lutter III.

Optical Disc Corp. 162
17517 H Fabrica Way, Cerritos, Calif. 90701
ODC 610A LaserVision videodisk recording system, encoder/generator, recordable laser videodisk. **Staff:** Donald Hayes, John Browne, Richard Wilkinson.

Orban Associates 3444
645 Bryant St., San Francisco 94107
Model 275A automatic stereo synthesiz-

er*, 8150A Optimod-FMX stereo generator*, ACC-22 filter card for Optimod-FM*, stereo television system, AM and FM audio processing systems, audio processing equipment, compressor/limiter/de-essers, parametric equalizers, stereo synthesizer, reverb. **Staff:** Howard Mullinack, Sid Goldstein, Robert Orban, John Delantoni, Dave Shantz, Robert Burkhardt, David Dunetz.

Orion Research 2499
Box 444, Richfield, Ohio 44286

Otari Corp. 3246
2 David Dr., Belmont, Calif. 94002

DTR-900-32 one-inch 32-channel digital audio digital recorder with remote and autolocator*, CTM-10 NAB cartridge recorder/reproducer*, MX-80-24 24-channel multitrack recorder*. **Staff:** John Carey, Jeff Phillips, Wende West, Steve Hill, David Roudebush, Jack Soma, Bill Ford, Jim Goodman, Emil Handke, Barry Ross, Chris Pukay, Charlie Webster, Mike Babbitt, Mark Yamashita, Tom Defiglio.

Oxberry 2441
180 Broad St., Carlstadt, N.J. 07072

Pacific Recorders & Engineering 3151
2070 Las Palmas Dr., Carlsbad, Calif. 92008

BMX consoles, AMX operations console, ABX production console, cartridge machines, phono preamp TX990*. **Staff:** Jack Williams, Sandy Berenics, Rob Lingle, Robin Starkey, Mike Uhl, Dave Pollard, Bonnie Smith, Don Coulter, Rich Kapushinski, Bob Moore.

Paco Electronics 2447
714 W. Olympic Blvd., Suite 706, Los Angeles 90015

DP-11* and DP-1240 battery pack, battery chargers, dememorizers and mobile charger. **Staff:** Tetsushi Wakabayashi, Kuniyasu Kaikiuchi, K. Kasuga.

Pag America 2459
Box 15194, Asheville, N.C. 28813

PAG-lok battery to camera mounting system*, PAG-lok charger*, Master 90 battery*, Nitecam ENG camera*, Master-charger, speedcharge 6000, sequencer 6000, multicharger, ENG batteries, belts, lights, lighting kits. **Staff:** Bebe McClain, Robin Greeley, Nigel Gardiner, Barry Parker.

Paltex 3592
2752 Walnut Ave., Tustin, Calif. 92680

Videotape editing systems.

Panasonic 3116
1 Panasonic Way, Secaucus, N.J. 07094

M-II half-inch videotape format product family*, professional-industrial products including in-camera recorders, camera kits, low capacitance diode gun plumbicon tubes, saticon tubes, editing systems, editing controllers, high resolution monitors, RAMSA professional audio equipment. **Staff:** Steve Yuhas, Tom Nagai, Herman Schkolnick, John McDonnell, Steve Wooley, Morris Washington, Ted Conboy.

TO REACH THEM



Whoever you're reaching, you'll get their attention faster—and keep it longer—with US.

United Stations Radio Networks, that is.

US gives you national strength no single station can match: The comprehensive, concise coverage of a worldwide news network. Plus a wide range of hit programming, with shows tailored specifically to fit each format so you can pick and choose exactly what's right for your station.

Between our youth network-US1, and our adult network-US2, and our programming network-USP,

we broadcast live daily, via satellite to over 2,500 radio stations nationwide. And because United Stations Programming is the leading producer of hit long-form shows and specials for radio, with the greatest selection of consistently top-rated programming, you know you'll have your listeners' undivided attention.

In short, we're a hit with every audience. Men and women. Youth and adult. Urban, suburban and rural.

So no matter what your format. Whoever your audience. Wherever they are. To make sure they stay tuned to your station. Turn to US.

New York

Washington, D.C.

Chicago

Detroit

Dallas

Los Angeles

London

Patch Bay Designation 2409
4742 San Fernando Rd., Glendale, Calif. 91204

Custom labeling for audio and video patch bays, control panels, racks, mixing boards. **Staff:** Scott Lookholder, Charles Schufer, David Schermer.

Peerless Sales 2412
1950 Hawthorne Ave., Melrose Park, Ill. 60160

TV/VCR/cable accessory products including security hardware, stands, mounts, carts and brackets for desk, wall and ceiling.

Pegasus Systems 3141
(see A.F. Associates)

Pelmark 240
2501 S. Raritan St., Englewood, Colo. 80110
Staff: Peter Bauer, Walt Aikman, Kurt Oswald, Dennis London.

Penn Fabrication 2593
Unit 26 St. Johns Estate, St. Johns Rd., Penn Buckinghamshire, Eng. HP10 8HR

Penny & Giles 2774
2716 Ocean Park Blvd., Suite 1005, Santa Monica, Calif. 90405

Conductive plastics studio faders, T bar controller*, motorized fader*. **Staff:** David McLain, Gaynor Moses, C.J. Melechin.

Penteco Optics 2469
7838 N. San Fernando Rd., Sun Valley, Calif. 91352

PEP 3387
25 W. 54th St., New York 10019
ENG power and battery equipment.

Performance Group 2584
2741 Noblestown Rd., Pittsburgh 15205

Perrott Engineering Labs 2733
7201 Lee Hwy., Falls Church, Va. 22046

Nickel cadmium, silver zinc and lead acid battery systems* for ENG/EFP in clip-on or belt styles, single or multiple fast medium fast or overnight mini-charger for ni-cads and silver zinc packs*, silver zinc and ni-cad battery and charger combo clip-on packs*, silver zinc BP-90 pack for VTR camera*, lighting systems*, accessories. **Staff:** V. Tygesen, W. Mallon, R. Clutter, W. Aylor, John Stead, Harry Glass, Frank Fitzhenry.

Pesa Electronics 3417
6073 NW 167 St., Suite C4, Miami 33015

Digital sync analyzer, satellite receivers*, color monitors*, TV modulator, VHF 5 kw transmitter*, Intercom, character generators, TV translators/transmitters. **Staff:** Antonio Borja, Jose Elman, Fernando Guillot, Antonio Duarte, Fernando Garcia, Carlos Xifra, Alfonso Saiz, Gaspar Sastre, Jesus Reganon, Dalmacio Tola, M. Cazorla, C. Laccourreye, A. Delgado, A. Solana, Alicia Cook.

Peters Productions 124
9590 Chesapeake Dr., San Diego 92123

The Ultimate Programing System for A/C, country, MOR, easy listening and CHR,

custom marketing campaigns, jingles, graphics, animation and creative consultation. **Staff:** Ed Peters, David Moore, Steve Cotov, Jerry Lee, Joel Thrope.

Philips Television Systems 3128
900 Corporate Dr., Mahwah, N.J. 07430

LDK 6A, LDK-26A family microprocessor cameras*, LDK-54A portable camera*, LDK-54A universal camera recorder*, Coach system computer maintenance and diagnostic aid*, high resolution color monitors, 10 to 240 kw UHF television transmitters, FM transmitters, professional compact disk player system, sync pulse generator, studio lighting. **Staff:** Jim Wilson, Warren Anderson, Bob Blair, Alan Keil, Nick Labate, John Giove, William Sturcke, Colin Parkhill, Mike Mackin, Mike Hartt, Jeffrey Clarine, Perry Priestley, Frank Coleman.

Phoenix Financial Group 160,161
630 Third Ave., New York 10017

Diversified financial services. **Staff:** James Youngling, Thomas Williams, Richard De Sina, Jackie Folts.

Pinzone Communications Products 2411
14850 Cross Creek Rd., Newbury, Ohio 44065

Stereo/multichannel vertical interval audio encoding system, refurbishment services, computer diagnostics, satellite uplinks/downlinks, all-format receiver w/ binaural stereo audio. **Staff:** Basil Pinzone Jr., Robert Broad, James Toohig, Mark Leslie, Bob Sourek, Herb Schoenbohm, Ray Walsh, Phil Parker, Dave Stoll, Dale Olgilvie, Frank Murzynski.

Pioneer Video 3546
5150 E. Pacific Coast Hwy., Suite 300, Long Beach, Calif. 90804

Laser optical videodisk players, videodisk replication, digital programing products, video display and monitor systems.

Polaroid 252
575 Technology, Cambridge, Mass. 02139
Instant video film recorder*.

Porta-Pattern 3538
Box 38945, 750 N. Highland Ave., Los Angeles 90038

Test charts and systems, telecine slides and films, spherical transparency illuminator and test transparencies, optical test media, RCA P-200 and P-300 test patterns*, film/video interface test media*, medical television and imaging equipment. **Staff:** Ed Ries, E. Taylor Jr., Anne Summers, A. Malang, Sid Tuff, Henry Cheong, Tom Pressley, Debbie Carter.

Potomac Instruments 3329
932 Philadelphia Ave., Silver Spring, Md. 20910

QA-100 audio program analyzer*, sub-carrier modems modulator/demodulator modules*, directional array antenna monitors, audio test system, automatic remote control system, frequency synthe-

sizer and coherent detector, medium wave field strength meters, VHF and UHF field strength meters, modulation and power controller, synthesized AM monitor receiver. **Staff:** Guy Berry, Bob Ellenberger, Cliff Hall, Dave Harry, Don Nash.

PPS Electronics 2465
101-10 Foster Ave., Brooklyn, N.Y. 11236

Sonosax SX-S compact portable professional mixing console, SX-T mono-stereo mixing console for studio and mobile applications. **Staff:** Jean-Jacques Broccard, Jacques Sax, Betty Sax.

Prismagraphics 2791
2422 W. Clybourn St., Box 703, Milwaukee 53233

Presentation folders/media kits. **Staff:** Richard Schmaelzle, Marsha Harvey, Jody Dries.

Provisional Battery 214
3941 Oakcliff Industrial Ct., Atlanta 30343

QEI Corp. 3336
Box D, Williamstown, N.J. 08094

Model 695 FM exciter, low-power FM emergency transmitters, high power FM transmitters, 691 FM modulation monitor, automatic remote control system*. **Staff:** Charles Haubrich, William Hoelzel, John Pilman, John Tiedeck, Ed Etschman.

QSI Systems 2722
12 Linscott Rd., Box 2176, Woburn, Mass. 01801

AF-1000B three channel autophasing blackburst generator*, BG-308/BG-316 colorbar generator with video source identifier*, CB-1601 SMPTE colorbar generator with 16 character identifier*, CHID-10 cable channel identifier*, STAR-16 series transportable satellite video uplink identifiers*, VT-7A countdown generator*, other color bar generators, battery/portable colorbar generator, battery/portable eight character camera identifier, mini-production switcher. **Staff:** Alfred Smilgis, Richard Sanford, Dick Smilgis, Bill Hickey, Peter Smilgis.

Q-TV 3469
104 E. 25th St., New York 10010

VPS-500* computerprompter system (IBM compatible), console and conveyor transport videoprompter system. **Staff:** George Andros, John Maffe, Jerry Berg, Hy Sheft, Ai Eisenberg, Jim Greenfield.

Quality Video Supply 2461
76 Frederick St., Hackensack, N.J. 07602

Quanta Corp. 3145
2440 S. Progress Dr., Salt Lake City 84119
Character generators.

Quantel 3171
3290 W. Baushore Rd., Palo Alto, Calif. 94303

Paint box, animation editing system, image manipulators, still stores, standard converter.

Quantum Audio Labs 3446
1909 Riverside Dr., Glendale, Calif. 91201
On-air production consoles.

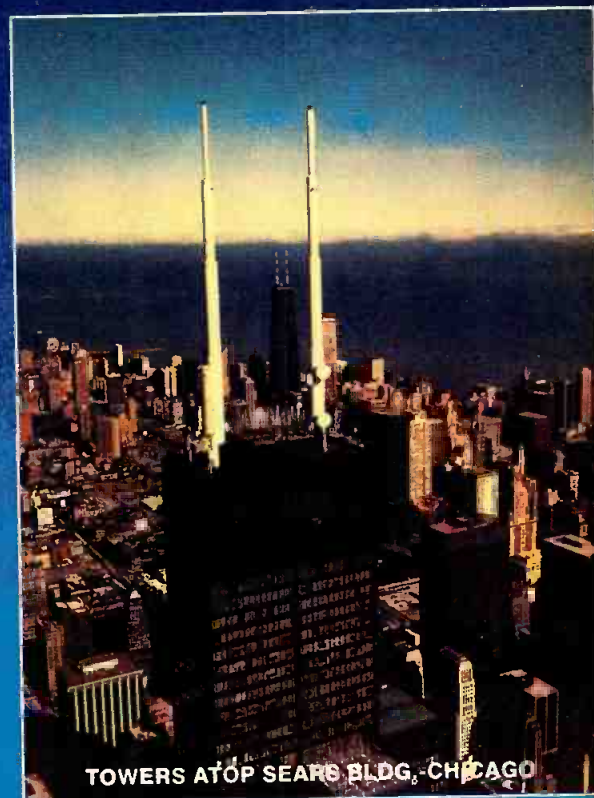
UNMISTAKABLY KLINE TOWERS! WHO BUT KLINE COULD DO IT?



KMTV-KPRC-TV, HOUSTON



MT. SUTRO TOWER, SAN FRANCISCO



TOWERS ATOP SEARS BLDG., CHICAGO

ARRAY ATOP THE WORLD TRADE CENTER SUPERSEDING
ARRAY ATOP THE EMPIRE STATE BUILDING



DESIGNED, FABRICATED and ERECTED BY

KLINE IRON & STEEL CO.

P.O. BOX 1041, COLUMBIA, SOUTH CAROLINA 29202 803 779-7080

**TOWERS, OIL DRILLING RIGS,
STRUCTURAL STEEL FOR BUILDINGS AND BRIDGES**

Quickset 3380
3650 Woodhead Dr., Northbrook, Ill. 60062
Support equipment including tripods, pedestals, friction heads, cam and fluid heads, dollies, cable equipment.

Radiation Systems 244
1501 Moran Rd., Sterling, Va. 22170

Tactical and fixed location antennas, five-meter Ku band earth station antenna*, eight-foot fold-down reflector for SNG vehicles*. **Staff:** Robert Denton Jr., Lawrence Thomas, William Thomas.

Radio Resources 2833
Box 8782, BWI Airport, Md. 21240

Studios, transmitters, buying and selling of equipment, rentals of test and other equipment, turnkey installations. **Staff:** Ashley Scarborough, Ellen Scarborough, Bernie O'Brien, Suzanne Roantree, Dale Tucker, Peter Kovalski, Kin Jones.

Radio Systems 2680
Box 356, Edgemont, Pa. 19028

Staff: Daniel Braverman, Andy Lovell, Gerrett Conover, Bill Wohl.

Ram Broadcast Systems 3028
346 W. Colfax St., Palatine, Ill. 60067

Phasescope, routing switchers, intercoms, input switchers. **Staff:** Ron Mitchell, Steve Gordon, Tim Anderson, Doc Masoomian.

Ramsa/Panasonic 3216
One Panasonic Way, Secaucus, N.J. 07094

Rank Cintel 3066
13340 Satcoy St., Unit F, North Hollywood, Calif. 91605

Flying spot telecine plus high resolution version, telecine, preprogramming control computer, still store, art file. **Staff:** J. Campbell, C. Waldron, D. Fenton, F. Bundesmann, D. Corbitt, N. Kempt, G. Collett, W. Capon, R. Mathys, G. Orme, J. Brittain, P. Swinson, D. Saville, C. Ritchie, E. Walden.

RCA American Communications 3298
Four Research Way, Princeton, N.J. 08540

Radio services, international/occasional TV services, RCA syndication system. **Staff:** Kurt Thoss, Guy Lewis, Elizabeth Rawson, Des McBride, Dave Cornell, Andreas Georgiou, Lou Donato, Gerry Kaplan, John Williamson, Harold Rice, Andrew Hospodor, Eugene Murphy, John Christopher, Al Weinrich.

RCA New Products Division 3292
New Holland Ave., Lancaster, Pa. 17604

TV camera tubes, power tubes and cavities for TV and FM services. **Staff:** D. Carter, R. Neuhauser, G. Grill, G. Brody, E. Dymacek, R. Nelson, G. Kochnovicz, O. Goedecke, L. Vera, D. Weinstein, H. Cramer, F. Ingle, T. Monroe, H. Strassman, J. Murphy.

R-Columbia Products 2671
2008 St. Johns Ave., Highland Park, Ill. 60035
Headphones/microphones.

RE Instruments 108
31029 Center Ridge Rd., Westlake, Ohio 44145

Dual channel audio analyzer*. **Staff:** George Mayhew, Steve Watts, Don Natterer, Tom Zavesky.

Reach Electronics 2438
1600 W. 13th St., Lexington, Neb. 68850

SCA pocket paging receiver model 2VR82 tone and voice, dial access paging terminal, dial access paging terminal. **Staff:** Mike Sutton, Jim Griffith, Gary Gifford, Jim DeCastro.

Recortec 3327
275 Santa Ana Ct., Sunnyvale, Calif. 94086

One-inch magnetic tape cleaners and evaluators, VCE-750*. **Staff:** Lester Lee, Eldon Corl, Ronald Troxell.

Rees Associates 2500
4200 Perimeter, Oklahoma City 73112

Register Data Systems 2505
Box 1246, Perry, Ga. 31069

Traffic system*, multi user IBM PCXT-PCAT, LF technologies multi user micro main frame, hard disk storage. **Staff:** Richard Spruill, Lowell Register, Janice Register, Len Register.

Research Technology 3386
4700 Chase Ave., Lincolnwood, Ill. 60646

Videotape evaluator/cleaner for one-inch, 3/4 and 1/2 inch, DV-5 dropout analyzer, film editing, previewing and cleaning machines. **Staff:** Tom Tisch, Charlie Morganti, Gary Ingram, Larry Beilin, Ray Short, Steve Little, Howard Bowen, Tom Boyle.

RF Scientific 2701
181 Atlantic Dr., Maitland, Fla. 32751

R.F. Specialty Products 165
4212 San Pedro Ave., San Antonio, Tex. 78212

Design, manufacture and installation of AM, FM and TV systems, AM phasors, ATU's coils, lighting chokes, static drains, contactors and accessories. **Staff:** Jose Rubio, Kenneth Hyman, Francisco Ibarra, Cesar Hernandez, Gustavo Paez, Luis Caverio, Guido Ortiz, Rocio Lopez.

RF Technology 2809
145 Woodward Ave., S. Norwalk, Conn. 06854

Flash-Back ENG transmit systems*, 950 mhz wireless microphone for field use*, FRL 7 and 13 fixed link systems, other ENG transmitters, power amplifiers. **Staff:** Patrick Bradbury, Christopher Lay, Grady Jackson, Drew Lance, Peter Bur-nage.

Richardson Electronics 2503
3030 N. River Rd., Box 424, Franklin Park, Ill. 60131

Doomsday portable power amplifiers*, replacement tubes and RF transistors, sockets and accessories. **Staff:** Larry Broome, Carlos Aillon, John Hess, Ian Stewart.

Riviera Broadcast Leasing 2793
7400 Center Ave., Suite 102, Hollywood, Calif. 90028

RJW Software 243
251 Rolling Meadow Dr., Billings, Mont. 59101

Computerized music scheduling and library system. **Staff:** Richard Jones, John Webber.

Rockwell Int. 3484
Box 10462, Dallas, Tex. 75207

Staff: Tom Noble, Bill Shurtleff.

Roh Corp. 2647
3603 Clearview Pl., NE, Atlanta 30340

Rosco Laboratories 3443
36 Bush Ave., Port Chester, N.Y. 10573

Roscor Corp. 3404
1061 Feehanville Dr., Mt. Prospect, Ill. 60056

Ross Video 2616
Box 220, 500 John St., Iroquois, Ontario K0E 1K0

RVS 508 production switcher with multi-level effects systems and 210 10-input production switcher with the multi-level effects switcher. **Staff:** John Ross, Jim Millard, Jack McQuigge, Eric Good-murphy, Donald McElheran, Brian Luscombe.

RPG Diffuser Systems 2463
12003 Wimbeldon St., Largo, Md. 20772

Reflection phase grating acoustical diffusers*, Tele-Image audio-for-video. **Staff:** David Sless, Peter D'Antonio.

R/Scan Corp. 2794
511 11th Ave. South, Minneapolis 55415

Lightning data and information systems. **Staff:** Dr. Walter Lyons, Thomas Nelson, Dr. Ken Bauer.

RTNDA 2622
1717 K St., Suite 615, NW, Washington 20006

RTS Systems 3566
1100 W. Chestnut St., Burbank, Calif. 91506

Model 848 intercom station* for the matrix intercommunication system HST17 low cost headset*, software updates for model 802 master station*, TW, series 17 and series 800 intercom systems, IFB systems, pro audio, amplifier systems. **Staff:** Douglas Leighton, Shelley Harrison, Dave Richardson, Cliff Michael, Susan Seidenglanz, Bob Ringer, Stan Hubler, Ed Fritz.

Rupert Neve 3318
Berkshire Industrial Park, Bethel, Conn. 06801

8232 audio console for TV production, postproduction and multitrack teleproduction recording*, V-series production consoles*, 16 to 60 input 51-series of stereo broadcast, video post production and film consoles, automated mixing systems, other mixing consoles, mobile consoles, limiter/compressors, digital signal processing consoles. **Staff:** Barry Roche, Anthony Langley, Geoffrey Lang-

Time is on your side with ADS-1.

**Full broadcast quality at
16 to 30 fps with 16 or 35mm film.**

ADS-1 is the only telecine designed specifically for broadcasters. It lets you compress film running time by as much as 25% without any unacceptable video side-effects. With this far superior technology, you'll never again have to cut scenes or suffer from picture degradation.

ADS-1 is fully compatible with 16 or 35mm film to give you the increased aesthetic impact that only 35mm can offer. You can also take advantage of the optional exclusive dirt/scratch concealment system and an automatic color corrector.

Rank Cintel is the world's only specialized manufacturer of telecine equipment. Backed by more than four decades of experience, you'll be glad to have ADS-1 on your side. For more information just call Rank Precision Industries at (914) 353-1914; (215) 886-9817; (609) 953-1331; or (818) 765-7265.



ATTITUDE MAKES BLAIR NUMBER ONE.

If you're looking for the top dog in spot television, it's Blair. Only Blair. Where you'll find the sales attitude that makes us the toughest competition you can come up against, and the most aggressive ally you can ask for.

Build savvy sales strategies. Deliver honest schedules. With fast turnaround, all around. Be smart, fight, win.

That attitude made Blair number one. And has kept us there for 38 years.

BLAIR. ONLY BLAIR.

Television



don, Rhonda Kohler, Michael George, Tom Semmes, Thomas Schlum.

Sachtler Corp. 3419
400 Oser Ave., Hauppauge, N.Y. 11788

Hot Pod tripod*, video 20 studio and O.B. pedestal*, video 14 fluid head, 7+7 fluid head, Video 20, 25 and 30 fluid heads. **Staff:** Eric Falkenberg, John Gehrt, Alex Froemel, Juergen Nussbaum, Hardy Jauermann, Kurt Gunkel, Alice Davis.

Samson Music Products 2797
124 Fulton Ave., Hempstead, N.Y. 11550

TH-1 body pack transmitter for instruments/lavaliers, VHF digitally synthesized receiving systems, receiver systems, microphone stands. **Staff:** Doug Bryant, Scott Goodman, Bob Rufkahr, Amy Rufkahr, John Amstadter, Bob Newhuis, Joe Martin, Alan Hyatt, Bill Ray, Mark Tarshis, Randy Fuchs.

Sansui Electronic 2598
108 Westlake Dr., Valhalla, N.Y. 10595

SatCom Technologies 244
2912 Pacific Dr., Norcross, Ga. 30071

Satellite earth station antennas, feed systems and antenna control systems, 5.5 meter antenna* with hybrid C/Ku band feed. **Staff:** Dave Speed, John Bulman, G. Douglas Henderson, John Scriberas.

Scandia Telecon 235
1 Park Pl., Suite 310, 621 N.W. 53d, Boca Raton, Fla. 33431

Schafer World Comm. 3353
Hwy. 16 South, Box 31, Marion, Va. 24354

Schmid Telecommunication 2462
Rieterstrasse 6, CH-8002, Zurich, Switzerland

Schneider Corp. of America 3343
400 Crossways Park Dr., Woodbury, N.Y. 11797

TV zoom lenses for 2/3, 1, 1 1/4-inch tube cameras, TV-80 series zoom lenses*, TV 64,65,66 series zoom lenses*, TV-44 series wide angle ENG/EFP zoom lenses. **Staff:** Bob Jones, Craig Marcin, Erwin Gerteis, Horst Stahl, Dr. Joachim Herzke, Peter Mieke, Dwight Lindsay, Jay Citrin.

Schwem Technology 2553
3305 Vincent Rd., Pleasant Hill, Calif. 94523

Gyrozoom 60/300 image stabilizing zoom lens for ENG/EFP cameras, wide angle attachment*, remote control system*. **Staff:** Katherine Metruulas, Michael Salit, Holt Johnson, Clayton Sylvester, Janet Alvarez.

Scientific-Atlanta 3272
3845 Pleasantdale Rd., Atlanta 30340

7555 Ku band video exciter, 7500 09 video receiver C band input displays Ku band, 9630 video receiver with low noise block converter for SNG trunks, Ku band LNAs 302A and 304, digital audio terminal, models of 11, 10, 7, 4.5, 2.8, 1.8 and 1.2 meter antennas, B-MAC equipment,

video/studio equipment, enclosure cabinets. **Staff:** Sid Topol, Jay Levergood, John Lappington, Duke Brown, Alan Freece, Alex Best, Dan Ozley, Jim Cofer.

Sea-Tex div./Si-Tex Marine 2683
14000 Roosevelt Blvd., Clearwater, Fla. 33520

Color weather radar system. **Staff:** Ted Bodtmann, Dave Church.

Selco/Sifam 2450
7580 Stage Rd., Buena Park, Calif. 90621

Knobs, audio level indicator, meters. **Staff:** Bill Wilkinson, John Tamsitt, Celeste Martinez, Tom Swearingen.

Sennheiser 2914
48 W. 38th St., New York 10018

UHF and VHF wireless microphones, headphones and microphones.

Sescom 3445
1111 Las Vegas Blvd., Las Vegas 89101

Staff: Franklin Miller.

SG Communications 2556
3444 N. Dodge, Suite A, Tucson, Ariz. 85716

Staff: James Meehan, Thomas Leschak, Douglas Gratzner, Jean Gratzner, Wallace Steiger.

Sharp Electronics 3305
Sharp Pl., Paramus, N.J. 07430

Color camera systems and high resolution rackmount color monitors, triax control systems, component VTR adaptors

The Story Behind The Story

BAF

See us at the
NAB SHOW
April 13-16
Outdoor
Booth #4

BAF Communications
Corporation
228 Essex Street
Salem, MA 01970
(617)744-3738
(617)744-1505

THE NEW 1986

Co-op source— directory

gives you 16 sales and marketing facts about
manufacturer's co-op programs — at a glance:

1—THE EXAMPLE COMPANY

Advertising Department
200 West 39th Street
New York, NY 10000

Contact

Bill Nelson, National Sales Manager
(212) 222-1111

2—Retailer Co-op Plan

See also Wholesaler Co-op Plan

3—Products

Pens; pencils

4—Trademarks

Yipee, Ya-hoo; Yellow; Yipes.

5—Eligible media

Radio; TV; newspaper; weekly newspaper; circular; catalog; magazine; direct mail; flyer; outdoor.
May include spot announcements only, not sponsorships; classified line ads.
Other media require prior approval.

6—Regional variations

Program only available in WA, OR, ID, NV, CA.

7—International availability

Canada; Mexico

8—Timing

Program: Calendar year
Accrual: Previous calendar year
Advertising: Jan. 1 thru Nov. 30
Claim: Within 60 days of ad run

9—Accrual

5% of net purchases.

10—Participation

100%
Lowest earned rate.
May include: agency fees; production charges; talent fees.

11—Advertising specifications

Maximum size: 3 column inches.
All of manufacturer's products may be advertised.
No competing products.
Manufacturer's products must be clearly separated from other products.
Products must be illustrated.
Trademark name must be prominent.
Not misleading.
Store name and address.

12—Media requirements

All media: Manufacturer's agreement/commitment form or contract must be completed before advertising is scheduled; prior approval required.
Radio: FCC license.
TV: FCC license.
Newspaper: Broad general interest; serving retailer's primary trading area; paid circulation; audited circulation; audited rates.

13—Advertising aids

Print elements; radio commercials; TV elements.

14—Reimbursement method

Credit memo or check.

15—Claim documentation

All media: Paid media invoice.

Unique 3-way index saves you time and effort!

TRADEMARK INDEX (product by brand name)

MANUFACTURER'S INDEX (maker's name)

PRODUCT CLASSIFICATION INDEX
(product by generic heading)

16—Claim address

Outdoor: Photo; list of locations.
The Example Company
Advertising Department
200 West 39th Street
New York, NY 10000
Attn: Bill Nelson, National Sales Manager

Discover Over 3,800 Sources of "Hidden" Advertising Dollars Instantly!

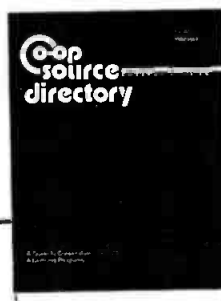
YOURS FREE FOR 15 DAYS!

At last! Here's your opportunity to grab a bigger share of the *billion-dollar* cooperative advertising business. The NEW 1986 CO-OP SOURCE DIRECTORY puts over 3,800 co-op advertising programs right at your fingertips—*ready cash* you (or your clients) may be overlooking... *easy profits* you can't afford to miss.

This is the single most accurate, reliable and up-to-date source of essential facts on cooperative advertising programs you can get today. Makes your research and sales calls easier, faster, less aggravating, and more successful!

The CO-OP SOURCE DIRECTORY comes out twice a year — in March and September. Order now and we'll send you the latest issue *at absolutely no risk or obligation*. Look it over and see for yourself the many rewarding opportunities you're missing. See how much work this amazing guide will save you. But if you don't agree it will *more than pay for itself*, return it in 15 days and owe nothing.

The annual (2 issues) subscription fee is \$172.00, which we'll gladly bill later.



For a FREE look at the
NEW 1986 CO-OP SOURCE
DIRECTORY—

CALL TOLL-FREE
1-800-323-4588

Think of the dollars you could be losing.

DO IT NOW!

srds

SRDS Co-op Source Directory
3004 Glenview Road,
Wilmette, IL 60091

for Sharp cameras, four head industrial VCR's* with VHS-HQ picture enhancement. **Staff:** Ron Colgan, Bob Garbutt, Bob McNeill, Paul Insko, Gary Bridges, Ron Parker, Neil Kobu, Peter Gloeggler, Bruce Pollack, Hank Miura, Mike Yamaguchi, Jim Hulfish.

Douglas Sheer & Assoc. 2561
274 Madison Ave., Suite 1406, New York 10016

Broadcast equipment marketplace survey and census of TV stations, professional video marketplace survey. **Staff:** Douglas Sheer, Des Chaskelson, April Palmer, Karen Kent.

Shintron Co. 3036
144 Rogers St., Cambridge, Mass. 02142

Empress C-2000 component production switcher with downstream keyer*, DK3/CK3 composite downstream keyer/chromakeyer*, 12X-C4 12-input/four-output component routing switcher*, Andromeda 3000 component framestore/DVE unit with control panel*, component switchers, time code generator/reader, VDA's and ADA's. **Staff:** Shintaro Asano, Jeff Swift, Jacques Kuchler, George Laughhead, Kathleen O'Keefe, Jose Rosado, Morris Sazar.

Shively Labs 2709
86 Harrison Rd., Bridgeton, Me. 04009

Spaced broadcast antennas*, vertically polarized FM broadcast antennas*, circularly polarized FM broadcast anten-

nas, panel antennas, horizontal-only antennas, rigid coaxial transmission line and coax components, branched and balanced FM combiners, RF patch panels, AM/FM isocouplers, hybrid power combiners, harmonic filters, directional couplers, pressurization equipment, FCC directional pattern and omnidirectional pattern studies, VSWR monitoring, display and protection systems, TV antennas. **Staff:** Paul Wescott, D. Steve Collins, Charles Peabody, Robert Surette, Jonathan Clark, Peter Hayes, George Harris.

Shook Electronic Enterprises 3222
6630 Topper Pwy., San Antonio, Tex. 78233

Model 14-22/D 22-foot mobile production system with dual generators, nine equipment racks, terminal package, two cameras and two VTR's*, ENG/EFP construction manual, network production trailer. **Staff:** Edwin Shook, Julia Hollenbeck Shook, Stuart Shook, Patrick McCafferty.

Shure Brothers 3320
222 Hartrey Ave., Evanston, Ill. 60202

FP32 stereo ENG mixer*, FP42 stereo production mixer*, microphones, circuitry, phono cartridges. **Staff:** Dick Murphy, John Phelan, Dan Marchetto, Chris Lyons, Michael Petersen, Al Hershner, Lottie Morgan, Joanne Wilkinson.

Sigma Electronics 2905
1184 Enterprise Rd., East Petersburg, Pa. 17520

Generators, video processing amplifiers, distribution amplifiers. **Staff:** Sue Huber, Joe Donches, Bob Hivner, Kent Porter, Jeff Spittle, Jerry Wingle, Cheryl Stauffer.

Singer Broadcast Productions 3344
875 Merrick Ave., Westbury, N.Y. 11590

CCA electronics FM-20G FM exciter and 20 kw FM transmitter. **Staff:** John Hillman, Timothy Hillman, Alan Singer, Ron Baker.

Skotel Corp. 2738
1445 Provencher, Brossard, Quebec J4W 1Z3

Staff: Stephen Scott, Gaston Auclair, Mark Danowski.

Leonard Sloan & Assoc. 234
2542 Elm St., Dallas, Tex. 75226

Staff: John Davis, Russell Anokey, David Downs, Kathryn Saxton, Larry Tompkins.

SMPTE 2501M
862 Scarsdale Ave., Scarsdale, N.Y. 10583

"Digital Television Tape Recording and Other New Developments" book. **Staff:** Alex Alden, Janice Baio, Peg Caggiano, Barry Detwiler, Harold Eady, Jeff Friedman, Lynne Robinson.

Solid State 3560
228 E. Main St., Milan, Mich. 48160

Audio mixing systems and studio computers.

H.A. Solutec 2530
4360 Iberville St., Montreal, Que. H2H 2L8

SOL-6800 automated broadcasting system for recording and playback, SOL-6800/UIS for eight VTR's with 12 inputs AV switcher*, SOL-6800/MICRO for one VTR with four inputs AV switcher*, SOL AD.ID/Q generator*, SOL-8200 adaptive co-channel filter*. **Staff:** E. Grondin, G. Fortin, G. Caron, M. Beland.

Solway 2745
5010 Johnson St., Hollywood, Fla. 33021

Sono-Mag 3480
1833 W. Hovey Ave., Normal, Ill. 61761

Broadcast automation programmers and systems for radio, compact disk-based automation program for live assist and random access of CD disks. **Staff:** Stephen Sampson, William Moulic Jr., Bill Hosington, Jerry Bassett, Pete Charlton.

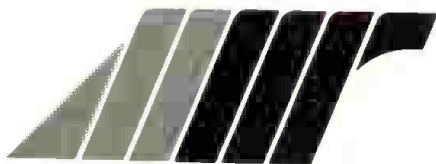
Sony Broadcast Products Co. 3100
1600 Queen Anne Rd., Teaneck, N.J. 07666

DVR-1000 component digital videotape recorder*, BVW-105 CCD Betacam camera*, BVH-2800 VTR with digital audio recording*, SP-mode U-matic recorders*, MXP-2000 stereo audio mixing console, BVE-900 editing system*, CDK-006 automatic compact audio disk loader*, Betacam camera-recorders, Betacam automated playback system, stereo audio production/post-production equipment, Type C one-inch videotape recorders and accessories, high-definition TV systems, color monitors, three-quarter-inch U-matic recorders and professional cameras. **Staff:** William Connolly.

Soper Sound Music Library 2443
Box 498, Palo Alto, Calif. 94302

Production music library.

Thanks



MAJOR MARKET RADIO

FOR MAKING ALL 300 OF US
BETTER CLIENTS AND FRIENDS
AT YOUR 7th ANNUAL FLY-IN
AT KEY BISCAYNE, FLORIDA.

We've Risen Above All The Rest!

... **With Our Tall Tower**—WDBB's phenomenal new tall tower is the second tallest man-made structure in the free world! Built by Kline Iron and Steel Co. of South Carolina, the tall tower makes WDBB the most powerful station in north/central Alabama. Our viewers will not only receive a sharper picture and better color than our competitors can deliver, but they'll get their programming in stereo.

... **With Our Coverage**—WDBB's new tall tower will enable us to reach 24 counties in central and north Alabama! And that's including the Birmingham area with its 587,000 TV households.

... **With Our Programming**—WDBB's got more great shows more often than any other TV station in Alabama. NCAA Basketball, Matt Houston, Private Benjamin, Bugs Bunny, The Three Stooges, and award winning movies every night! Future shows will include Night Court, Cheers, Family Ties, Webster and more! We've got the shows and we broadcast them 24-hours a day, in stereo!

FOR NATIONAL SALES INFORMATION

ITS ITS, 437 Madison Avenue
New York, New York (212) 233-2777

OR CALL WDBB-TV

1700 Jug Factory Road, E., P.O. Box 1006, Tuscaloosa, AL 35403, (205) 345-1117
600 Beacon Parkway West, Birmingham, AL 35209, (205) 942-1717

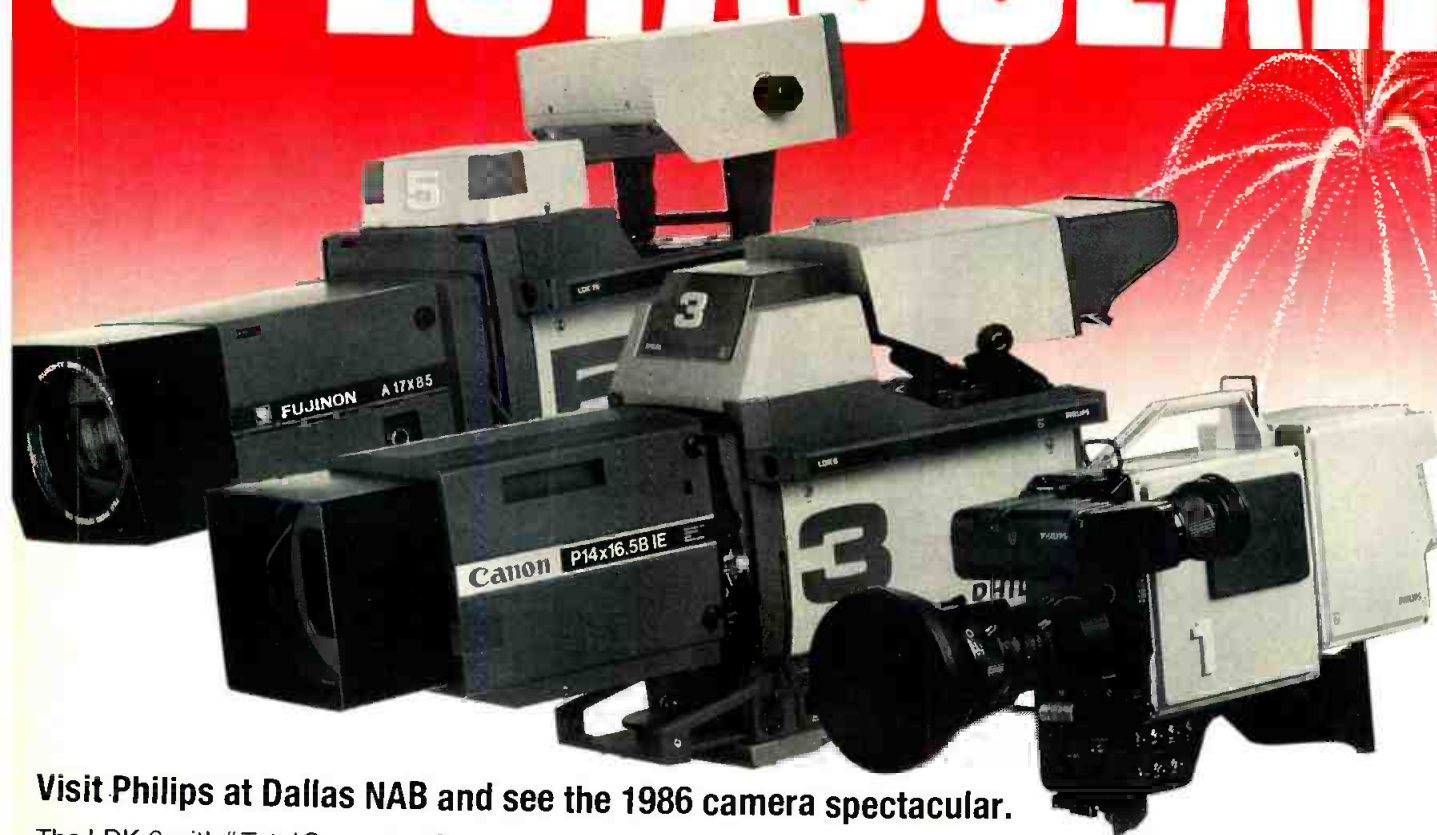
Move It On Over!

WDBB Stereo TV
Alabama's Brightest!



Designers, fabricators, and erectors of the
World's tallest man-made structures
KLINE IRON & STEEL CO.
Columbia, SC, West Columbia, SC and
Bartow, FL (803) 779-7080

Dallas NAB-Philips makes it a **CAMERA SPECTACULAR**



Visit Philips at Dallas NAB and see the 1986 camera spectacular.

The LDK 6 with "Total Computer Control" has a new 1986 series, the advanced LDK 6A and LDK 26A. With new production features. Plus innovations like the unique COACH computer maintenance and diagnostic aid with telephone interconnect. There's also the new LDK 54A multi-role compatible portable.

And don't miss the other star attractions at the Philips NAB booth.

- High quality color monitors
- UHF television transmitters

- FM radio transmitters
- Television test and measuring instruments
- Philips professional compact disc player
- Philips professional lighting

See Philips at NAB or for immediate information call 201-529-1550. In Canada call (416) 439-9333

PHILIPS TELEVISION SYSTEMS, INC.
900 Corporate Drive, Mahwah, N.J. 07430



Broadcast Equipment

PHILIPS
Reliability through Quality

Sound Ideas 2444

86 McGill St., Toronto M5B 1H2

Staff: Brian Nimens, Michael Bell, Garry Trafford, Bruce Hayne.**Sound Technology 3328**

1400 Dell Ave., Campbell, Calif. 95008

Soundcraft USA 2770

1517 20th St., Santa Monica, Calif. 90404

Staff: Wayne Freeman, Erika Lopez, Greg McVeigh, Alan Archer, Gary Lynn, Shane Morris, Charlie Day.**Soundtrack/Aircraft Music 2554**

25 E. 21st, New York 10010

Custom, syndication and production music service. **Staff:** Mark, Crit, Rob, John, David, Vi, Jeannie, Mary Ellen, Lisa, Bonzie.**Soundtracs/USA Office****MCI Intertek 144,145**

745 109th St., Arlington, Tex. 76011

Audio mixing consoles, M series monitor desk*, CM-4400 studio console linked with 24-track tape machine, M and MR ranges for sound reinforcement and studio engineers, eight and 16-track recording, T series consoles. **Staff:** Todd Wells, John Carroll, Peter Jostins, John Stadius, Tom Burrows, Jerry Spohn, John Birkhead, Travis Ludwig, Bill Mullin, John Caporale, Rick Brown, Stan Sliz, Wane Fuday, Barry Evans, Paul Cullity, Randy Fuchs, Jim Starkin, Bob Rufkahr, Pete Wood, Mark Tarshis.**Spantel 3382**

968 NBC Center, Lincoln, Neb. 68508

FM subcarrier paging, tone and voice pagers. **Staff:** Richard Thompson, Donn Davis, Andy Andros, Tom Barker, Ken Gray, Robert Roe, Kay Davis, Mary Endacott, Ann Murray, Deb Sandstedt, Chuck Piper.**Spectrum Planning 2634**

Box 831360, Richardson, Tex. 75083

Communications systems engineering services, marketing research, site location, feasibility studies, channel and frequency searches, coordination and protection, TV Beam* combining engineering, marketing and cable analysis into one tool, 80/90 application package for spectrum planning. **Staff:** Scott Goldman, Nick Stanley, Jerry Mull, Jerry Armes, Duncan McIntosh, Randy Oster, Dale Rylander, Fred Johnston, Lyman Bishop.**Sperry Corp. 2633**

49 Music Square West, Nashville, Tenn. 37211

Radio traffic and accounting software for IBM PC's. **Staff:** Ray Hines, Sharon Moyers, Mark Spruill.**Sprague Magnetics 2540**

15720 Stagg St., Van Nuys, Calif. 91406

Replacement Sony BVH audio heads, replacement parts and tape heads, refurbishment services. **Staff:** Darrell Sprague, John Austin, Bob Reiss.**Stage Lighting Distributors 2446**

346 44th St., New York 10036

Lighting dimmers and control, studio lighting, fog and smoke machines.

Stainless 2735

Third & Montgomery Ave., North Wales, Pa. 19454

Guyed and self-supporting towers, design, fabrication and installation services. **Staff:** R.A. Farrington, J.C. Rodriguez, Howard Balshukat, Owen Ulmer, Peter Starke, Kenneth Wetzell, Ronald Pagnotto, John Windle, H. William Guzewicz.**Standard Communications 2489**

Box 92151, Los Angeles 90009

Stanton Magnetics 3331

200 Terminal Dr., Plainview, N.Y. 11803

Cartridges, styli, preamplifiers, headphones and record care products. **Staff:** Pete Bidwell, Jack O'Donnell.**Stantron 2911**

6900 Beck Ave., N. Hollywood, Calif. 91605

Desk consoles, VTR/VCR racks, duplication racks and cabinet consoles. **Staff:** Guy Tessier, Tom Grant Jr., Tom Hanson, Scott Harries, Tom Judkins, John Crockett, Jeff Gouch.**Star Case Manufacturing 2555**

648 Superiro, Munster, Ind. 46321

Staff: Dennis Toma, Bernard Fryman, Al Novak, Bill Coffel, David Athans.**Steady-Film 248**

707 18th Ave., South, Nashville, Tenn. 37203

Steady-Film system retrofitted to Rank Cintel Mark IIIC with microprocessor controller which interfaces with Sony BVH-2500 or Abekas and color grading system for film-to-tape transfer. **Staff:** Wayne Smith, Sara Brinker, Phil Kroll, Chris Gyoury, Sarah Burmeister.**Steenbeck 2749**

9554 Vassar Ave., Chatsworth, Calif. 91311

Storeel 3322

2050-C Chamblee-Tucker Rd., Box 80523, Atlanta 30341

Instant access and modular rapid transit storage systems for videotape, cassettes and film, room stretcher high-density storage for RCA, Ampex and Beta carts, set-up trucks*, high-density audio cart for FM and AM storage. **Staff:** Carolyn Galvin, Michael Plaut, Robert Kearns, Paul Galvin, Maureen Kearns.**Straight Wire Audio 2518**

2611 Wilson Blvd., Arlington, Va. 22201

Strand Century 3024

18111 S. Santa Fe Ave., Rancho Dominguez, Calif. 90221

Showchangers motorized fixtures*, Lightboard XP, Lightboard M, control consoles*, DC-90 dimming, memory control console, Janiro fixtures, 12 kw HMI, HMI par units. **Staff:** John Pavacik, Jeff Sessler, Marion Rimmer, William Groener, Jim Crooks, Len Bedard, Leonard Wittman, Lee Magadini, Robert Schiller, Franc Dutton, Susan Dandridge, Debra Garcia, Tom Folsom, Robin Crews, Noland Murdock.**Strata Marketing 2689**

403 W. North Ave., Chicago, Ill. 60610

Staff: Bruce Johnson, Roger Skolnik, Chuck Cady, John Thompson, Deborah Novess.**Studio Technologies/AEA 2769**

5520 Touhy Ave., Skokie, Ill. 60077

AEA active MS matrix, MS 380 battery powered ENG version with microphone inputs, AN2 stereo simulator. **Staff:** Gordon Kapes, Carolyn Cashel.**Studer Revox America 3048**

1425 Elm Hill Pk., Nashville 37210

A812 ATR, A807 ATR, B203 automation controller*, SC 4016 and SC 4008 system controllers for video post*, 961/962 compact mixing consoles*, A820-TC ATR with center track time code*, multitrack ATR's, mixing consoles, compact disk players, compact ATR's, telephone hybrid systems, cassette decks, synchronizing systems, studio monitor loudspeakers.

Staff: Thomas Mintner, Doug Beard, David Bowman, Larry Jaffe, Thomas Jenny, Chris Ware, Nick Balsamo, Fred Layn, Brian Tucker, Joe Bean, Vencil Wells, Nancy Byers, Bruce Borgerson, Tom Knox.**Sunspot 2679**

2440 San Mateo Pl., Albuquerque, N.M. 47110

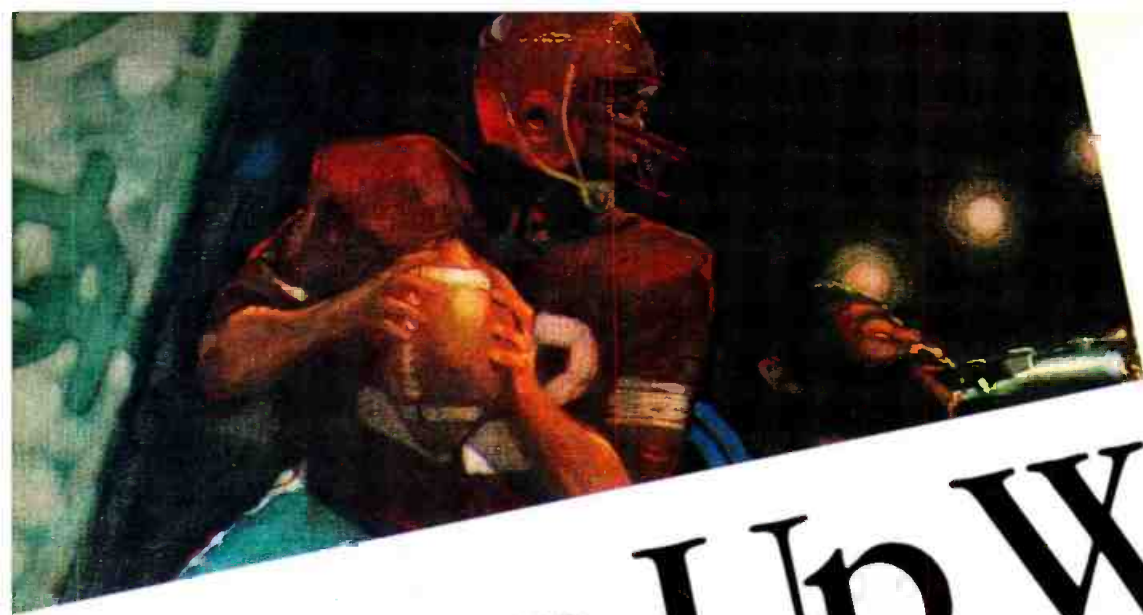
Broadcast billing, trafficking and data system for Apple III and IBM compatible computers*. **Staff:** Don Rice, Dave**Accu-Weather
CAN MAKE YOUR
WEATHER A****10 NEW
PRODUCTS AND SERVICES
VIA SATELLITE****ALL AT NAB BOOTH 2529**

- | | |
|--------------------|------------------------|
| ■ Accu-Graphics™ | ■ NAFAX/DIFAX |
| ■ Accu-Data™ | ■ Weather Wire |
| ■ Satellite Images | ■ All NWS/FAA Circuits |
| ■ Radar Images | ■ Forecasting |
| ■ Plainpaper FAX | |

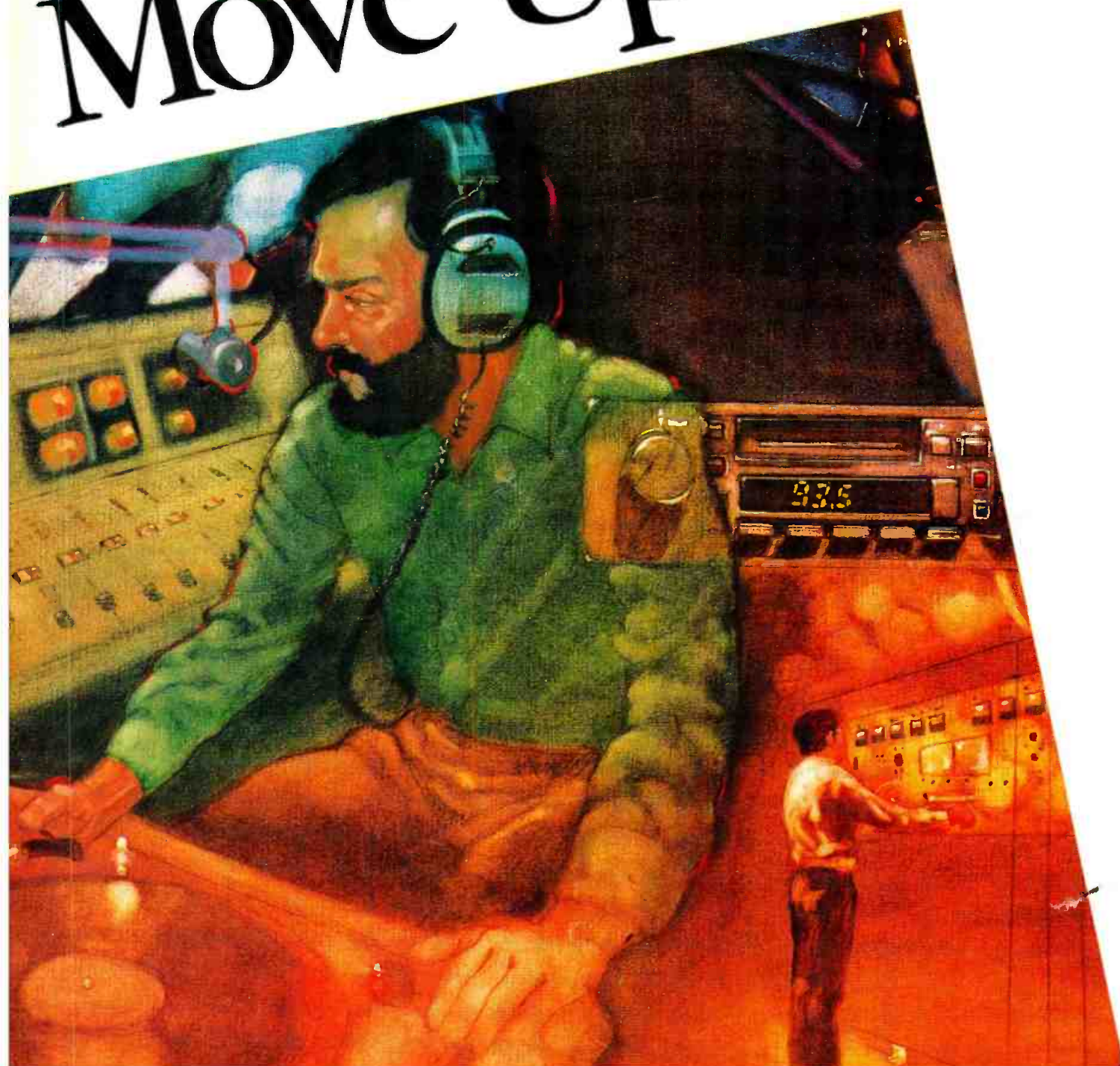
Delivery via Equatorial Satellite, Siscorp 2 ft. dish. RCA service.

**Accu-Weather costs much less
than other services.****It pays to switch.****Accu-Weather, Inc**

619 W. College Ave. State College, Pa. 16801 814-237-0309



Move Up With



Continental

Join the many radio broadcasters who are meeting a variety of station equipment needs with Continental products.

If the 80-90 Docket impacts your station, don't miss the Best Solution: Continental Low-Medium-High Power FM Transmitters.

If AM Improvement is your goal, Look to Continental for the Best Built AM Transmitters.

Besides transmitters, Continental offers the popular 802A FM Exciter, FM antennas, AM coupling and phasing, transmitter combiners, remote and automatic exciter and transmitter controls and studio equipment.

Visit the Big Voice from Dallas and discuss your needs with the Industry's best Radio Equipment Sales, Engineering and Service Team.

FM Transmitters
AM MW Transmitters
AM SW Transmitters
Transmitter-Related Equipment
Engineering Service & Transmitter Parts

© 1986 Continental Electronics/6174



a Division of Varian Associates, Inc.

PO Box 270879

Dallas, Texas 75227

Ph: (214) 381-7161

Telex: 73-398



See What's New From Continental: Booth 3200, 86-NAB Show



Marvin Steelman
(916) 268-0277



Tom Cauthers
(503) 668-9312



John Hutson
(704) 274-5298



Barry Ariaz
(615) 822-0256



Steve H. Schott
(214) 423-3644



Dave Hultsman
(205) 822-1078



John D. Abdnour
(815) 672-8585



Jim Littlejohn
(612) 479-2633



Ken Perkins
(303) 670-1049



R. Clifford Rogers
(518) 532-7488

Spring, Dawn Bodener, John Flint, Maggie Wesley, Joshua Wesley, Don Manual, Jerry Littenberg.

Swintek Enterprises 2918
587 Division St., Campbell, Calif.

Staff: William Swintek, Les Underwood, Davisa Hill, John Ferguson, Dan Deegal, Wayne Wyche, Richard Pass, Frank Fitzhenry, Tovge Montero.

Switchcraft Inc. 2684
5555 N. Elston Ave., Chicago 60630

Phone jacks and plugs, phono jacks and plugs, audio and general purpose connectors, jack panels and connectorized jackfields, molded and nonmolded cable assemblies, E series audio receptacles with removable inserts*, straight and right-angle BNC receptacles*, high-power plugs and jacks*, two-wire printed circuit board jackfields. **Staff:** Bruce Heeb, Terry Leen, Bill Kysiak, Keith Rosborough.

SWR Inc. 3350
Box 215, Goffstown, N.H. 03045

Sylvania US Lighting 3393
Sylvania Lighting Center, Danvers, Mass. 01923

Lighting equipment.

Symetrix 2519
4211 24th Ave., West, Seattle 98199

Teleconferencing interface, broadcast telephone interface, telephone interface,

noise reduction system, fast RMS compressor/limiter, peak-RMS compressor/limiter, stereo amplifier, parametric equalizer, quad expander/gate, voice track processor. **Staff:** Dane Butcher, Roy Blankenship, Mike Burnes.

Symtec/One Pass Video 228
14902 Winning Creek Rd., Tampa, Fla. 33612

Graphics and text generator. **Staff:** Robert Cook, Heather Welner, Rob Duncan, Steve Strong, Peter Mandel, Jim Davies.

System Associates 3392
5801 Uplander Way, Culver City, Calif. 90230

Brokers of used TV equipment. **Staff:** Walter Shubin, Billy Seidel.

Systemation 2567
337 N. Water, Decatur, Ill. 62523

Taber Manufacturing 3491
1880 Embarcadero Rd., Palo Alto, Calif. 94303

Bulk degaussers, audio replacement heads, refurbishing services, computer software, computer graphics software. **Staff:** Veldon Leverich, Diane Leverich, Chuck Towns, Neil Martinez, Bob Souza.

Take a Trip America 2590
3608 N.W. 58th St., Oklahoma City 73112

Tamron Industries 120
24 Valley Rd., Port Washington, N.Y. 11080

Film video professor. **Staff:** Hank Nagashima, Tony Garaguso, Hideaki Shimizu, Takamune Hirano, Harumasa Ikumo, Yasumasa Mizushima.

Tandberg of America 2748
Box 58, Armonk, N.Y. 10504

Tannoy North America 215
97 Victoria St., North, Kitchener, Ont. N2H 5C1

NFM-8, SRM-10B and SRM-12B near-field broadcast monitors, SR-840 power amplifier. **Staff:** Bill Calma, Rob Hofkamp.

Tapecaster 3310
3798 Watman Ave., Memphis 38118

Series 1000 console*, cartridge machine. **Staff:** Welton Jetton, Steve Sage, Stovall Kendrick, Bob Jones.

Tapscan 2664
2100 Data Park, Suite 202, Riverchase, Ala. 35244

Tascam 3416
7733 Telegraph Rd., Montebello, Calif. 90640

Recorder reproducers*, studio 8 console multitrack, 16-channel multitrack, other mixing consoles. **Staff:** Anders Madsen, Bill Mohrhoff, Gregg Hildebrandt, Barry Goldman, David Oren, Norio Tamura, Sue Osborne, David Bierut, Bill Stevens, Jimmy Yamaguchi, Hal Onda, Vince Basse, Kiy Watanabe, Gary Beckerman, Fred Johnson, Jon Bliese.

Teatronics 2756
3100 McMillan Rd., San Luis Obispo, Calif. 93401

Lighting control equipment, Vision computer lighting console*, Tech Director manual two-scene console. **Staff:** Roger Volk, Paul Rabinovitz, Mike Griffith, Randy Pybas.

Technov Industries 148
3974 Amboy Rd., Staten Island, N.Y. 10308
Sync generators, DAs, switchers.

Tekno 2486
100 W. Erie St., Chicago 60610

Tekskil Industries 2570
Suite 310, 218 Blue Mountain St., Coquitlam, B.C. V3K 4H2

Tektronix 3214
Box 500, Beaverton, Ore. 97077

1730 waveform monitor*, 1720 vectorscope*, sync, pulse and test signal generators, picture monitors, precision demodulators, frame synchronizers and automated measurement devices. **Staff:** Larry Kaplan, Steve Kerman, Jim Zook, Dan Castles, Larry Harrington, Dave Friedley, Wayne Olmstead, Rex Stevens, Jeanine Navarra, Ron Marquez.

Telecom Research 2588
1163 King Rd., Burlington, Ont. L7R 3X5

Telemet 3396
185 Dixon Ave., Amityville, N.Y. 11701

TV broadcast demodulator*, controller for routing switcher*, fiber optics systems, isolation amplifiers, thermal equal-

Celebrating our 50th year in communications lending

Join us during the NAB Convention at our Hospitality Suite, Lowe's Anatole Hotel, or call us during the convention at 748-1200.

CHUCK COON
JOLEN CAMERON
KEN KEELER
(216) 622-8654

Communications Lending Department

**Society
BANK**

Cleveland, Ohio

izers, sideband analyzers, spectrum/sideband analyzers, clamping amplifiers, repeaters, video cable terminals, test signal generators, modulators, chroma keyers and decoders, group delay measuring systems, routing switchers. **Staff:** Robert Griffiths, Seymour Hamer, Eugene Murphy, Alex Kwartiroff, Leo Lazarus, Vincent Delmato, Ivan Slovak, Antonio Silva.

Telemetrics 2569
7 Valley St., Hawthorne, N.J. 07506

Camera remote-control system*, pan/tilt tri-ax cable connected table for remote control of portable video color cameras, other tables controlled via microwave transmitters/receivers, standard multi-conductor cable controlled systems. **Staff:** Anthony Cuomo, Allen Phelps, Albert Chan, Haig Soojian.

Telepak San Diego 2566
8340 Clairemont Mesa Blvd., Suite 201, San Diego 92111

Carrying cases.

Telescript 3351
445 Livingston St., Norwood, N.J. 07748

1000 line resolution monitor/prompts, telecue and telescript transports, hi-efficiency beamsplitters, telepod free standing transport, C-64 networking prompting program*, 8088-8086 PC prompting program*, 1150 line resolution monitor/prompter*. **Staff:** Bob Swanson, Jim Stringer, Rich Mergner, Susan Moran, Kay Hyde, John Lennan.

Television Engineering 3400
580 Goddard Ave., Chesterfield, Mo. 63017

14-inch four camera production unit. **Staff:** Jack Vines, Linda Vines, Gary Warnecke, Ray Vines.

Television Equipment Associates 3342
Box 393, S. Salem, N.Y. 10590

Matthey low loss video delays*, micro video filters*, wideband products for HDTV*, rack mounted and video and pulse delays, little gray boxes, transparent low pass video filters, Elcon one-inch tape cleaner/profiler*, 3/4 inch cassette cleaner/profiler*, Rascal ounce intercom headset*. **Staff:** Bill Pegler, Steve Tocidowski, Vince Emmerson, Bill Walters, Marilyn Walters.

Television Information Office 3105
745 Fifth Ave., New York 10151

Television Technology Corp. 3492
2360 Industrial Ln., Broomfield, Colo. 80020

Staff: Carol Anderson, Jim Billig, John Binsfeld, Dave Haupt, Mark Hutchins, Nick Panos, Bo Pearce, Byron St. Clair.

Telex Communications 3370
9600 Aldrich Ave., South, Minneapolis 55420

Single antenna and dual diversity wireless mic systems, headsets, headphones, intercom systems, wired mics, audio tape duplicators, ENG-4 wireless microphone receiver*. **Staff:** Jim Arring-

ton, Pat Gillette, Don Mereen, Michael Olinger, Dan Paulnock, Claude Kleiman, Gary Fisher, Rick Peterson, Joel Johnson, Dan Dantzier.

Tennaplex Systems 2812
452 Five Farms Ln., Timonium, Md. 21093

TV and FM broadband panel with circular polarization, multistation combiner*, broadcast antennas with vertical patterns*. **Staff:** Marvin Crouch, Les Lear, Manfred Muenzel, Ed Ritz, Bob Paradise.

Tentel 3326
1506 Dell Ave., Campbell, Calif. 95008

Staff: Wayne Graham, John Bonn, John Chavers, Burke Stafford, Bev Zern, Chris Lui, Lorrie David.

Texar 2571
7175 Saltsburg Rd., Pittsburgh 15235

Texscan MSI/Compuvid 2473
3855 S. 500 W., Suite S, Salt Lake City 84115

TFT 3420
3090 Oakmead Village Dr., Santa Clara, Calif. 95051

Multi-channel remote control*, baseband input BTSC aural modulation monitor*, distortion analyzer*, narrowband STL receiver*, composite subcarrier generator, series STL with IF repeater, FM/stereo monitor, AM stereo exciter, EBS systems, AM monitor, BTSC aural modulation monitor. **Staff:** Joe Wu, Henry Wu, Jesse Max-

enchs, Lois Kiri, Kevin Tam, Joe Bor-gonia, Terry Peterson, Gerald Wakayama, Charlie Hu, Charles Lee, Y.S. Law, Richard Chien, Malcolm Furlly.

Theater Service & Supply 2917
1792 Union Ave., Baltimore 21211

Staff: Richard Antisdell, Jacauelein Keleman.

Thermodyne 2824
20850 S. Alameda St., Long Beach, Calif. 90810

Shipping cases, rack-mounted instrument cases.

Thomson-CSF Broadcast 3190
37 Brownhouse Rd., Stamford, Conn. 06902

Vidifont graphic product line, Betacam and studio cameras, FM and TV transmitters and video and audio processing equipment. **Staff:** Stanley Basara, Charles Gaydos, Thomas Hindle, Johan Safar.

Thomson Electron Tubes 3422
550 Mount Pleasant Ave., Dover, N.J. 07801

Staff: Robert Kolts, S.N. Barthelmes, Daniel Kleim, Anthony Laconti, Charles Kalfon, James Auxier, C. Mariac, C. Bonnet, P. Gerlach, C. Grolleau, G. Cleri.

Tiffen Manufacturing 2736
90 Oser Ave., Hauppauge, N.Y. 11788

Special effect filters, lenses, special effect viewing kit. **Staff:** Nat Tiffen, Ira Tif-

DIGISOUND™

DIGITAL AUDIO STORAGE



Add a New Dimension to Your Station

The Digisound™ Random Access Digital Audio Storage Unit from MEI Electronics provides the reliability and convenience of digital instant random access... with the superior sound quality of digital recording. Audio is digitized and stored on a large capacity disk for instant playback.

What's more, Digisound is a one-for-one replacement for mechanical cartridge equipment. For a free brochure, call Dave Collins, at 312/295-2606.

At the touch of a button, you select your next spot, song or message track. Instantly, Digisound presents the track with unprecedented audio fidelity, play after play.

Have the Sound of the Future... Today

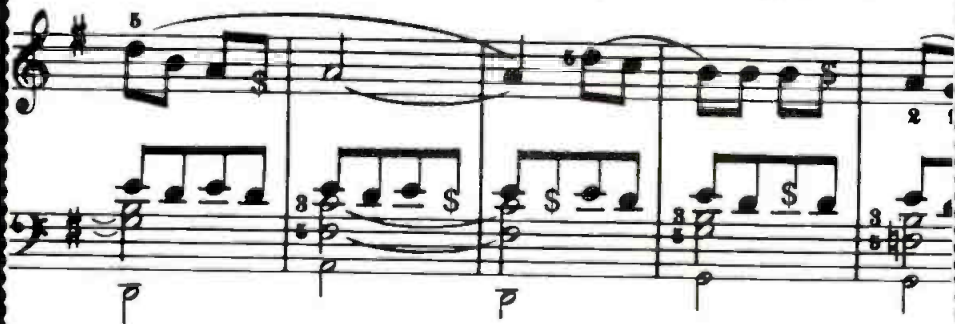
MEI

ELECTRONICS

910 Sherwood Drive Unit 19,
Lake Bluff, IL 60044

See us at NAB booth 2620

THE SOUNDS OF MUSIC!!



100 DISC PROGRAMMABLE CD PLAYER

from

audio~metrics

AVAILABILITY
STARTS LAST
QUARTER 1986



MODEL AMCDS — 1000A

1. Ruggedly built for industry use.
2. Automatically cues to within 300 MS of audio.
3. Direct access via RS-232C port.
4. *Unit returns "arming complete" and time data from selected cut. In addition, time pulses are returned once each second, after starting, and an end-of-message at end of selection.
5. Audio outputs-stereo, 10K at 2V RMS and 600 OHMS at +4.
6. *100 disc capacity — full R.A. ability. Up to 99 cuts per disc.
7. 15 second disc/cut access time max.
8. *Programmer may be downloaded from user's existing computer.

*Features with optional programmer

You may buy with programmer, especially built for this use, in a package with 2 players. Great for use with automation systems. Will permit 1000 event programming!!

ATLANTA, GA
(404) 964-1464

CHICAGO, IL
(312) 794-0224

DALLAS, TX
(214) 423-8667

LOS ANGELES, CA
(818) 843-5052

RICHMOND, IN
(317) 962-8596

SEATTLE, WA
(206) 838-2705

SEE IT! HEAR IT! AT



ALLIED
Broadcast Equipment

fen, Steve Tiffen, Tom Grosso, Jack Bonura.

Timeline 2686
270 Lafayette St., Room 1300, New York 10012

Time code and synchronization products, Lynx time code module, SAL time code module, Lynx model video systems interface*, system controller*, software package*. **Staff:** Gerry Block, Julie Goldscheid, Glenn Lystad Jr., James Monroe.

TOA Electronics 2498
480 Carlton Ct., S. San Francisco 94080

Audio equipment manufacturer, studio reference monitors, sound reinforcement, loudspeakers systems and components, mixing consoles, signal processing equipment, digital delay, microphones. **Staff:** Terry Taylor, Bill Eskew, Kae Cochran.

Torpey Controls 2906
98-2220 Midland Ave., Scarborough, Ont. M1P 3E6

Hi-styled, low profile illuminated analog clocks to operate from impulse drive*, master clock systems, digital and analog slave clocks, central temperature display systems, timers, central timing systems with remote readouts, video time display, video temperature display, video stopwatch, video/audio routing switchers. **Staff:** R.J. Torpey, A. Critchley.

Toshiba America 3302
2441 Michelle Dr., Tustin, Calif. 92680

Total Spectrum Manufacturing 3534
20 Virginia Ave., West Nyack, N.Y. 10994

Townsend Associates 3418
79 Mainline Dr., Westfield, Mass. 01085

UHF, VHF transmitters, 15kw VHF*, high efficiency pulse for klystron transmitters*, update TV exciter*, VHF and UHF solid state amplifiers for replacement in older transmitters. **Staff:** George Townsend, Tom McDonald, Howard McClure, Ray Yirga, Bob Anderman, Gary Cooper, Jim Rogers, Harry Craig, Ken Barker, Bob Klein.

Tracoustics 151
Box 3610, Austin, Tex. 78764

Transimage International 130
245 Hanworth Rd., Hounslow, Middlesex, England TW3 3UA

Transmission Structures 2621
Box 907, Vinita, Okla., 74301

Staff: Richard Bell, Shari Bell, Tom Snow.

Trimm Inc. 223
400 W. Lake St., Libertyville, Ill. 60048

Audio jacks, plugs and patch cords, coaxial jacks, plugs and patch cords, terminal block and connectorized terminal block, front facing terminal blocks, fuse panels, audio and video jack panels and connectorized panels. **Staff:** Ron Larsen, Harry Lewis, George Newton, Richard Sinclair.

Trinity Corp. 143
481 8th Ave., Suite 647, New York 10001

Some uncommon projects have something in common!

Take a look at this list of leading American Broadcasters and guess what they all have in common: Amaturro Group, American Broadcasting Company, Arch Communications, Belo Broadcasting, Capital Cities Communications, Gilmore Broadcasting, Metroplex Communications, National Broadcasting Company, Outlet Broadcasting and Scripps Howard Broadcasting.

The answer is that they have all chosen the LDC Group to supply them with products and services in the exciting Eighties!

The LDC product range includes antennas for both TV and FM in broadband and high power configurations, broadcast towers in all height ranges up to more than 2000 feet, and design, supply and support services for complete turnkey installations.

If the leading broadcasters like our products and our work, maybe you will too! Why not talk to us about your next project!



**LeBlanc & Dick
Communications Inc.**

14440 Cherry Lane Court, Suite 201
Laurel, MD. 20707. Tel: (301) 498-2200.
FAX: 301 498 7952

Accounts Deceivable

Every day you wait on an overdue account is a day that money should be working for you.

When we started our media collection business 14 years ago, we had no competition.

We still don't.

We're the nation's media collection specialists. And our knowledge of your business makes us the best at ours.

For immediate action on your local and national business, call us. And collect.

szabo

Media Collection Specialists

Szabo Associates, Inc.
3355 Lenox Road, Suite 945
Atlanta, Georgia 30326
404/266-2464

Trivial Development 2514

4 N 240 Calvary Dr., Unit D, Bloomingdale, Ill. 60108

Trompeter Electronics 3346

31186 La Baya Dr., Westlake Village, Calif. 91362

Coax connectors, cable assemblies, patch panels, patch cords and accessories, RGB cable plug*. **Staff:** Ed Trompeter, Hap Gladish, Bill Byers, Dick Coleman, Frank Miles, Jeannette Miles, Sam Jones, Arnie Stryk.

TVI 2752

5426 Fair Ave., N. Hollywood, Calif. 91601

TWR Lighting 246

1630 Elmview, Houston 77080

Obstructional lighting including beacons, sidelights and controls, strobe lighting*. **Staff:** George Jackson, Mike Elledge, Jack Byers, Bill Fabry, Tom Brame.

Ultimate Support Systems 2783

Box 470, Fort Collins, Colo. 80522

Rackmount stands*, modular parts systems*, lightweight aluminum and portable support stands, tripods, utility stands, versa tables and mic boom stands. **Staff:** Glen Snider.

Ultimate Corp. 3552

18607 Topham St., Reseda, Calif. 91335

Ultimate-5 production and post production and Newsmatte-2 weather and news. **Staff:** Paul Vlahos, Pat Smith, David Fellingner, Arpag Dadourian, Ron Ungerman, Petro Vlahos, Maury Schallock, Roger Factora.

Uni-Set Corp. 2806

449 Avenue A, Rochester, N.Y. 14621

Modular studio staging system, graphic design cart, riser blocks, tops, ramps, news set and table system.

Unicol Products 2475

74 Fourth St., New Rochelle, N.Y. 10801

Union Connector 2923

149 Babylon Tpke., Roosevelt, N.Y. 11575

United Media 3526

4075 Leaverton Ct., Anaheim, Calif. 92807

Comm-ette videotape editor*, mini-comm A/B/C roll editor, Commander II eight machine edit controller, time code generators, readers and character generators, audio router/dissolver. **Staff:** Robert Ricci.

United Ropeworks 2420

Box 306, 20 Commerce Dr., Montgomeryville, Pa. 18936

Phillystran HPTG, electrically transparent, maintenance-free tower guys and specially designed systems for high power applications. **Staff:** Vincent Pappas, Kenneth Knight.

Universal Elecon 152

903 S. Lake St., Burbank, Calif. 91502

Universal Antennas 244

909 E. Collins Blvd., Richardson, Tex. 75081

Earth stations, radio telescopes and antennas for offshore drilling. **Staff:** John Wallace.

UPI 3378

1400 Eye St., NW, Washington 20005

UPI TeleCast*, The Assignment Desk*, CustomNews, Custom-Weather, Unisides, Nuestras Noticias, CustomNet*, Live*, NewsFeed*, TeleSports 100*, Format Wires*. **Staff:** Richard Boggs, Bruce Kanner, Gordon Rice, Bill Ferguson, Bud Hutchinson, Jim O'Keefe, Bill Fuller, Jim Palmer, Lou Westendorf, Courtenay Carson, Mary Meter, Lauren Savadel, Pinky Vidacovich.

U.S. Tape and Label 2723

1561 Fairview Ave., St. Louis 63132

Bumper strips, window labels and concert patches. **Staff:** Byron Crecelius, Audrey Moore, Jim Eiseman.

Utah Scientific 3144

1685 W. 2200 South, Salt Lake City 84119

Routing switchers, station automation hardware, video and audio distribution amplifiers.

Utility Tower 3485

3200 NW 38th, Box 12369, Oklahoma City 73157

AM, FM, TV, CATV and MW towers. **Staff:** R. Nelson, C. Nelson, Joe James, Chris Payne, Rick Bales.

Valentino Music Library 3465

151 W. 46th St., New York 10036

Production music and sound effects libraries, direct licensing of performance rights. **Staff:** Thomas Valentino, Chris Carrino, John Battaglia.

Valley People 2747

2817 Erica Pl., Nashville 37204

Model 400 microphone processor*, 415 dynamic sibilance processor*, PR-2 powered rack for 800A series limiters*, expanders*, multifunction signal processor, limiter/compressor/expanders. **Staff:** Norman Baker, Michael Morgan, Tom Irby, Shawna Crymes.

Varian Associates 3206

611 Hansen Way, Palo Alto, Calif. 94304

Broadcast tubes and amplifiers, klystrons, klystrons, sockets and cavities for radio and TV, linear triodes and tetrodes, switch tubes, industrial heating applications, special ham cavity, test set, TWT power supply, UHF-TV klystrons, variable visual couplers. **Staff:** G. Badger, H. Foster, D. Crumm, S. Paul, K. Peterson, M. Wytshyn, S. Adamo, R. Stones, W. Brunhart, J. Aurand, E. McCune, J. Button, M. Schrader, N. Pond, J. Driscoll, C. Wirth, B. Miklos, C. Erridge, T. Dolan, J. Ahern, J. Bradley, R. Brandon.

Veam/Litton Systems 2559

100 New Wood Rd., Watertown, Calif. 06795

Active interconnect. **Staff:** Hubert Dumas, Al Bernardini, William Stopper, Dennis Kohanek.

Vertex Communications 208, 209

2600 Longview St., Kilgore, Tex. 75662

Vidcom International 225

3 West End Ave., Old Greenwich, Conn. 06830

The play-by-play of Wall Street...

BusinessWeek

INVESTOR NEWS NETWORK

Your listeners spend a substantial amount of time concerned about their money—the way it's invested, and the impact of economic and corporate developments.

That's why R&R Syndications has introduced the *first pure editorial service* to stations and listeners that offers the greatest on-air flexibility—the Business Week Investor News Network. Live from the editorial offices of the world's largest and most prestigious business magazine, you can receive up to six daily 60-second *free-standing* reports that give your listeners an up-to-the-minute play-by-play of the trends and events that affect their financial well-being.

From stocks and bonds to gasoline prices, the effects of inflation on paychecks

to the impact of corporate mergers and takeovers on supermarket prices. Business Week Broadcast Editor Rudy Ruderman and Correspondent Ray Hoffman offer insightful reporting that is most pertinent to your audience.

The Business Week Investor News Network, now available via Satcom 1R, has years of proven service to Group W's AM stations in New York, Boston, Philadelphia, Pittsburgh and Los Angeles.

For a demo tape and complete information on market availability and terms, contact Charles Brandt, Vice President-Station Relations, R&R Syndications, at 1-800-225-0358 (toll-free outside New York State) or 212-532-7346.

Business Week Investor News Network

Produced and distributed by

R&R Syndications, Inc.

460 Park Avenue South, New York, New York 10016

A Subsidiary of Robbins & Ries, Inc.

BAT 1700 billing, accounting traffic system. **Staff:** Anthony Toogood, Mark Custer, Warren Middleton, Charles Cox.

Video Aids of Colorado 175
Suite H, 2450 Central Ave., Boulder, Colo. 80301

Pattern generator, burst phasemeter, sequential switcher, DAs. **Staff:** Pat Adamson, Don Rogers, Kirk Fowler.

Video Associates Labs 3330
3933 Steck Ave., Austin, Tex. 78756

Video International 2754
1280 Sunrise Hwy., Copiague, N.Y. 11726

DTC 3500 standard converters, DTC2500 standards converter, TBC 3000 time base corrector. **Staff:** Gerhard Freitag, Stefanie Freitag, Peter Kaminsky.

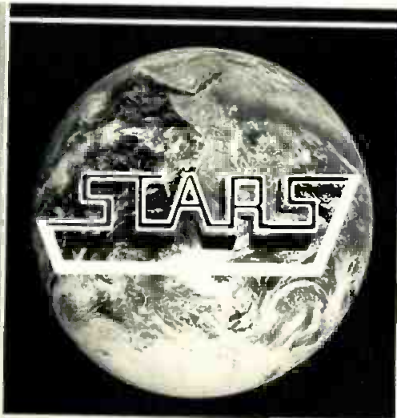
Video Telecom 2592
1041 N. Highland Ave., Hollywood, Calif. 90038

VideoLab 210
1978 B Del Amo Blvd., Torrance, Calif. 90501

Time code retrofit, zero offset time code retrofit*, fast shuttle retrofit*, 6800 time code retrofit*, balanced audio module for type V VTR's. **Staff:** Tom Anderson, Kevin Irlean, Ramsey Dawson.

Videomagnetics 2725
3515 Edison, Menlo Park, Calif. 94025

Quad video heads. **Staff:** Tony Korte, Ted Barger, Ed Chapman, Carme-Blanchard.



Houston International Teleport

- Coast-to-Coast and Worldwide Transmissions for News, Sports and Special Events.
- Live and Taped Program Distribution.
- Television Broadcasts and Videoconferencing.
- Satellite Scheduling.
- Domestic and International News Gathering.
- Fixed and Transportable Uplink/Downlink Services.
- C and Ku Capabilities.

3003 Moffett Lane ■ Houston, TX 77489
713/438-3600

Telex: 287939 STARS UR

100% Reliability, 24 Hours-a-Day.

Videomedia 3558
211 Weddell Dr., Sunnyvale, Calif. 94089

Eagle editing systems XR low cost AB roll*, magnum editing system, VS10 frame accurate videotape animation system*, Q-Star IIA commercial insertion sequencer, VMC-202A multichannel traffic control system with log generator, availabilities, billing, sales tracking, edit list generator, graphics. **Staff:** Jim Thibedeaux, Hank Wilks, Ken Royer, Bill Stickney, Stu Earnest, Herb Kneiss, Dick Dorsa.

Videotek 3316
243 Shoemaker Rd., Pottstown, Pa. 19464

VSM-60 broadcast vectorscope*, HR-190 19-inch high resolution master color monitor*, AVM-13s 13-inch color monitor with audio*, APM-8RS eight input audio program monitor with four stereo inputs*, rack mount color monitors, color receiver/monitors, waveform monitor, sync generator, routing switchers, audio program monitors, distribution amplifiers, demodulators. **Staff:** Phil Steyaert, Peter Choi, Rick Hollowbush, Don Taylor, Eric Wahlberg, Emery Grady, Barry Gardner, Bill Boxill, Jay Trunzo, Jim Mauger.

Viking Cases 2757
10480 Oak St., NE, St. Petersburg, Fla. 33702

Heavy duty shipping cases and lightweight carrying cases, EIA rack cases and shock mounted rack cases. **Staff:** Arthur Stemler, William Strickland, Robert Stemler, Bruce Stemler.

Vital Industries 3191
3700 NE 53d Ave., Gainesville, Fla. 32601

3000 video production switcher*, digital video manipulator. **Staff:** Christopher Donoyan, Linda Buickel, Norman White, Paul Dragon, Gordon Peters, Jon Martin, Richard Hardage.

VTS Music 206
Box 1168, Arden, N.C. 28704

Ward-Beck Systems 3060
841 Progress Ave., Scarborough Ont. M1H 2X4

R1400 and R2200 radio audio consoles*, transportable production console, stereo TV audio consoles, stereo routing switcher*, distribution amplifier assembly, distribution amplifier, extended range meters, intercom systems. **Staff:** Ronald Ward, Rodger Beck, Arthur Schubert Jr., Eugene Johnson, Sylvia Fantin, William McFadden, Duke McLane.

Wavefront Technologies 247
1421 State St., Santa Barbara, Calif. 93101

Software modules, Model, PreView and Image, for 3D animation/simulation. **Staff:** Lauri Kelty, Ken Duckworth, John Grower, Larry Barels, Bill Kovacs, Mark Sylvester, Dave Elrod, Scott Stein, Jeff Wood, Richard Taylor.

Weatherbank 2930
2185 S. 3600 West, Salt Lake City, Utah 84119

WeatherCheck weather information ser-

vices. **Staff:** Steven Root, Richard Eubank.

Wegener Communications 2760
150 Technology Park, Norcross, Ga. 30092

Staff: Bob Placek, Peggy Placek, Ned Mountain, Jon Thrasher, Roger Doering, Harry Matthews, Steve Fox, Neil Kohn, Louis Livaditis, Heinz Wegener.

West End Film 2474
2121 Newport Pl., Washington 20037

Wheatstone Broadcast Group 2400
5 Collins Rd., Bethany, Conn. 06525
Stereo television consoles.

Wheelit 2478
440 Arco Dr., Toledo, Ohio 43607

Whirlwind 2463
Box 1075, Rochester, N.Y. 14603

Audio and video cabling for interface, audio accessories, custom cabling and rack panels, cable reels and transformers.

Will-Burt Co. 2587
169 S. Main St., Orville, Ohio 44667

Telescoping masts for radio mobile units*, masts for ENG and SNG mobile units. **Staff:** David Davis, Jeffrey Milligan, W.M. Patterson, Don Barlow.

Winsted 3424
9801 James Cr., Minneapolis 55431

Editing consoles, tape storage systems, vertical equipment racks, dubbing racks, mini editing console*, modular dubbing rack*. **Staff:** C.E. Johnson, G.R. Hoska, Brenda Sabin, Judy Ruzek, Kent Lilja, Greg Hedlund.

Wireworks 2401
380 Hillside Ave., Hillside, N.J. 07205

Multiboxes/racks, multitunks, multitails, transformer isolated mic splitters, chassis mount multipin connectors, mini microphone multiboxes, prism components, assemblies, cables, cable tester, reelers, consulting and design services. **Staff:** Larry Williams, Jerry Krulwicz, Angela DiCicco.

Wold Communications 2606
10880 Wilshire Blvd., Los Angeles 90024

Satellite delivery of programming, television operations centers, earth station complexes, mobile satellite uplink and microwave units, weather data and information service, Ku- and C-band transmission services. **Staff:** Maxine Jordan, Robert E. Wold, Robert N. Wold, Bill Hynes, Tom Bartunek, Dorothy Marsh, Jim Burke, Mike LoCollo, Bob Abrahams, Gary Lister, Bob Wean, Craig Robin, Paula Aldridge, John Chin, Gary Luhrman.

Wolf Coach 3541
7 B St., Industrial Park, Auburn, Mass. 01501

Satellite newsgathering mobile design. **Staff:** Richard Wolf, Mark Leonard, Marcia Germanian.

World Tower 2814
Box 405, Mayfield, Ky. 42066

AM, FM, TV, cable and microwave

The voice of the industry now can be heard...

Billboard®

ENTERTAINMENT NEWS NETWORK

For the first time, radio listeners can benefit from the wealth of knowledge that station and entertainment industry executives have depended on for more than 50 years.

The new Billboard Entertainment News Network provides PD's with up to 30 60-second music and video features each week, based on the authoritative editorial resources of Billboard magazine.

Anchored by three leading broadcast personalities—Jim Kerr of WPLJ-FM, New York; Dennis Elsas of WNEW-FM, New

York; and Brian McFadden, Executive Producer of the Network—six different programs are available.

Fed via Satcom 1R, and available exclusively through R&R Syndications, the Network reaches the heart of the 18-34 demo.

For a demo tape and information on market availability, call Charles Brandt, Vice President - Station Relations at 1-800-225-0358 (toll-free outside New York State) or 212-532-7346. Limited to one station per ADL.

Billboard Entertainment News Network

Produced and distributed by

R&R Syndications, Inc.

460 Park Avenue South, New York, New York 10016

A Subsidiary of Robbins & Ries, Inc.

towers. **Staff:** M. Sholar, Jeff Sholar, Jim Wilson, Ron Williams.

WSI 2642
41 N. Road, Box B, Bedford, Mass. 01730

Astro-WX complete weather service*, Astrofax, Astrographics and Astrodata, high resolution satellite images, weather graphics and database. **Staff:** Alan Riley, Ray Costello, Don Freeland, Debbie Turner, Dave Miller, Maureen Condon, Dave Devlin, Grady Young, Roy Reiss, Todd Glickman, Mike Daunais, Rich Schanck, Arlo Gambell, Bob Brammer.

Zellan Optics 2477
15 E. 26th St., New York 10010

Zenith Electronics 167
1000 N. Milwaukee, Glenview, Ill. 60025

Zonal Limited 2586
Holmethrope Ave., Redhill, Surrey, England
Acetate and polyester-based magnetic sound recording film, audio tape and cassette products, multitrack audio tapes*. **Staff:** A. Heise, S. Malek-Jahanian, V. Gaboudian, M. Gaboudian.

Outdoor exhibitors

Aerospatiale Helicopter Corp. 29
2701 Forum Dr., Grand Prairie, Tex. 75053

Aries Industries 6
W229 N2494AA, Hwy. 164, Waukesha, Wis. 53186

INDUSTRY PUBLICATIONS

"Investing in Television 1986"

The Market-By-Market Guide
to the Television Industry

"Investing in Radio 1986"

The Market-By-Market Guide
to the Radio Industry

"Financial/Legal Service Guide"

(Brokers, Bankers & Attorneys)

AT&T Communications 9
Rtes. 202/206, Bedminster, N.J. 07921

BAF Communications 4,6
228 Essex St., Salem, Mass. 01970

Broadcast Microwave Service 17
7322 Convoy Ct., Box 84630, San Diego, Calif. 92138

Centro Corp. 52
9516 Chesapeake Dr., San Diego 92123

Comsat 26,27
950 L'Enfant Pl., SW, Washington 20024

Comtech Antenna 15
3100 Communications Rd., St. Cloud, Fla. 32769

Conus Communications 24
3415 University, Minneapolis 55414

Dalsat 3
1205 Summit, Plano, Tex. 75074

Ethereum Scientific Corp. 19
7641 Clarewood, Suite 336, Houston, Tex. 77036

Hubbard Communications 23
12495 34th St. N., St. Petersburg, Fla. 33702

IDB Communication Group 5
10509 W. Washington Blvd., Culver City, Calif. 90232

Kavouras Inc. 14
6301 34th Ave., South, Minneapolis 55450

Microdyne Corp. 16
491 Oak Rd., Ocala, Fla. 32672

FINANCIAL CONSULTING

— ASSET APPRAISALS —

— ADVISORY SERVICES —

— BANK PRESENTATIONS —

Valuation Studies

Business Plans

Feasibility Studies

BROADCAST
INVESTMENT
ANALYSTS

Dulles International Airport
P.O. Box 17307
Washington, D.C. 20041
(703) 661-8515

NAB Hospitality Suite - 2100 Fairmont Hotel

Midwest Corp. 10,11,12,13
One Sperti Dr., Edgewood, Ky. 41007

Musco Mobile Lighting 1,2
100 First Ave., West, Oskaloosa, Iowa 52577

MZB & Associates 22
4203 Beltway Dr., Dallas, Tex. 75244

ENG/EFP/production mobile video vehicles. **Staff:** John Zienkosky, Dick Bock, Tom Hosper, Herb Huff, Bruce Laughlin, Mike Woody, Karen Westbrook, Mike Rucker.

Pesa America 18
6073 N.W. 167th St., Suite C-4, Miami, Fla. 33015

Radiation Systems 28
1501 Moran Rd., Sterling, Va. 22170

RCA American Communications 7
Four Research Way, Princeton, N.J. 08540

Shook Electronic Enterprises 30
6630 Topper Pkwy., San Antonio, Tex. 78233

Spectra Communications
Rte. 1, Box 116B, Aldie, Va. 22001

Networks

Capital Cities/ABC

Plaza of the Americas

Loews Anatole, Honeysuckle room

Staff: George Newi, Bryce Rathbone, Buzz Mathesius, Arnold Marfoglia, Lesley Allegro, Howard Burkat, Warren Denker, Bob Hingel, Tim Kearney, Nancy Smith, Peter Zobel.

Capcities/ABC Radio

Loews Honeysuckle room

1330 Avenue of the Americas, New York 10019

Staff: Jim Arcara, Stuart Krane, Charles King, Daniel Forth, Susan Moran, Darryl Brown, Debbie Golden, Beverly Padratzik, Ed McLaughlin, Bob Benson, Peter Flannery, Kathy Lavinder, Joe Keating, Kent Coughlin, Richard Martinez, John Axten, Bob Kingsley, Gloria Briggs, Robert Donnelly, Maria LaPorta, Doug Land, Lettice Tanchum, Diane Jennings, Linda Stern, Maurice Tunick, David Rimmer, Al Resnick, Harry Priester, Lou Raymo, Ed Glab, Don Bouloukus, Tom Rounds, Ralph Smith, Mark Kalman, Lorraine McConnell, Howard Cosell.

CBS Inc. Fairmont 1901
51 W. 52d St., New York 10019

CBS/Broadcast Group

Staff: Thomas Leahy, George Schweitzer, Tony Malara.

Affiliate Relations

Staff: Scott Michels, Don Clancy, Fran Eigendorff, Joe Eustace, Preston Farr, Eunice Broome, Dave Olmsted, Heather Regan, Jeff McIntyre, Bob Shelland, Ged Young, George Zurich, Diane Quinzi.

CBS/TV Stations Fairmont 1901

Staff: Neil Derrough, Mark Pearlman, Allen Shalkan, Ronald Tindiglia, Carl Wenholt, Ray Solley, Douglas Clemenson, wcbs-TV: Roger Colloff, Tom Baldwin, Ron

The news behind the news...



RADIO NETWORK

Now there's a new dimension to the news that goes that extra meaningful step beyond routine hourly newscasts: the U.S. News Radio Network.

You can put one of the country's most distinguished and experienced staffs of correspondents to work for your station, daily, with four of the

most popular short-form editorial features available to radio stations. For the first time, familiar titles like "Washington Whispers," "News You Can Use," "Tomorrow" and "Worldgram" are aired by a broadcast journalism team of well-recognized newsmen headed by Executive Producer Palmer Payne.

In its first six months on the air, here's what Network affiliates are saying:

"... a timely and authoritative supplement to our morning news block. Based on the resources of U.S. News & World Report, the Network has the audience credibility that makes it a strong asset."

—**Lee Fowler, Operations Manager,**
WNWS-AM/Miami

"... fits in quite well with our jazz format, and provides a valuable service for our highly upscale audience."

—**Bob Bordonaro, General Sales Manager,**
KKGO-FM/Los Angeles

"... consistently strong program content with a line-up of professional and authoritative announcers that adds another fine dimension to our talk format."

—**Scott Cassidy, Program Administrator,**
WTKN-AM/Pittsburgh

"... provides our listeners with valuable features that don't intrude on our programming. The program content and high production standards are also instrumental in helping generate additional revenues for the stations."

—**Ken Lamb, Operations Manager,**
WPAT-AM-FM/New York

For a demo tape and information on exclusive rights to the U.S. News Radio Network for your market, call 1-800-225-0358 (toll-free, outside New York State) or 212-532-7346 and ask for Charles Brandt, Vice President-Station Relations.

U.S. News Radio Network

Produced and distributed by

R&R Syndications, Inc.

460 Park Avenue South, New York, New York 10016

A Subsidiary of Robbins & Ries, Inc.

Tarasoff. WBBM-TV Chicago: Jonathan Rodgers, Howard Matthews, E. Charles Upton. KCBS-TV Los Angeles: Frank Gardner, David Percelay, Bob Davis, Bob Lacy. WCAU-TV Philadelphia: Steven Cohen, Gordon Hughes, John Byrne, Hank Schorle.

CBS Radio Loews Anatole 1134

Staff: CBS Radio Division: Van Gordon Sauter, Robert Hosking, Elizabeth Hayter, Sylvia Hughes, Helene Blieberg, Larry Conti. **CBS Owned AM Stations:** Eugene Lothery, Anna Mae Sokusky, Jerone Navies, Allen Balch. **CBS Owned FM Stations:** Robert Hyland, Robert VanDerheyden. **CBS Radio Network:** Richard Brescia, Joseph Dembo, Tom McGinn, Michael Ewing, David Kurman, Suzanne Sack, Deborah Reno, Cornelius Knox, John Burrows, Peter Acquaviva, William McGee, Anne Murray, David Kleinbart, Michael Connolly, Charles Osgood, Judy Muller, Dr. Peter Salgo, Marshall Loeb, Doug Poling, John Rooney. **CBS Radio-Radio:** Robert Kipperman, Frank D. Murphy, Norm Ginsburg, Rob Carpenter, Larry Cooper, David West, Nick Kiernan, Robert Leeder, Steven Epstein, Mike Harrison. **CBS Radio Representatives:** Edward Kiernan, Anthony Miraglia.

Operations & Engineering

Staff: George Shannon, Gerald Plotnick, Jim McKenna, Herman Badler, Jerry Stahler, Robert Norvet, Charles Capple-

man, David White, Joseph Flaherty, Ralph Green, Robert Zagorna, Charles Dages, Robert O'Connor, Palma Ricken, Howell Matte.

CNN Radio Loews Anatole 523 *1050 Techwood Dr., Atlanta 30318*

Staff: Paul Amos, Clifford Matis, Lisa McMahon, Chuck Carr.

CNN Television Loews Anatole 523 *1050 Techwood Dr., Atlanta 30318*

Staff: Paul Amos, Earl Casey, Gene Wright, Henry Gillespie, Bob Rierison, Bob Schuessler, Arthur O'Connor, Paul Wischmeyer, Colin Chisholm, Carol Bomberger, Judy Borza.

Mutual Broadcasting

Loews Anatole 1034
1755 S. Jefferson Davis Hwy., Arlington, Va. 22202

Staff: Jack Clements, Ben Avery, Esther Bernard, Lynn McIntosh, George Barber, Grace Gearino, Craig Whetstone, Gordon Peil, Peggy Solomon, Ron Nessen, Marc Feldman, Mac Allen, Larry King, Pat Piper, George Thomas, Rick Bockes, Art Kriemelman.

NBC Inc.

30 Rockefeller Pl., New York 10020

Staff: Grant Tinker, Irwin Segelstein, M.S. Rukeyser.

NBC-TV Network Fairmont 2500

Staff: Ray Timothy, Pierson Mapes, George Hiltzik.

NBC-TV Affiliate Relations

Staff: Tony Cervini, John Damiano, Bill Fouch, Jim Ritter, Bill Kelley, Eric Ben-north, Barry Hillebrandt, Peter Flynn, Arlene Engleman, Jim Barry, Mort Dillon.

NBC-TV Sales Services: Rick Quackenboss, Joe Fedrich, Frank Neumeister, Don Hector. **Operations & Technical**

Services: Michael Sherlock, Jack Weir, Steve Bonica, David Baylor, Maurice Greenfield, Arthur Digman, Joseph Ulascewicz, Crawford McGill, Anthony Pedalino. **TV Stations Division:** Al Jerome, Bob Finnerty, Mark Monsky, Duffy Sasser, Paul Beavers; WNBC-TV: Carl Carey, Jerry Nachman, Edward Knapp;

WRC-TV: Fred DeMarco, Jim Van Messel, Bill Johnston; WKYC-TV: John Llewellyn, Ron Bilek, Dave Boylan, Tom Powers; WMAQ-TV: Richard Lobo, Allan Horlick, Richard Reingold, James Powell;

KNBC(TV): John Rohrbeck, Tom Capra, Bill Landers, Pat Wallace. **News:** Larry Grossman, Tom Wolzien, Tim Russert, Jo Moring. **Sports:** Ken Shanzer, Ken Aagard, Phil Parlante, Bill Tobey, Terry Ewert, John Gonzalez. **Press:** Dom Giofre, Cathy Lehrfeld. **Corporate:** Rick Kelly.

NBC Radio Anatole 1234

Staff: Randall Bongarten, Robert Mounty, Barbara Landes, Stephen Soule, Larry Miller, Craig Simon, Deborah McLaughlin, Steve White, Gerry Green, Richard Greenhut, Robert Wogan, Dave Bartlett, Willard Lochridge, Nancy Cook, Gig Barton, Patti Le Mon, Frank Cody, Shirley Maldonado, James Farley, Sidney Friedman,

Frank Raphael, Joan Voukides, Nicholas Schiavone, Warren Vandever, Raphael Weiss, John Bailie, Dr. Ruth Westheimer, Bruce Williams, Sally Jessy Raphael, Michael Donovan, Charles Pickering, John Irwin, Terry DeVoto, Mark Olkowski, Scott Standiford, William Newbrough, Bill Kraus, Michael Bock, Joel Hodroff, Bartley Wash.

Satellite Music Network Anatole 2072 *40655 N. Central Expwy., Suite 600, Dallas 75243*

Staff: John Tyler, David Hubschman, Bob Bruton, Kristine Sites, Greg Daugherty, Mel Diamond, Sheila Quisenberry, Michael Penzell, Robert Hall, Carlos Hurd, Ralph Sherman, Tim Spencer, Roni Bava, Pat Clarke, Jim White, Marianne Bellingier, Charlie Strickland, Jackie Butler.

Sheridan Broadcasting Loews Anatole *1500 Chamber of Commerce Bldg., Pittsburgh 15219*

Staff: Ronald Davenport.

SIN Television Network

460 W. 42d St., New York 10036

Staff: Rene Anselmo, William Stiles.

Transtar Radio Networks Loews 2172 *620 S. Pointe Ct., Suite 185, Colorado Springs 80906*

Staff: Terry Robinson, Ron Ruth, Gary Fries, Bill Moyes, Mike Harvey, Tom Page, Carl Goldman, Rob Bein, Ken Harris, Clark Jones, John Lodge, Larry Wilson, Craig Hines, Bud Weisner.

The United Stations Loews 2372 *1440 Broadway, New York, 10018*

Staff: Nick Verbitsky, Bill Hogan, Barbara McMahon, Ruth Presslaff, Ed Salamon.

Unity Broadcasting Loews 934 *10 Columbus Cr., New York 10019*

Staff: Eugene Jackson, Sydney Small, Del Raycee, Joan Logue, George Edwards (National Black Network), and Jack Bryant (National Black Network).

Wall Street Journal Report **Loews Anatole 2189**

22 Cortlandt St., New York 10007

Staff: Bob Rush, Tony Garcia.

Westwood One Loews Anatole 1034 *9540 Washington Blvd., Culver City, Calif. 90230*

Staff: Gary Landis, Tom Ferro, Richard Kimble, Bill Battison, Barry Freeman, Doug Field, Biff Davis, Mike Carne, Glen Sigmon, Steve Jenkins.

Reps

John Blair & Co. Anatole 823
1290 Avenue of the Americas, New York 10104

Staff: Corporate: Jack Fritz. **TV:** Harry Smart, Wally Schwartz, Pat Devlin, Jim Kelly, Floyd Geline, Bill Breda, Jack Poor, Kenn Donnellon. **Radio Representation Division:** Jim Hilliard, John Boden, Bar-

Now you can deliver your
Sports, News, Videoconferencing
Deep in and Around
The Heart of Texas



WESTERN UNION TEXAS VIDEO

LOW HALF HOUR RATES
24 HOUR SERVICE

WESTERN UNION
IS WELL CONNECTED
...TO

MAJOR GATEWAYS IN TEXAS

- MORE THAN 25 TV STATIONS
- TEXAS A&M
- REUNION ARENA
- NEW!! ENG RECEIVE SERVICE

PLUS SATELLITE DELIVERY

CALL AT SILL AT (214) 748-7409



western union

3166 ONE MAIN PLACE, DALLAS, TEXAS 75202

Getting personal with your listeners...

BusinessWeek

PERSONAL BUSINESS NETWORK

Business Week introduced the concept of Personal Business* reporting more than 30 years ago, so it's no surprise that the Personal Business Network, now in its third year on the air, has evolved into America's leading lifestyle business programming source.

Anchored since its inception by veteran newsman/editor John Meagher, the Personal Business Reports are cleared in most major markets. Coast-to-Coast. R&R Syndications strives to maintain the highest standards of quality and overall consistency in producing the daily 90-second programs.

Our Network affiliates constantly remind us of how the Personal Business Reports have improved with age:

"... the Reports are of a consistently high calibre and have become an integral part of our programming. Also, R&R's delivery schedule is the most reliable of all program syndicators we deal with."

—**John O'Day, News Director,**
WWWE-AM/Cleveland

"... has proven to be a popular and successful element in K-101's morning programming."

—**William A. Gilreath, VP-General Manager,**
K-101/San Francisco

"... provides an excellent service for the Station, covering the important area of consumer-oriented business news... consistently topical and well-produced."

—**Frank Sciortino, Executive Editor,**
WINS-AM/New York

"... have counted on the Reports for almost two years to provide the type of business programming that our

listeners can both relate to and act upon."

—**Art Camiolo, General Manager,**
WWDB-FM/Philadelphia

"... covers issues of importance to our listeners, who regularly request more information. Local research shows the Reports fit well in our Easy Listening format ... and they've also proven to be a great asset as a sponsorship vehicle for local sales."

—**Joe Chille, Program & Operations Manager,**
WJYE-FM/Buffalo

Discover the benefits of becoming a Personal Business Network affiliate by contacting Charles Brandt, Vice President-Station Relations. R&R Syndications, at 1-800-225-0358 (toll-free outside New York State) or 212-532-7346.

*"Personal Business" is a registered trademark of McGraw-Hill Corporation, parent of Business Week.

Business Week Personal Business Network

Produced and distributed by

R&R Syndications, Inc.

460 Park Avenue South, New York, New York 10016

A Subsidiary of Robbins & Ries, Inc.

bara Crooks, Bob Smith. **Blair Radio:** Charlie Colombo, Bob Ferraro, Bill Coury, Ken Miller, Bob Lion, Scott Lazare, Karen Wald. **Selcom/RAR:** Frank Oxarart, Bill McHale, Tom Turner, Andy Rainey, Jim Forrer, Brian Robinson. **Torbet:** Tony Fasolino, Mike Bellantoni, John Graziano, Robert Lurito, Mariann DeLuca, Bill Kehlbeck, Alan Harrison, Loyd Senn.

Durpetti & Associates Anatole
111 E. Wacker Dr., Chicago 60601

Staff: Michael Blackman, Pat Byrne, Tony Durpetti, John Fabian, Cheryle Hangartner, Peggy Kafka, Jay Kirchmaier, Stacy Mack, Bruce Pollock, Patty Riegler.

Eastman Radio Anatole
1 Rockefeller Pl., New York 10020

Staff: Bill Burton, Dave Recher, Jerry Schubert, Carl Butrum, Lee Lahey, Dan Prodanovich, Dave MacAlister, Mayo Smith.

Hillier, Newmark, Wechsler & Howard Anatole
100 Park Ave., New York 10017

Staff: Frank Carter, Joi Christo-Schlapp, Kirk Combs, Rocky Crawford, Jane Engel, Marc Gross, Marcia Herman, Chuck Hillier, Bernard Howard, Nick Imbornone, Clarence Johnson, Georgann Lavelle, Ashley Manning, Phil Newmark, Paddy O'Brien, Tom O'Brien, Elaine Pappas, Jacqui Rossinsky, Ira Wechsler, Sharon Wienzveg.

Independent TV Sales

437 Madison Ave., New York 10022

Staff: Bill Bee.

Interep

100 Park Avenue, New York 10017

See Durpetti & Associates; Hillier, Newmark, Wechsler & Howard; Major Market Radio; McGavren Guild Radio, and Weiss & Powell.

Katz Communications Anatole 1472
One Dag Hammarskjold Pl., New York 10017

Staff: Corporate: James Greenwald, Dick Mendelson, Barry Lewis, Lucille Luongo, Debra Kontir.

Katz Television Group

Staff: Corporate: Peter Goulazian, Richard Goldstein, Paul Arzen. **American Television:** James Beloyanis, Michael Hugger. **Continental Television:** Tom Olson, Jack Higgins. **Independent Television:** Marty Ozer. **Katz Radio Group:** Ken Swetz, Stu Olds, Glenn Kummerow, David Halberstam, Bruce Hoban. **Christal Radio:** Bill Fortenbaugh, Paddy Ramsay, Mark Braunstein, John Fouts, Dave Winston, John Comenos, Bob Gad, Susan Specht, Ken Roberts. **Katz Radio:** Dick Romanick, Bob McCurdy, Jerry Stehney, Greg Noack, Mike Marshall, Tim Robisch, Mitch Kline. **Republic Radio:** Jerry Cregan, Dick McCauley, Ed Marshak, Jeff Hodge, Linda Packer-Spitz, John Poche, John Lynch.

Major Market Radio Anatole 553
100 Park Avenue, New York 10017

Staff: Karin Dutcher, Jim Hagar, Elaine Jenkins, Dave Kaufman, Tom McKinley, Warner Rush, Austin Walsh.

Masla Radio Anatole
41 E. 42d St., New York 10017

Staff: Jack Masla, Stan Feinblatt, Charles McCreary, Mel Trauner, Doug Masla, Johnnie Pegues, Arnold Taylor, Julie Judge, Kathy Murphy, Cathy Moran, Phil Roberts, Peter Moore, Sue Barnes, Bruce Schneider.

McGavren Guild Radio Anatole 734
100 Park Avenue, New York 10017

Staff: Gary Ahrens, Gina Analdi, John Bitting, Robert Bordon, Adrian Chu, Jeff Dashev, Lynn DeCaterina, Tom Dolliff, Peter Doyle, Erica Farber, Andie Fatool, Shane Fox, Les Goldberg, Marc Guild, Ralph Guild, Don Hall, Martha Harrington, Denton Holmes, Ellen Hulleberg, Donna La Vitola, Pam Little, Debbie Pascalle, Jim Peacock, Vince Perez, George Pine, Tom Poulos, Kathy Score, Dick Sharpe, Andrea Simon, Jane Sperrazza, David Wisentaner.

Seltel
750 Third Ave., New York 10017

Staff: Ray Johns, Jack Mulderrig, Hoe Cosenza.

TeleRep Fairmont
875 Third Ave., New York 10022

Staff: Sandra McCourt, Dick Singer, Al Masini, Dave Plager, Ollie Treyz, Jim Jordan.

Weiss & Powell Anatole 984
100 Park Avenue, New York 10017

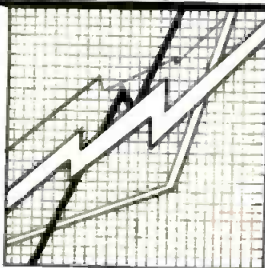
Staff: Judith Brandt, Jay Berman, Ralph Connor, Glen Corneliess, Carol Salter, Christi Taylor.

Adam Young Fairmont
3 E. 54th St., New York 10022

Staff: Vincent Young, Keith Thompson, Joan Barron, Susan Clair Wagner.

RESULTS

There comes a time when you, the broadcaster, must decide whether to expand, sell or stand pat. That's when you need the assistance of sure-handed, media brokerage professionals like Robert Rounsaville, Mary Bush and Arnold Kaufman.



With our unlimited resources and connections, we can evaluate your needs and match them with available opportunities.

See us at our Hospitality Suite in the Plaza of the Americas

Hotel at the NAB Convention. And you'll see the payoff—in results!

Robert W. Rounsaville & Associates
MEDIA BROKERS AND CONSULTANTS

ATLANTA, GA 30355 P.O. Box 11898 (404) 261-3000/1-800-531-1500
ORLANDO, FL 32802 P.O. Box 2991 (305) 423-9426/1-800-328-3500

Brokers

Americom Loews Anatole 610
900 17th St., Suite 1050, Washington 20006

Staff: Thomas Gammon, Daniel Gammon, Craig Culp, Mark Cunningham.

Bill-David Associates Loews Anatole
2508 Fair Mount St., Colorado Springs 80909

Staff: Bill Martin.

Blackburn & Co. Loews Anatole 810
1111 19th St., NW, Washington 20036

Staff: Jim Blackburn, Richard Blackburn, Tony Rizzo, Joe Sitrick, Alan Tindal, Roy Rowan, Jay Bowles, Howard Stassen, Bud Doss, Charles Kurtz, George Otwell, Greg Johnson, Jack Harvey, Neil Rockhoff, Steve Puett, Susan Byers.

Frank Boyle & Co.
Marriott Market Center
55 Old Field Point Road, Greenwich, Conn. 06830

Robbins & Ries turns on the LITES Coast-to-Coast.

Since there was LITE—the LITE music format, that is—Robbins & Ries Advertising has been helping radio stations move audiences to the LITE spot on the dial in

record numbers. Since R&R's initial success with WLTW-FM, New York, as early as 1984, our clients have been highly successful in *every* case.

Some current success stories:



"R&R's commercial has caused us to be much more top-of-mind than we were before. Our audience share has almost doubled since the initial spot went on the air."

—**Arnold Lerner,**
General Manager,
WSSH-FM/Boston



"It's a great spot...it tests well... and we think it's contributed greatly to our success. From Spring to Fall, 1985, alone, we moved from 13th to 4th in the all-important 25-49 demo in Milwaukee!"

—**Steven Downes,**
VP-General Manager,
WLTQ-FM/Milwaukee



"We were looking for a TV spot that best described our station's new format to those who had never heard it. R&R's commercial accomplished that. In addition, it did an excellent job of selling our dial position. And, R&R pleasantly surprised us with their 48-hour turnaround."

—**Tom Mosher, VP-General Manager,**
KIQQ-FM (K-LITE)/Los Angeles

Call R&R for a demo cassette and complete information toll-free 1-800-225-0358 (outside New York State) or 212-686-6220, and ask for Sherman Robbins, President.

New LITE commercial format now available from R&R/Editel New York.* Look for all-new multi-format commercial reel available this summer in time for Fall sweeps from R&R/Editel New York!

Robbins & Ries

A D V E R T I S I N G . I N C .

460 Park Avenue South, New York, New York 10016

A Subsidiary of Robbins & Ries, Inc.

Staff: Frank Boyle, Bob Pates, Jim Boyle.

Business Broker Associates

Loews Anatole

399 Somerville Ave., Chattanooga 37405

Staff: Alfred Dick.

Robert A. Chaisson Inc.

Anatole

50 Locust Ave., New Canaan, Conn. 06840

Staff: Robert A. Chaisson.

Chapman Associates

Loews Anatole 923 Atrium

1835 Savoy Dr., Suite 206, Atlanta 30341

Staff: Bill Cate, Ray Stanfield, Corky Cartwright, Charles Giddens, William Lytel, Brian Cobb, Elliot Evers, Warren Gregory, Bill Lochman, Greg Merrill, Ernie Pearce, Peter Stromquist, Bill Whitley, Mitt Younts, David LaFrance, Ron Hickman, James Mergen, Randy Jeffrey.

Donald K. Clark Loews Anatole 1788

Box 1065, Merritt Island, Fla. 32952-1065

Staff: Donald Clark, Anne Clark.

Communications Equity Associates

Loews Anatole 753

Fairmont 1101

851 Lincoln Center, 5401 W. Kennedy, Tampa, Fla. 33609

Staff: Kent Phillips, Diane Healy-Linen, Glen Serafin, J. Patrick Michaels.

R.C. Crisler & Co.

Hyatt

Suite 801, 580 Walnut St., Cincinnati 45202

Staff: R.C. Crisler, Clyde Haehnle, Larry Wood, John Babcock, Graham Quaak, Carl Ward.

Daniels & Associates

Sheraton

2930 E. Third Ave., Denver 80206

Staff: Phil Hogue, Bruce Cranston.

William A. Exline

Loews Anatole 710 Atrium

4340 Redwood Hwy., San Rafael, Calif. 94903

Staff: Bill Exline, Andrew McClure.

Norman Fischer & Associates

Loews Anatole 1010

Box 5308, Austin, Tex. 78763

Staff: Norman Fischer, Bill Prikrly.

Richard A. Foreman Assoc.

Marriott Market Center

330 Emery Dr. East, Stamford, Conn. 06902

Staff: Dick Foreman.

Milton Q. Ford & Associates

Loews Anatole 1765 Tower

5050 Poplar Ave., Suite 1135, Memphis 38157

Staff: Milton Q. Ford, Jo Ann F. Kail.

Gammon & Ninowski

Media Investments Hyatt Regency

Suite 306, 1925 K St., Washington 20006

Staff: Jim Gammon, Ron Ninowski, Don Bussell, Jack Satterfield, Marc Hand, Richard Wartell, Carl Fielstra.

Wilt Gunzendorfer & Assoc. Hyatt

2210 Hastings Dr., Belmont, Calif. 94002

Staff: Wilt Gunzendorfer.

Hogan-Feldmann

Loews Anatole

16255 Ventura Blvd., Suite 219, Encino, Calif. 91436

Staff: Arthur Hogan, Jack Feldmann.

The Holt Corp.

Loews Anatole 653 Atrium

Suite 205, Westgate Mall, Bethlehem, Pa. 18017

Staff: G. Arthur Holt, Bernhard Fuhrmann, Gary Kirtley, Mark O'Brien.

Jamar-Rice Co. Loews Anatole 1165

110 Wild Basin Rd., Suite 245, Austin, Tex. 78746

Staff: William Rice.

Kalil & Co.

Loews Anatole

3438 N. Country Club, Tucson, Ariz. 85716

Staff: Frank Kalil, Howard Duncan, Kelly Callan.

Kepper, Tupper & Co.

Summit

300 Knightsbridge Parkway, Suite 360, Lincolnshire, Ill. 60069.

Staff: William Kepper, John Tupper, Pam Mysker, Mike Fugatt.

H.B. LaRue

Loews Anatole 1489

44 Montgomery St., San Francisco 94104

Staff: Hugh Ben LaRue, Harold Gore, Joy Thomas.

The Mahlman Co. Loews Anatole 723

1 Stone Pl., Bronxville, N.Y. 10708

Staff: Bob Mahlman, Nancy Mahlman,

Josh Mayberry, Bob Biernacki, Lou Faust.

R.A. Marshall & Co.

Wyndham

508A Pineland Mall Office Center, Hilton Head Island, S.C. 29928

Staff: Bob Marshall, Marti Marshall.

Reggie Martin & Associates

Loews Anatole 710 Atrium

731 S. Mashta Dr., Key Biscayne, Fla. 33149

Staff: Reggie Martin, Ron Jones.

Ralph Meador Loews Anatole 8189

Box 36, Lexington, Mo. 64067

Staff: Ralph Meador, Randy Meador.

George Moore & Associates

Loews Anatole

Suite 712, 6116 N. Central Expwy., Dallas 75206

Staff: George Moore, Jim Moore, Charles Earls.

The Montcalm Corp.

Pan Pacific Vancouver

Duncan Building, 315 2nd Ave., Seattle 98104

Staff: Jerry Dennon, William Baldwin.

O'Grady & Associates

Wyndham

Drawer D, Goshen, N.Y. 10924

Staff: Jim O'Grady, Richard Lytle, Tom Shovan.

Stan Raymond & Assoc. Loews 1889

1795 Peachtree Rd., NE, Suite 220, Atlanta 30309

Staff: Stan Raymond, Nancy Raymond, Nick Iborrone.

Cecil L. Richards Inc.

Hyatt 1018

7700 Leesburg Pike, Suite 408, Falls Church, Va. 22043

Staff: Cecil Richards, Loyola Richards, Bruce Houston, Lee Hague.

Robert Rounsaville & Associates

Plaza of the Americas

P.O. Box 11898, Atlanta 30355

Staff: Robert Rounsaville, Arnold Kaufman, Mary Bush.

Barry Sherman & Associates

Loews Anatole 1665 Tower

1828 L St., N.W., #300, Washington 20036

Staff: Barry Sherman, Walter Westman, Muriel Levin.

Howard E. Stark

By appt. only

575 Madison Ave., 10th Floor, New York 10022

Staff: Howard Stark.

Edwin Tornberg & Co.

Mansion

Box 8698, Washington 20011

Staff: Edwin Tornberg.

Other

Toby Arnold & Assoc. Loews 622-23

3234 Commander Dr., Carrollton, Tex. 75006

Contemporary country ID package*, adult contemporary*, urban contemporary* jingle packages, Silk & Satin adult contemporary format*, computer gener-

A Constructive Service to Broadcasters
and the Broadcasting Industry

HOWARD E. STARK

Media Brokers—Consultants

575 Madison Avenue

New York, N.Y. 10022

(212) 355-0405

ated music system*, Unforgettable, Unforgettable II, Country Magic, production bank and master library. **Staff:** Toby Arnold, Dolly Arnold, Bill Pasha, Jim Kerr, Norma Kerr, Walter Wienecke, Danny Owen, Ed Johnson, Jeanne Bozetti, Irene Bonales, Dottie Woodell, Tom Wedge, Debbie Pasha, Greg Ricks.

Birch Radio Loews Anatole 2082
120 Van Nostrand Ave., Englewood Cliffs,
N.J. 07632

Radio audience measurement for all 212 markets, micro computer generated rating analysis system. **Staff:** Alan Trugman, David Kabakoff, John Dobel, Bill Livek, Craig Harper, Larry Gorkick.

Broadcast Investment Analysts
Fairmont 2100
Box 17307, Washington 20041

Staff: Tom Buono, Jonathan Intrater, David Cole.

Firstmark Financial Loews Anatole
110 Washington St., Indianapolis 46204

Staff: Mike Lewis, Ed Brubeck, Don Godfrey.

Frazier, Gross & Kadlec
Loews Anatole 953
4801 Massachusetts Ave., Suite 390, Washington 20016

Staff: Charles H. Kadlec, Sandra Freschi, Timothy Pecaro, Linda Shapiro, Elisabeth Swanson, Arthur Dietz.

Jhan Hiber & Associates
Loews Anatole 6189
26384 Carmel Rancho Ln., Suite 202, Carmel, Calif. 93923

The Predictor. **Staff:** Jhan Hiber, Larry Johnson, Wendy Minafo.

The Ward L. Quaal Co. Hyatt
401 N. Michigan Ave., Suite 3140, Chicago 60611

Staff: Ward L. Quaal, Graham W. Quaal, Donald Raydon.

T.A. Associates Loews Anatole
45 Milk St., Boston 02190

Staff: David Croll, Richard Churchill, William Collatos, James Wade, Stephen Gormley.

TelCom Associates Loews Anatole
8033 Sunset Blvd., Suite 559, Los Angeles 90046

TV station and program consulting firm.

Staff: Ronald Krueger, Grace Jacobs.

Turner Program Services 2424, 3210
100 International Blvd., Box 105366, Atlanta 30348

The Goodwill Games, World of Audubon, World of Cousteau, Cousteau's Rediscovery of the World, End of Eden, Super Football Saturday Night. **Staff:** Henry Gillespie, Bob Schuessler, Bob Rierson, Paul Amos, Carol Bomberger, Colin Chisholm, Art O'Connor, Paul Wischmeyer, Lisa McMahon, Cliff Matis.

FCC

All of the FCC commissioners are expected to be in attendance at NAB. Expected to be accompanying them will be: Daniel Brenner, senior adviser to Chairman Mark Fowler; John Kamp, special assistant for congressional affairs; Kenneth Howard Jr., legal assistant to Commissioner James Quello;

Robert Pettit, senior adviser to Commissioner Mimi Dawson, and Diane Killory, senior adviser to Commissioner Dennis Patrick. If President Reagan signs the Budget Reconciliation Act, which would permit the industry to reimburse FCC officials for travel expenses, the Mass Media Bureau is expected to be represented by William Hassinger, engineering assistant to the Mass Media Bureau chief; Larry Eads, chief, audio services division; Roy Stewart, chief, video services division; Ralph Haller, deputy chief, policy and rules division; Jim Shook, attorney, EEO branch, and John Reiser, assistant chief, engineering policy branch. Also expected to attend are Thomas Stanley, chief engineer; Robert Cleveland, physical scientist, spectrum engineering division, and Kent Crawford, director, FCC Field Operations Bureau Chicago office.

Public service

All-Industry Radio Music License Committee—2301; Conservative Media Network—2311; Commerce Department Minority Services—2302; Department of the Army and Air Force—2307; Museum of Broadcasting—3104; National Air/Space Museum—2308; National Safety Council—2310; Society of Broadcast Engineers—2305; Society of Motion Picture and Television Engineers—2501; Television Information Office—3105; The Jewish Museum—2301; U.S. Armed Forces Radio Service—2309; Voice of America—2312.

Tuning in NAB's 64th annual convention

Up to 38,000 broadcasters due in Dallas Saturday; highlights include appearance by Chief Justice Burger, presentation of results of new management studies, and satellite television conference

Broadcasters are expected to get down to business this week as the National Association of Broadcasters convenes its 64th annual meeting (April 12-16) at the Dallas Convention Center. The convention theme is "Tuning in America," and will focus on the industry's continued efforts to provide the "finest educational and entertaining programming" it can. Much of the agenda is devoted to assisting broadcasters in their day-to-day business affairs. (As many as 38,000 broadcasters may attend. NAB says preregistration is about the same as it was for last year's show.)

Both radio and television broadcasters will hear the results of two research projects aimed at enhancing their station operations.

For radio, the results of a study called MegaRates: Getting Top Dollar for Your Spots will be unveiled on Monday, April

14. The study, conducted by The Research Group, is based on interviews conducted with more than 50 broadcasters and will offer tips on management techniques and sales strategies used by some of the most effective radio stations in the country. That session will be repeated Monday afternoon and a question and answer session on the report is scheduled for Tuesday morning.

The television side of the convention opens Monday, April 14, with "Great Expectations: Making It Happen," a study that explores changes in the industry and looks at the economic trends for the future. Copies of the study conducted by Browne, Bortz & Coddington, of Denver, will be available in the lobby of the Dallas Convention Center theater. A question and answer session follows the presentation.

Chief Justice Warren Burger will address the broadcasters during a champagne brunch Wednesday morning, April 16, at the close of the convention. Joining Burger on the dais will be FCC Chairman Mark Fowler, who will also speak. Dolly Parton will perform after Fowler.

NAB kicks off its meeting with a series of

radio programming sessions on Saturday, April 12. In the morning, a radio production workshop is planned along with panels on minority employment opportunities and how to analyze rating books.

In the afternoon, NAB will present McKinsey & Co.'s "Radio in Search of Programming Excellence," which, as at last year's session, will examine strategies used at successful radio stations. A panel discussion featuring some of the broadcasters cited in the report follows the presentation. And a radio reception is being held Saturday from 5 p.m. to 6 p.m. at the convention center.

Convention activities formally get under way Sunday, April 13, with a "state of the industry" address by NAB President Eddie Fritts, followed by the presentation of the Distinguished Service Award (the association's highest honor) to Grant Tinker, chairman and chief executive officer of NBC. Dionne Warwick will perform later that afternoon.

Sunday morning, several panels are scheduled for radio broadcasters including two daytime forums, a session on political advertising and one called "Broadcasting



Burger

'86: Women and Minorities at the Crossroads."

For TV broadcasters, a session on multi-channel sound and another on "People Meters and Sole Source Measurement" will be held that morning. The Radio Advertising Bureau and the Television Bureau of Advertising will sponsor workshops on Monday and Tuesday, respectively.

Highlights of the radio agenda for Monday and Tuesday include "Agencies... How to Sell Them on Your Station"; a panel featuring FCC Commissioners James Quello and Dennis Patrick; a station acquisition workshop, and a management session conducted by Fred Palmer, WATH(AM) Athens, Ohio. (Seven radio sessions are being videotaped and will be played back at various times.)

"It's a working convention," said Bev Brown of KGAS(AM) Carthage, Tex., who is convention co-chairman and vice chairman of the NAB radio board. "It's the kind of convention where a broadcaster can learn enough to pay for his trip," Brown said.

Brown thinks the Tuesday morning satellite teleconference with FCC Mass Media Bureau Chief James McKinney from the Regional Administrative Radio Conference in Geneva on AM band expansion will draw a crowd. Tuesday's panel on cutting telephone costs and another on music licensing are also expected to be well attended.

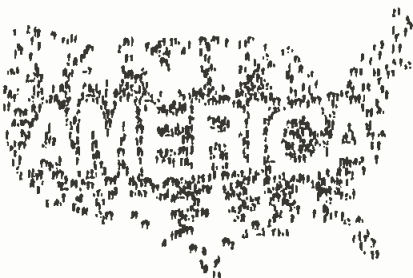
The radio luncheon is Tuesday, April 15, with Stan Freberg as keynoter. (Two new radio spots created by Freberg in association with NAB will be aired during the luncheon.)

Also, during the luncheon, radio sports-

caster Mel Allen and commentator Earl Nightingale will be inducted into the Radio Hall of Fame. Don Johnson, star of NBC TV's *Miami Vice*, will make a special appearance at the luncheon to promote the "Hands Across America" fund-raising project aimed at fighting hunger and homelessness in America.

For TV broadcasters, Monday and Tuesday will offer a variety of management and programing sessions. Among some of the

TUNING IN



panels slated Monday, "What's a TV Station Worth Today?" and "Forecasting—A Tool for All Managers."

Convention Co-chairman Peter Kizer, WTTV(TV) Indianapolis, feels television broadcasters will take an interest in some of the legislative and regulatory panels scheduled, particularly those on must carry and music licensing. The NAB's Grover Cobb Award (for improving broadcaster relations with the federal government) will be presented during the television luncheon on



Johnson



Fowler

Monday to Representatives Thomas Tauk (R-Iowa) and Billy Tauzin (D-La.).

More than 30 members of Congress are expected to attend the meeting. Some will participate in panel sessions scheduled for Monday, April 14, including one called "The Role of Broadcasters in the Political Election Process," featuring Senators J. James Exon (D-Neb.), Spark Matsunaga (D-Hawaii), Ted Stevens (R-Alaska) and Edward Zorinsky (D-Neb.) and Representatives Silvio Conte (R-Mass.), Mike Oxley (R-Ohio) and Lawrence Smith (D-Fla.).

Television music licensing will be discussed by Senators Dennis DeConcini (D-Ariz.), Senate Copyright Subcommittee Chairman Charles McC. (Mac) Mathias (R-Md.), Strom Thurmond (R-S.C.) and Representatives Frederick Boucher (D-Va.), Carlos Moorhead (R-Calif.), Henry Hyde (R-Ill.) and Patricia Schroeder (D-Colo.).

The future of must carry and cable copy right will be debated Monday afternoon by Representatives John Bryant (D-Tex.), Michael DeWine (R-Ohio), Hamilton Fish (R-N.Y.), House Copyright Subcommittee Chairman Bob Kastenmeier (D-Wis.), Mickey Leland (D-Tex.), Thomas Luken (D-Ohio), Romano Mazzoli (D-Ky.), and Billy Tauzin (D-La.).

In other convention activities, the Television Information Office is holding a general membership meeting Sunday, April 13, at 8:30 to 10:30 a.m. in East Ballroom C in the convention center. The Broadcast Education Association's three-day meeting during the NAB convention will feature a Saturday luncheon address by Gene Jankowski, president of the CBS/Broadcast Group. □

The daily agenda for NAB

Saturday, April 12

RADIO SESSIONS

Ten concurrent one-on-one sessions. 11 a.m.-1 p.m. Rooms W116-117. *Engineering for Managers and Programers.* Panelists: Larry White, KVOO(AM) Tulsa, Okla., and Al Resnick, WLS(AM) Chicago.

Doing your own research. Panelists: James Fletcher, University of Georgia; Joey Reagan, Washington State University; Richard Ducey, NAB.

Program Consultants. Panelists: Donna Halper, Donna Halper Associates; Steve Warren, Programming Co-op; Kent Burkhart, Burkhart, Abrams, Michaels & Douglas Associates; John Stevens, Surrey Broadcast Group.

Minority Employment Opportunities. Panelists: Claryce M. Handy, NAB; Bill Shearer, KGFK(AM) Los Angeles; David Bajor, PBS; Don Chaney, KTBB(AM)-KNUE(FM) Tyler, Tex.; Cliff Webb, NBC Radio News.

Legal Answers & EEO Workshop. Panelists: James Shook, FCC; Barry Umansky, NAB; Eugenia Hull, NAB.

Instant Rating/Book Analysis. Rip Ridgeway, Arbitron; Bill Livek, Birch

Broadcasting contingent. BROADCASTING's advertising and editorial staffs will be headquartered at the Plaza of the Americas during the NAB convention. Attending will be Dave Berlyn, Vince Ditingo, Geoff Foisie, Adam Glenn, Kira Greene, Harry Jessell, Kwentin Keenan, Kim McAvoy, Charles Mohr, Larry Taishoff, Robert (Skip) Tash, Tim Thometz, Don West, David Whitcombe and Len Zeidenberg.

Jio; Steve Elliot, KQZY-FM Dallas.

NAB Services. Panelists: James Hulbert, NAB; Peggy Lambert, NAB.

the FCC. Panelists: Albert Halprin, FCC; Diane Killory, FCC; Larry Js, FCC; Robert Cleveland, FCC.

carrier Opportunities. Panelists: Harry Pappas, Ethnic Radio Net-
k; Bob Switzer, Switzer System Technology; Tom Barket, Spantel Corp.

dio Computer Showcase. 11 a.m.-1 p.m. Rooms W108, 109, 115.

dio Production Workshop I. 11 a.m.-1 p.m. Room W111. Presenters:
ee Ford, production consultant; Don Elliot, KIS-AM-FM Los Angeles; Julie
iato, talent director.

dio in Search of Excellence. Presentation: 1-2:15 p.m. Rooms W101,
3. Welcome: David Parnigoni, NAB. Introduction: Bernadette McGuire,
B. Presenter: Sharon Patrick, McKinsey & Co. **Panel:** 2:30-3:45 p.m.
om W107. Panelists: Jack Swanson, KGO-AM-FM San Francisco; Rick
ar, Sklar Communications; Wayne Vriesman and Dan Fabian, WGN(AM)
icago; Wally Clark and Gerry DeFrancesco, KIS-AM-FM Los Angeles;
rn Irwin and Lee Stewart, KOSI(FM) Denver.

o concurrent sessions. 2:30-3:45 p.m. *Small Market Radio Pro-
graming.* Rooms W105, 106. Moderator: Ray Lockhart, KOGA-AM-FM Ogal-
a, Neb. Panelists: Cary Simpson, WTRN(AM) Tyrone, Pa.; Donna Halper,
nna Halper Associates; Chuck Denney, KBZZ(AM) LaJunta, Colo.; Nor-
in Protsman, WNER(AM)-WQHO(FM) Live Oak, Fla.

e Whole Brain Approach to Radio Programing. Rooms W102, 104,
J. Presenter: Harry Nelson, Personality Workshop.

ree concurrent sessions. 4-5:15 p.m. *Making \$ With Your Mouth.*
oms W102, 104, 110. Moderator: Jerry Johnson, Voice Craft. Panelists:
rry King, Mutual Radio Network; Jim French, KIRO(AM) Seattle; Sally
ssy Raphael, NBC Talknet; Pat Rogers, WOAI(AM) San Antonio, Tex.

ilding on Basics '86. Rooms W105, 106. Presenter: David Klemm,
mm Media.

rviving in AM Radio. Rooms W101, 103. Moderator: Rick Sklar, Sklar
mmunications. Panelists: Judy Karst, KDBS(AM) Alexandria, La.; Bruce
irr, Bruce Marr Associates; Tim Pecaro, Frazier, Gross & Kadlec; Gary
chiels, WOND(AM) Biloxi, Miss.

dio Get-Together reception. 5-6 p.m. Rooms W116, 117. Welcome:
ivid Parnigoni, NAB.

RADIO ENGINEERING

A Technical Improvement. 9 a.m.-12:50 p.m. East Ballroom D. Session
airman: Charles Morgan, Susquehanna Broadcasting Co.
The NAB Improvement Project: A Status Report. 9:15 a.m. Charles
rgan, Susquehanna Broadcasting Co.; Michael Rau, NAB. *National
dio Systems Committee: A Status Report.* 9:40 a.m. John Marino, Katz
adcasting; William Gilbert, Delco Electronics. *Novel Antenna Design
duces Skywave Radiation.* 10:05 a.m. Richard Biby, Communications
ineering Services. *A New Dimension for the Design of Medium Wave
ntennas.* 10:30 a.m. Ogden Prestholdt, A.D. Ring & Associates. *Improv-
y AM Broadcast Service by Means of Synchronous Transmitters.* 11
n. Oscar Reed, Reed & Associates. *Broadbanding AM Antennas for
gher Fidelity Sound.* 11:35 a.m. William Ball, Carl T. Jones Corp. *How
ectrical Devices are Tested to Determine Interference Levels.* Noon.
ward Marrie, Joint Sections Committee on Electromagnetic Interfer-
ce, NEMA. *How the FCC Controls Interference.* 12:25 p.m. Thomas
anley, Acting Chief Engineer, FCC.

idio Broadcast Engineering. 1:15-4:40 p.m. East Ballroom D. Session
airman, George Capalbo, RKO Radio, Boston. *FM Antenna with Modi-
nterbay Spacings Solves Downward Radiation and Other Problems.*
30 p.m. Joseph Semak, KZBT(FM) San Diego. *FM Short Spacing Inter-*

face Study Uses a Microcomputer. 1:55 p.m. Jon Banks, WLTT(FM) Bethes-
da, Md. *Combining Networks for FM Transmitter Multiplexing.* 2:20
p.m. D.S. Collins, Shively Labs. *Designing Antenna Systems for the VOA
Based on Broadcast Area Coverage Requirements.* 2:45 p.m. George
Lane, VOA. *Sideband Analysis of Medium Wave Antenna Systems.* 3:25
p.m. Jerry Westberg, Harris Corp. *Assessment and Suppression of Rera-
diation from Steel Power Lines Into Directional AM Patterns.* 3:50 p.m.
Christopher Trueman, Concordia University. *Microcomputer Applications
in AM Antenna System Adjustment and Analysis.* 4:15 p.m. Karl Lahm,
A.D. Ring & Associates.

TELEVISION ENGINEERING

Television Recording and Tape Technology. 9-11 a.m. East ballroom B.
Session chairman: Steven Bonica, NBC Television. *An Overview of the
SMPTE D-1 Digital Television Recording Standard.* 9:15 a.m. Bernard
Dickens, CBS Television. *The Broadcaster's Need for the Digital Televi-
sion Tape Redorder.* 9:40 a.m. William Nicholls, CBS Television. *User
Requirements for Small Format Broadcast Video Recorder.* 10:05 a.m.
Peter Smith, NBC Television. *Magnetic Media for the Digital Television
Tape Recorder and Small Format Systems.* 10:35 a.m. Arthur Moore, 3M
Co.

Television Multichannel Sound. Noon-3:45 p.m. East ballroom B. Ses-
sion chairman: Harry Owen, WDCW-TV Washington. *Transmitting Data
Over TV Audio Subcarriers.* 12:25 p.m. Robert Unetich, ITS Corp. *Testing
the BTSC MTS Stereo System.* 12:40 p.m. Eric Small, Modulation Sci-
ences. *Demystifying TV Stereo Equipment Performance Specifications.*
1:05 p.m. James Carpenter, Broadcast Electronics. *FCC Type Accep-
tance and Compliance for TV-MTS Transmission Systems.* 1:30 p.m.
Ralph Haller, FCC. *Maintaining Mono Compatibility with TV Stereo Pro-
graming.* 2:05 p.m. Randy Hoffner, NBC. *Production & Post Production
for TV Multichannel Sound—Part 2.* 2:30 p.m. Robert Liften, Regent
Sound Studios. *Advanced Acoustic Design for Stereo Broadcast Televi-
sion Facilities.* 2:55 p.m. Peter D'Antonio, RPG Diffusor Systems. *VIM-
CAS: Vertical Internal Multichannel Audio System.* 3:20 p.m. Basil
Pinzone, Pinzone Communications; Robert Broad, IRT Electronic PTY.

Television Graphics. 3:45-5:40 p.m. East ballroom B. Session chairman:
Dave Rabinowitz, NBC Television. *Adding Quality and Dimension to
Television Graphics and Effects.* 4 p.m. Richard Thorn, Post Group Inc.
Integrating Weather Data into Station Graphics Systems. 4:25 p.m. Dr.
Joel Myers, Accuweather Inc. *Big City Graphics on a Medium Market
Budget.* 4:50 p.m. Michael Huilt, KAKE-TV Wichita, Kan. *The Importance of
Image Quality in Television Graphics.* 5:15 p.m. Dave Smerier, NBC
Television.

Sunday, April 13

RADIO MANAGEMENT

Five concurrent sessions. Noon-2 p.m. *Public Domain Software.*
Rooms W108, 109, 115. Moderator: Richard Ducey, NAB. Panelists: Dave
Biondi, Broadcasters Database; Mark Cunningham, Americom Radio
Brokers Inc.; Scott Marcus, KFMI(FM) Arcata, Calif.

Legal Workshop: Political Advertising. Room W106. Moderator: Julian
Shepard, NAB. Panelists: Kenneth Howard Jr., FCC; Milton Gross, FCC;
Irving Gastfreund, Finley, Kumble & Wagner; Richard Zaragoza, Fisher,
Wayland, Cooper & Leader.

Radio Acquisition—So... You Want to Buy Your First Station? Rooms
W101, 103. Moderator: Erwin Krasnow, Verner, Lipfert, Bernhard, McPherson
& Hand. Panelists: Robin Martin, Deer River Group; Susan Ness,
American Security & Trust Bank; Randy Jeffrey, Chapman Associates,
Orlando, Fla.

Radio Production Workshop II. Room W111. Presenters: Tyree Ford,
production consultant; Don Elliot, KIS-AM-FM Los Angeles; Julie Amato,
talent director.

Working Profitable with Your Rep. Room W107. Moderator: Jerry Fen-
iger, Station Representative Association. *Sales Development—Small/
Large Markets.* Chuck Chackel, KUGN-AM-FM Eugene, Ore.; Karen Wald,
Blair Radio; Paul Jacobs, KRXC(AM)-KZEW(FM) Dallas; Ira Wechsler, Hillier,
Newmark, Wechsler & Howard, Los Angeles; Charles Crawford, Caballero

Spanish Media. *Rep Evaluation*. James Smith, KFRC(AM) San Francisco. Mike Bellantoni, Torbet Radio, New York; Ellen Hulleberg, McGavren-Guild. *Budgeting*. G. Michael Donovan, WKQX(FM) Chicago; Daver Recher, Eastman Radio; Peter Moore, Jack Masla & Co. *News & Sports*. Joseph Abel, KIRO(AM) Seattle; David Halberstam, Katz Radio; Ed Kiernan, CBS Radio Reps.

Daytimer's Forum. Noon-12:45 p.m. *Part 1—Update*. Room W102. Moderator: David Palmer, WATH(AM) Athens, Ohio. Panelists: Barry Umansky, NAB; Gregg Skall, Baker & Hostetler; Larry Eads, FCC. *Part 2—Audience Retention, Achieving Greater Sales*. 12:45-2 p.m. Room W102. Moderator: Jay Asher, WJDA(AM) Quincy, Mass. Panelists: Gary Capps, Capps Broadcasting; Dave Walker, WKFI(AM) Wilmington, Ohio; Bill Saunders, WPAL(AM) Charleston, S.C.; Gerald Robbins, WCMP-AM-FM Pine City, Minn.

Broadcasting '86: Women & Minorities at the Crossroads. Noon-2 p.m. Room W105. Moderator: Dwight Ellis, NAB. Panelists: Donna Zapata, WHAS-TV Louisville, Ky.; FCC Commissioner James Quello; Representative Al Swift (D-Wash.); Dorothy Brunson, Brunson Broadcasting.

TELEVISION MANAGEMENT

Three Concurrent Sessions. 11 a.m.-12:15 p.m. *People Meters and Sole Source Measurement*. Room S411. Moderator: Charles Sherman, WHOI(TV) Peoria, Ill. Panelists: Marvin Mord, ABC; David Poltrack, CBS, Inc.; William Rubens, NBC; Thomas McClendon, Cox Communications; Barry Kaplan, Ted Bates Advertising.

Multichannel Sound: A Year Later. Room S412. Moderator: David Lachenbruch, *Television Digest*. Panelists: Arnold Chase, WTC-TV Hartford, Conn.; David Layne, KCNC-TV Denver; Hal Protter, WNOI-TV New Orleans.

News Director... Policymaker or Journalist? Room S413. Moderator: Wayne Godsey, WISN-TV Milwaukee. Panelists: David Dodds, WGAL-TV Lancaster, Pa.; Bill Goodman, KPRC-TV Houston; Ed Quinn, WVUE-TV New Orleans; John Spain, WBRZ-TV Baton Rouge, La.

Joint opening general session. 2:30-5 p.m. *State of the Industry Address*. Arena. Edward O. Fritts, NAB president. *Presentation of the Distinguished Service Award* to Grant Tinker, chairman of the board and chief executive officer, NBC.

RADIO ENGINEERING

Radio Station Maintenance. 9:30-11:30 a.m. East ballroom D. Session chairman: James Hoke, Edens Broadcasting. *Making the Best Use of Engineering Talent*. 9:45 a.m. Michael Callaghan, KIS(FM) Los Angeles. *Increasing Transmitter Reliability Through Failure Analysis*. 10:10 a.m. Jerry Whitaker, *Broadcast Engineering* magazine. *Panel on Radio Station Maintenance*. 10:35 a.m. Michael Callaghan; Jerry Whitaker; Timothy Bealor, Broadcast Electronics; David Chenoweth, Continental Electronics; John Sullivan, Econco Broadcast Service; Douglas Gratzner, SG Communications.

TELEVISION ENGINEERING

TV System Maintenance. 9 a.m.-noon. East ballroom B. Session chairman: Otis Freeman, Tribune Broadcasting. *Quality Control Systems in Broadcast Television Operations*. 9:15 a.m. John Prager, PBS. *Keeping the Video Cart Machine on the Air and Other Maintenance Procedures*. 9:40 a.m. Roy Trumbull, KRON-TV San Francisco. *Engineering Management of Radio and Television Tower Structures*. 10:05 a.m. Ramon Upsahl, Skilling-Ward-Rogers-Barkshire Inc. *New Techniques in Controlling and Documenting Ice Buildup on Tall Towers*. 10:30 a.m. Karl Renwanz, WNEV-TV Boston. *Panel on Television Maintenance*. Trumbull; Renwanz; Upsahl; Gregory Best, Harris Broadcast; Gene Faulkner, KDNL-TV St. Louis.

Monday, April 14

RADIO MANAGEMENT

MegaRate\$: How to Get Top Dollar for Your Spots. 8-9:15 a.m. Theater. Introduction: David Parnigoni, NAB. Presenter: Bill Moyes, The Research Group. (Session repeated at 1 p.m. Monday. Question and answer session at 9:15 a.m. Tuesday.)

Syndicators Semi-Annual Breakfast. 7:30-9:30 a.m. Rooms W116, 117.

Five concurrent sessions. 9:30-10:45 a.m. *Are You Teaching Your People to Fail... Enough?* Room W101. Presenter: David Richards David Richardson Associates.

Agencies...How to Sell Them on Your Station. Rooms W102, 104, 1 Moderator: Wayne Cornils, RAB. Panelists: Jouette Travis, Tracey-Lo Advertising; Kathy Meloy, WMAL-FM Washington; Eddie Leeds, McGavren Guild.

Increasing Revenues through Community Promotions. Room W1 Moderator: Jay Mitchell, Jay Mitchell Associates. Panelists: Jim Chap WIRA(AM)-WQV(FM) Fort Pierce, Fla.; Jon Quick, WCCO-AM-FM Minneapolis; David Rudat, WHO(AM) Des Moines, Iowa; Robert Putnam, WLAD-AM-FM Danbury, Conn.

What You Need to Know About Retailers to Sell Them on Radio. Room W107. Presenter: Christo Jackson, consultant.

What's New at the FCC. Room W105. Moderator: Jeff Bauman, NAB. Panelists: Commissioner James Quello, FCC; Commissioner Dennis F. Rick, FCC; Edward Hummers, Fletcher, Heald & Hildreth; Eugene Mullin, Rhyne, Emmons & Toppel.

Two concurrent sessions. 11 a.m.-12:15 p.m. *Fitting Yourself for Libel Suit*. Room S411. Moderator: Steve Bookshester, NAB. Panelists: Tom Leatherbury, Locke, Purnell, Boren, Laney & Neely; Bruce Sanford Baker & Hostetler; Ernie Schultz, Radio-Television News Directors Association; Carl Solano, Schnader, Harrison, Segal & Lewis.

The Role of Broadcasters in the Political Election Process. Room W11 Moderator: Wallace Jorgenson, WBT(TV) Charlotte, N.C. Panelists: Senators James Exon (D-Neb.), Spark Matsunaga (R-Alaska) and Edward Zorinsky (D-Neb.); Representatives Silvio Conte (R-Mass.), Mike Oxley (Ohio) and Lawrence Smith (D-Fla.); Gary Capps, Capps Broadcasting; Paul Davis, WGN-TV Chicago.

Radio Sales and Winning with the "Theory of 21." 11:15 a.m.-12:15 p.m. Theater. Introduction: William Stakelin, President, Radio Advertising Bureau. Speaker: Chuck Reaves, XXI Associates.

MegaRate\$: Getting More for Your Spots. 1-2:15 p.m. Theater. Repeat of Monday, 8-9:15 a.m. session.

TELEVISION MANAGEMENT

TV Music Licensing. 7:45-9:15 a.m. Room S412. Moderator: Donna Zapata, WHAS-TV Louisville, Ky. Panelists: Senator Dennis DeConcini (D-Ariz) Senator Charles Mathias (R-Md.), Senator Strom Thurmond (R-S.C.), Representative Frederick Boucher (D-Va.), Representative Carlos Moorhead (R-Calif.), Representative Henry Hyde (R-Ill.), Representative Patricia Schroeder (D-Colo.).

Two Concurrent Sessions. 8-9:15 a.m. *LPTV in 1986*. Room S413. Moderator: Constance Wodlinger, Wodlinger Broadcasting Co. of Texas. Panelists: John Kompas, Kompas-Biel & Associates; Roy Stewart, FCC; Larry Shoborn, KFWJ(AM)-KBBC(FM) Lake Havasu City, Ariz.; Randy Swingle, Impact Television Group. *The Power of Positive Management*. Room S41 Presenters: Pam Lontos, Pam Lontos Inc.; Chuck Reaves, XXI Associates.

Great Expectations: Making It Happen. 9:30-10:45 a.m., Theater. Welcome: John Abel, NAB. Introductions: Peter Kizer, NAB convention chairman. Presenter: Paul Bortz, Browne, Bortz & Coddington.

Five Concurrent Sessions. 11 a.m.-12:15 p.m. *The Role of Broadcasters in the Political Elections Process*. Moderator: Wallace Jorgenson WBT(TV) Charlotte, N.C. Panelists: Senators James Exon (D-Neb.), Spark Matsunaga (D-Hawaii), Ted Stevens (R-Alaska) and Edward Zorinsky (I Neb.); Representatives Silvio Conte (R-Mass.), Mike Oxley (R-Ohio) and Larry Smith (D-Fla.); Gary Capps, Capps Broadcasting; Paul Davis, WGN-TV Chicago. *Fitting Yourself for the Libel Suit*. Room S411. Moderator: Steve Bookshester, NAB. Panelists: Tom Leatherbury, Locke, Purnell, Boren, Laney & Neely; Bruce Sanford, Baker & Hostetler; Ernie Schultz, Radio Television News Directors Association; Carl Solano, Schnader, Harrison, Segal & Lewis. *Planning for Your Broadcasting Facility's Future*. Room S412. Presenter: Frank Rees Jr., Rees Associates Inc. Broadcasters: Jack Jenkins, KVUE-TV Austin, Tex.; Duffy Sasser, NBC; Ken Preston, KSEE-Fresno, Calif. *Broadcasting Opportunities Overseas*. Room S413. Moderator: John Eger, CBS Inc. Panelists: Vittorio Boni, Radiotelevisione Italiana; Antoine de Clermont Tonnerre, Editions Mondiales; Walter O'Brien, J. Walter Thompson, New York.



TOWERS ABOVE THE REST

Libraries for Sales and Production • Station IDs
Advertiser Jingles • Music Formats • Travel Packages
Program Syndication • Custom Production

NAB Booth #3335 Look for the Tower.
Visit our Hospitality Suite
at Lowe's Anatole

"We Deliver"



Broadcast Services, Inc.

A MEDIA GENERAL COMPANY

NEW YORK • MEMPHIS • CHICAGO
CLEVELAND • LOS ANGELES

Television luncheon. 12:15-2:15 p.m. Arena. Call to order by William F. Turner, KCAU-TV Sioux City, Iowa, and chairman of NAB Television Board. Presentation of Grover C. Cobb Memorial Award to Representatives Thomas Tauke (R-Iowa) and Billy Tauzin (D-La.).

Four concurrent sessions. 2:30-4:45 p.m. *What Are We Doing to Help GSMs Meet Station Revenue Goals?* Room S411. Moderator: Blake Byrne, LIN Broadcasting. Panelists: Paul Hughes, Viacom; Robert Kunath, Group W; Robert Lefko, TVB; Gary Lieberthal, Embassy Telecommunications; Thomas Oakley, Quincy Newspapers. *Scrambling, Must Carry and Cable Copyright.* Room S412. Moderator: John Summers, NAB. Panelists: Representatives John Bryant (D-Tex.), Michael DeWine (R-Ohio), Hamilton Fish (R-N.Y.), Bob Kastenmeier (D-Wis.), Mickey Leland (D-Tex.), Romano Mazzoli (D-Ky.), Billy Tauzin (D-La.). *What Works in Children's Programming.* Room S413. Moderator: Greg Stone, wsoc-TV Charlotte, N.C. Panelists: Phyllis Vinson, NBC; Rick Gitter, NBC; Lou Schiemer, Filmation Studios; Nicholas Van Dyck, National Council for Families and Television; Alvin Ferleger, Taft Entertainment. *What's a TV Station Worth Today?* Moderator: James Dowdle, Tribune Broadcasting Co. Panelists: Peter Desnoes, Burnham Co.; Daniel Gold, Knight-Ridder Broadcasting; George Lilly, Montana Television Network; Marvin Shapiro, Veronis Suhler & Associates.

Four concurrent sessions. 4-5:15 p.m. *Is PTAR Over The Hill?* Moderator: Richard Wiley, Wiley & Rein. Panelists: Steve Currie, KOIN-TV Portland, Ore.; David Henderson, Outlet Communications; Les Brown, Channels of Communication; Gary Lieberthal, Embassy Telecommunications; Dudley Taft, Taft Broadcasting Co. *Financing the Acquisition.* Room S414. Moderator: Martin Pompadur, Television Station Partners. Panelists: George Castell, Viacom International; David Croll, T.A. Associates; Gerald Hassell, Bank of New York; Fred Seegal, Shearson, Lehman Brothers. *The Home Team Advantage.* Room S413. Moderator: Roy Danish, Television Information Office. Panelists: Fred Barber, WTAE-TV Pittsburgh; Gary DeHaven, wisctv Madison, Wis.; Dixon Lovvorn, wis-TV Columbia, S.C.; John Suder, KWGN-TV Englewood, Colo.; Donna Zapata, WHAS-TV Louisville, Ky. *News Networking Systems.* Room S412. Moderator: Jim Snyder, Post-Newsweek Stations. Panelists: John Greene, WRAL-TV Raleigh, N.C.; Anita Klever, Conus; Mel Martin, Florida News Network; Brent Stranathan, ABC, New York.

RADIO ENGINEERING

AM-FM Allocations. 8:30-10 a.m. East ballroom D. Session chairman: James Wulliman, WTMJ-TV Milwaukee. *Recent FCC Activities Regarding AM-FM Allocation Matters.* 8:45 a.m. William Hassinger, FCC. *How Recent CCIR Technical Decisions Affect U.S. AM-FM Broadcasting.* 9:10 a.m. Ralph Justus, NAB. *Solutions to the FM Radio/Aeronautical Interference Problem.* John F.X. Browne, John F.X. Browne Associates.

Radio Subcarriers. 10:15 a.m.-12:10 p.m. East ballroom D. Session chairman: Dennis Snyder, WJOY(AM)-WCOR(FM) Burlington, Vt. *A Systems Approach to Improving FM Subcarrier Performance.* 10:30 a.m. Geoffrey Mendenhall, Broadcast Electronics. *Optimizing FM Audio Program Subcarrier Performance.* 10:55 a.m. Richard Shumeyer, Modulation Sciences. *Radio Data System Permits Receiver Adjustments and Special Signalling by the Broadcaster.* 11:45 a.m. Dietmar Kopitz, European Broadcasting Union. *High Speed Data Transmission Over Broadcast AM and FM Subcarriers.* 11:20 a.m. Gary Robinson, Bonneville International.

Broadcast Auxiliary. 2:30-5:30 p.m. East ballroom D. Session chairman: Robert Denny, WBT(AM) Charlotte, N.C. *Modern Developments in ENG Antenna Systems.* 2:45 p.m. Sujay Verma, M/A-Com. *Narrow Deviation Aural STL Systems Relieve Broadcast Auxiliary Frequency Congestion.* 3:10 p.m. Michael Callaghan, KIS(FM) Los Angeles. *How Broadcasters Can Use the 18 and 23 GHz Microwave Bands.* 3:35 p.m. Edmund Williams, NAB. *A National Policy for Broadcast Auxiliary Frequency Coordination.* 4:10 p.m. Jerry Plemmons, Outlet Communications. *Panel on the Future of Broadcast Auxiliary Bands.* 4:35 p.m. Plemmons; Thomas Stanley, FCC; Ralph Haller, FCC; Richard Rudman, KFWB(AM) Los Angeles; Michael Rau, NAB.

TELEVISION ENGINEERING

Television Engineering & New Technology. 8:30 a.m.-12:05 p.m. East ballroom B. Session chairman: Richard Streeter, CBS Television. *Lighting*

System for In-the-Round Television Production. 8:45 a.m. Norman F. sell, Cercione-Vincent Associates. *SPOT: An Automated Station Broadcast Composition and Playback System.* 9:10 a.m. Guy Beverlin, Rol Murch, WPXI-TV New York. *Component Video—Where Are We Going?* 9:45 a.m. Merrill Weiss, NBC Television. *The Component Digital Studio Progress Report.* 10:30 a.m. Christian Tremblay, Canadian Broadcast Corp. *Equipment for the All-Digital Studio.* 10:25 a.m. Max Artiga Thompson Video. *High Quality Fiber Optic Systems Provide Unique Solutions to Television Transmission Problems.* 10:50 a.m. Peter N. tanos, Grass Valley Group. *SMPTE Remote Control Interface Standard.* 11:15 a.m. Thomas Meyer, Dynair Electronics. *New ENG Camera Battery Interface System with Accompanying Universal Charger.* 11:40 a.m. Bebe McClain, Clive Hawkins, PAG America Ltd.

Advanced Television Systems. 2-5:35 p.m. East ballroom B. Session chairman: Dr. Robert Hopkins. *Advanced Television Systems Committee—Status Report.* 2:15 p.m. E. William Henry, chairman; Dr. Robert Hopkins, ATSC. *ATSC Technology Group Reports.* 2:45 p.m. High Definition Television: Renville McMann, CBS Technology Center. Enhanced 525-L Systems: Daniel Wells, Satellite Television Corp. Improved NTSC System: Dr. Kerns Powers, David Sarnoff Research Center, RCA Laboratories. *U.S. Proposal to the CCIR for a High Definition Television World Production Standard.* 3:30 p.m. Laurence Thorpe, Sony Broadcast Facilities. *High Quality Compresses HDTV Transmission Uses 8 mhz Bandwidth.* 3:55 p.m. Dr. Takashi Fujio, NHK. *Compatible Terrestrial HD System.* 4:20 p.m. Dr. William E. Glenn, New York Institute of Technology. *Status Report of the Joint NAB/MST Demonstration Project for HD.* 4:45 p.m. E.B. Crutchfield, NAB. *Comparing Various Proposals for Audio for High Definition Television.* 5:10 p.m. Georg Plenge, Institut für Rundfunktechnik.

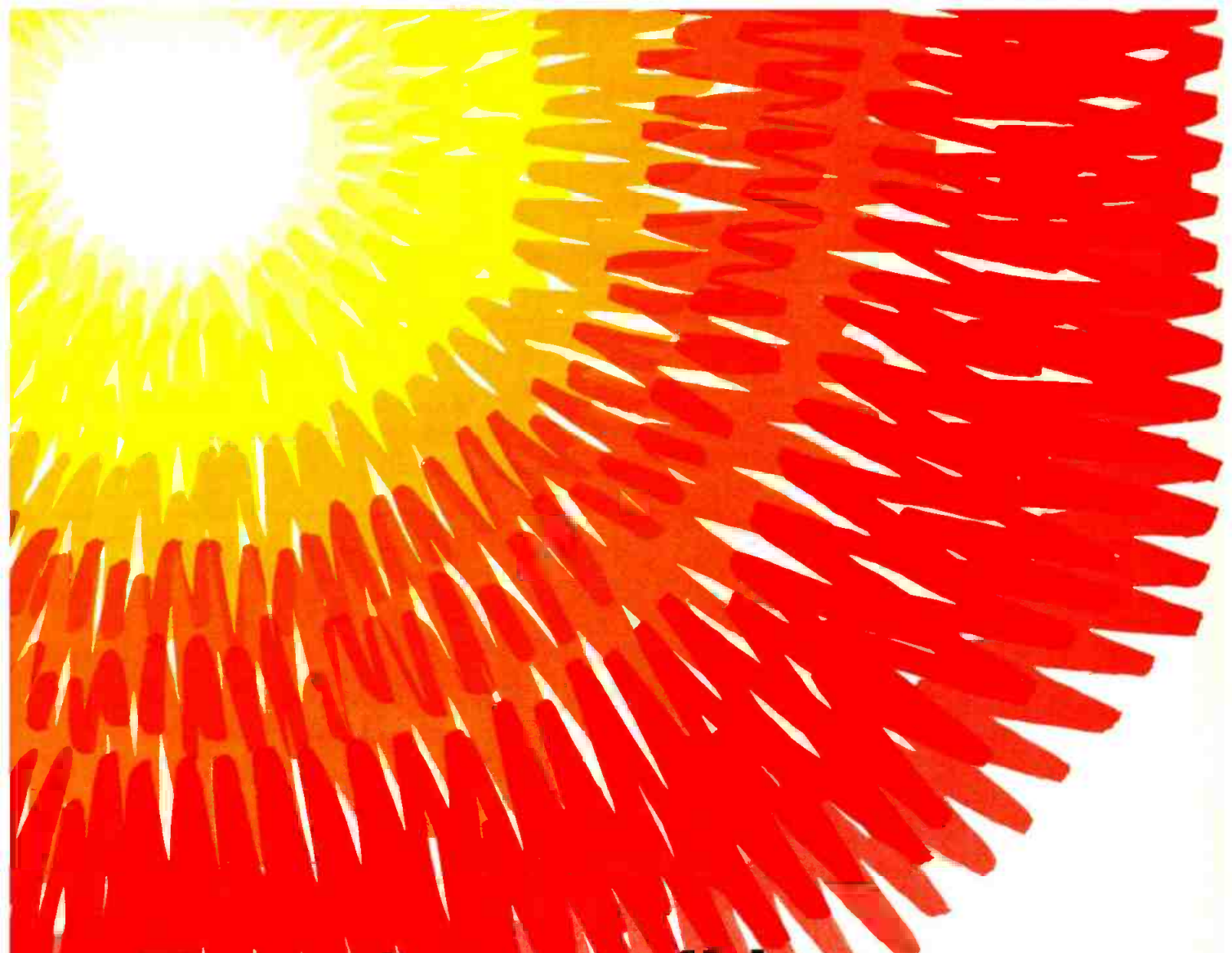
UHF Television Systems. 2-4:20 p.m. East ballroom C. Session chairman: George DeVault, WKPT-TV Kingsport, Tenn. *The Multiple Depression Collector Klystron Project: A Progress Report.* 2:15 p.m. E.W. McCu Varian. *Using Klydstrode Technology to Create a New Generation of High Efficiency UHF-TV Transmitters.* 3:05 p.m. Kerry Cozad, Harris Co. *Klystron Operating Efficiencies: Is 100% Realistic?* 3:30 p.m. R. Heppstall, EEV Ltd. *Circular & Cross-Polarization UHF-TV Transmitter Antenna System.* 3:55 p.m. Geza Dienes, Andrew Corp.

Broadcast Auxiliary. 2:30-5:30 p.m. East ballroom D. Session chairman: Robert Denny, WBT(AM) Charlotte, N.C. *Modern Developments in ENG Antenna Systems.* 2:45 p.m. Sujay Verma, M/A-Com. *Narrow Deviation Aural STL Systems Relieve Broadcast Auxiliary Frequency Congestion.* 3:10 p.m. Michael Callaghan, KIS-TV Los Angeles. *How Broadcasters Can Use the 18 and 23 ghz Microwave Bands.* 3:35 p.m. Edmund Williams, NAB. *A National Policy for Broadcast Auxiliary Frequency Coordination.* 4:10 p.m. Jerry Plemmons, Outlet Communications. *Panel on the Future of Broadcast Auxiliary Bands.* 4:35 p.m. Jerry Plemmons, Outlet Communications; Thomas Stanley, FCC; Ralph Haller, FCC; Richard Rudman, KFWB(AM) Los Angeles; Michael Rau, NAB.

Tuesday, April 15

RADIO MANAGEMENT

Six concurrent sessions. 7:45-9 a.m. *Examining the Public Interest Standard.* Room W116. Moderator: FCC Commissioner Mirni Dawsc. *Using Direct Mail to Promote Your Station and Make Money.* Room W101. Presenter: Jerry Bobo, KVIL-AM-FM Dallas. *Teaming Up with Sales to Reduce Credit and Collection Headaches.* Room W105. Presenters: Ma Matz, WGN(AM) Chicago; Linda Stephens, LIN Broadcasting. *Getting Your Local Advertiser through Research.* Room W103. Moderator: Nan Vaeth, WFMS(FM) Indianapolis. Panelists: Myriam Lopez, WPXI-FM New York; Harvey Gersin, Reymor & Gersin Associates; John Ryman, KOZY-FM Dallas. *Small Market Radio Management.* Rooms W102, 104, 110. Moderator: Donald Kirkley, University of Maryland. Panelists: Alan Andrews, WCL(A) Corning, N.Y.; Mike Gummer, WCA(AM)-WCUL(FM) Culpepper, Va.; Marie Rizers, WSWN-AM-FM, Belle Glade, Fla. *Secrets to Selling and Maximizing Combo Rates.* Room W106. Panelists: Richard Bremkamp, WRCH(AM) Farmington, Conn.; Larry Edwards, WMT-AM-FM Cedar Rapids, Iowa.



**There is something new
under the sun!**

COMEDY RADIO . . . "LIVE" . . . 24 HOURS A DAY

*Visit our hospitality suite during the NAB
Convention at Loew's Anatole #2682*

*Listen to the newest and most unique full-time
satellite format in the industry.*

Register to WIN GREAT PRIZES!
Refreshments . . . Souvenirs . . . Open 2pm Daily

FUNNY BUTTON INCORPORATED
2400 N Street, N.W.
Washington, D.C. 20037
(202) 659-5959



Are You Playing With a Full Deck? 9:15 a.m.-noon. *Managing Yourself and Others*. Rooms W108, 109, 115. Presenter: George Glover, George Glover & Associates.

Two Concurrent Sessions. 9:15-10:30 a.m. *The Big Co-op Bucks: Manufacturing, Distribution & Vendors*. Room W103. Presenters: Lois Weiss, co-op consultant; Louise Heifetz, KIS-AM-FM Los Angeles. *MegaRates: Panel Discussion*. Room W101. Moderator: Bill Moyes, The Research Group. Panelists: Larry Campbell and Jim Woodward, The Research Group, Seattle; Steve Marx, Katz Radio Inc., Bridgeport, Conn.; Bob Green, WYAY(FM) Gainesville, Ga.; Perry Ury, WTC-AM-FM Hartford, Conn.

Radio Allocation: From Expanded Hours to Expanded Band. 9:15-11 a.m. Room W107. Moderator: Barry Umansky, NAB. Panelists: Larry Eads, FCC; Robert Pettit, FCC; Jules Cohen, Jules Cohen and Associates; William Potts Jr., Haley, Bader & Potts, Washington; James McKinney, FCC; Wallace Johnson, Moffett, Larson & Johnson, Washington.

Station Acquisition. 9:15-10:30 a.m. Rooms W102, 104, 110. Moderator: Barry Skidelsky, Barry Skidelsky & Associates. Panelists: Larry Justice, WCIJ(FM) Falmouth, Mass.; Paul Raeder, ComCapital Group; Charlie Earls, George Moore & Associates.

Five concurrent sessions. 10:45a.m.-noon. *Telephone Cost Management*. Room W106. Moderator: Marcia DeSonne, NAB. Panelists: Jerry James, ClayDesta Communications; Julian Shepard, NAB; Mark Durenberger, Hubbard Broadcasting; Walt Suski, AT&T Communications; Jeffrey Sudikoff, IDB Communications. *Vendor Money: New Advertising Dollars for Radio*. Room W101. Presenters: Karen Wald, Blair Radio; Steven Strauss, Strauss & Associates. *Common Traits of Successful Managers*. Rooms W102, 104, 110. Moderator: Bernadette McGuire, NAB. Panelists: Mickey Luckoff, KGO(AM) San Francisco; Cindy Shepard, WNYR(AM)-WEZO(FM) Rochester, N.Y.; Robert Fox, KVEN(AM) Ventura, Calif.; Stuart Brotman, management consultant; Jim Taszarek, Radio Sales Systems. *Stop the Madness: Abuse in the Station*. Room S414. Panelists: Al Jackson, NBC; Wade Williams, Group W. *The Seven Step Formula for Doubling Small Market Sales*. Room W103. Presenter: David Gifford, RAB.

Radio luncheon. 12:15-2:30 p.m. Arena. Introduced by David Parnigoni, NAB. Toastmaster: Bev Brown, radio board vice chairman. Induction into Radio Hall of Fame of Mel Allen and Earl Nightingale.

Five concurrent sessions. 2:45-4:00 p.m. *Fred Palmer on Management*. Rooms W108, 109, 115. Presenter: Fred Palmer, WATH(AM) Athens, Ohio. *Operating a Small Market Radio Group*. Room W106. Moderator: Paul Hedberg, Hedberg Broadcast Group. Panelists: Cary Simpson, WTRN(AM) Tyrone, Pa.; Glenn Olson, KQWC-AM-FM Webster City, Iowa; Russ Withers, WMIX-AM-FM Mt. Vernon, Ill.; Galen Gilbert, KDNT(AM) Denton, Tex. *Packaging for Profitability*. Room W101. Moderator: Tom Rounds, Radio Express, Los Angeles. Panelists: Tom Holiday, WERE(AM)-WGCL(FM) Cleveland; Bill Battison, Westwood One; Bob Fish, WHJJ(AM)-WHJY(FM) Providence, R.I.; Joshua Feigenbaum, MJL. *The Radio Way vs. The IBM System*. Rooms W102, 104, 110. Presenters: Robert Heckman, M Tech; Jim Taszarek, Radio Sales Systems. *Hiring & Firing*. Room W105. Moderator: Valerie Schulte, NAB. Panelists: Henry Rivera, Dow, Lohnes & Albertson; James Shook, FCC; Jason Shrinsky, Shrinsky, Weitzman & Eisen; Michael Zinser, King, Ballow & Little.

Five concurrent sessions. 4:15-5:30 p.m. *Shaking Up Your Market*. Room W102. Moderator: Bernadette McGuire, NAB. Panelists: Bud Wertheimer, WFOR-FM Rochester, N.Y.; Bart Walsh, WKYS-FM Washington; Bob Zimmerman, WRSC(AM) State College, Pa.; Rick Sklar, Rick Sklar Communications Inc.; Charles Jones, WIS(AM) Columbia, S.C. *For New Owners—What's Next?* Room W107. Mark Kassof, Mark Kassof & Co. *Station Promotions that Work*. Rooms W102, 104, 110. Presenter Beryl Spector, president, Broadcast Promotions and Marketing Executives, WMHT-TV-FM Schenectady, N.Y. *The Exciting New Retail Research*. Room W101. Moderator: Robert Galen, RAB. Panelists: Edith Hilliard, Leigh, Stowell Co.; Benny Griffin, Great Empire Research. *Radio Music Listening: Where Are We?* Room W105. Moderator: Robert Henley, Chairman, All-Industry Radio Music License Committee. Panelists: Voncile Pearce, Radio South Inc.; Alan Weinschel, Weil, Gotshal & Manges.

Seven concurrent 'Night Court' sessions. 8-9 p.m. All in Loews Anatole hotel. *What You MUST Know About Employee Conflicts of Interest, Spon-*

sorship ID, Payola & Plugola. Madrid room. Moderator: Jeff Baur, NAB. Panelists: Thomas Carroccio, Santelli, Smith, Kraut & Carroc Gordon Coffman, Wilkinson, Barker, Knauer & Quinn; Barry Frieder Wilner & Scheiner; Ramsey Woodworth, Wilkes, Artis, Hedrick & Le *Radio Allocations: New Stations, Opportunities and Challenges*. Manchester room. Moderator: Barry Umansky, NAB. Panelists: Larry Eads, FCC; Dennis Kahane, Pillsbury, Madison & Sutro; Fred Polner, Rothman Gordon, Foreman & Groudine; Lisa Stevenson, Koteen & Naftalin. *Get the Edge with Your Satellite Dish*. Ming room. Moderator: Valerie Schulte, NAB. Panelists: Albert Halprin, FCC; Robert Mazer, Chadbourne, P, Whiteside & Wolff; Marvin Rosenberg, Fletcher, Heald & Hildreth; C. Epstein, Latham, Watkins & Hills. *Political Advertising Primer*. Morocco room. Moderator: Steve Bookshester, NAB. Panelists: Milton Gross, F, Craig Blakeley, Schnader, Harrison, Segal & Lewis; Bill Green, Piers Ball & Dowd; Lewis Paper, Grove & Engelberg. *Monitoring Your Advertising Practices Post-Deregulation*. Miro room. Moderator: Julian Shepard, NAB. Panelists: John Crigler, Haley, Bader & Potts; Edward Hennenberg, Howrey & Simon; Thomas Keller, Verner, Liipfert, Bernhard, McPherson Hand; Christopher Reynolds, Dempsey & Koplovitz. *Copyrights & Wrongs (and Trademarks, Too)*. Milan room. Moderator: Eugenia H. NAB. Panelists: Michael Berg, Miller & Young; David Leibowitz, Wile Rein; James Popham, Fawer, Brian, Hardy & Zatzkis; John Stewart Crowell & Moring. *The Fair Labor Standards Act—What It Means to You*. Lalique room. Moderator: Catherine Grant, NAB. Panelists: Michael Zinser, King, Ballow & Little, Nashville; Brian Farrington, U.S. Department of Labor; John Rose, NBC; Alan Serwer, Haley, Bader & Potts.

Seven concurrent 'Night Court' sessions. 9:15-10:15 p.m. All in Loews Anatole. *Dealing with the FCC: Tips From Commissioners' Legal Assistants, FCC Lawyers and Key Personnel*. Madrid room. Moderator: Robert Baumann, NAB. Panelists: Kenneth Howard, Diane Killory, James Shook and Roy Stewart, all with FCC; Scott Johnson, Gardner, Carton & Douglas. *Improving AM Radio: A Government-Industry Resolution*. Manchester room. Moderator: Barry Umansky, NAB. Panelists: Ralph Haller, FCC; Robert duTreil, duTreil Rackley Consulting Engineers; Mark Prak, Tharrington Smith & Hargrove; Richard Swift, Tierney & Swift. *Troublesome Talk: How to Prevent Talk Shows from Generating Libel Suits and FCC Violations*. Morocco room. Moderator: Steve Bookshester, NAB. Panelists: Matth Leibowitz, Leibowitz, Spenser & Freedman; Jeffrey Malikson, Baha Communications; Harold McCombs Jr., Marmet & McCombs; David Levine, Donrey Media Group. *Acquisition Fever: Strategies for Success*. Morocco room. Moderator: Julian Shepard, NAB. Panelists: George Bosari, Bos & Paxton; Janice Hill, Arter & Hadden; Peter O'Connell, Pierson, Ballow & Dowd; Zave Unger, Law Offices of Zave Unger. *Winning Within the Lotteries, Contests, Promotions*. Milan room. Moderator: Eugenia H. NAB. Panelists: Tom Davidson, Sidley & Austin; Harry Martin, Reddy, Ball & Martin; John Quale, Wiley & Rein; James Weitzman, Shrinsky, Weitzman & Eisen. *Unions—What to Do After You've Lost the Election*. Lalique room. Moderator: Catherine Grant, NAB. Panelists: Stanley Brown, Are Fox, Kintner, Plotkin & Kahn; Joseph Gerstner, Westinghouse Broadcasting & Cable; Richard Marcus, Reuben & Procter; Frank Stewart, Tietz & Stettinius & Hollister.

TELEVISION MANAGEMENT

Five Concurrent Sessions. 7:45-9:00 a.m. *Examining the Public Interest Standard*. Moderator: FCC Commissioner Mimi Dawson. *Getti Along with Your Cable Operator*. Moderator: Burt Harris, Harrisco Broadcasting. Panelists: Michael Berg, Miller & Young; Gail Brekke, WNYT-TV New Orleans; John Evans, Metro Cable; Robert McRann, Cox Cable San Diego; Paul McCarthy, Broadcast Cable Associates. *Forecasting—Tool For All Managers*. Moderator: Mark Wyche, Browne, Bortz & Coddington. Panelists: Michael Conly, WTLV-TV Jacksonville, Fla.; Charles Kallec, Frazier, Gross & Kadlec; Robert Wormington, KSHB-TV Kansas City, Mo. *Naturally Effective... The Best Possible You*. Presenter: Peter Giuliano, The Executive Communications Group. *TV Music Licensing—1986 Where's the Beef?* Room S414. Moderator: Leslie Arries, WYB-TV Buffalo, N.Y. Panelists: Jack Zwaska, All-Industry Television Station Music License Committee; M.N. Bostick, KWTX-TV Waco, Tex.; Marvin Grieve, Association of Program Distributors; Neil Pugh, WHO-TV Dayton, Ohio.

The Outlook from TVB. 9:15-10:30 a.m. Theater. Presenters: Blaise Byrne, LIN Broadcasting and TVB chairman; Roger Rice, TVB president.

Three concurrent sessions. 10:45 a.m.-noon. *TV Critics... Friend*

Foe? Room S411. Moderator: Deborah McDermott, WKRN-TV Nashville. Panelists: Ann Hodges, Television Critics Association; Bill Carter, *Baltimore Sun*; Jerry Nachman, WNBC-TV New York; George Keramidos, Capital Cities/ABC; Jeff Fossier, WNEV-TV Boston; Tom Goodgame, WBZ-TV Boston. **News Promotions: Your Best Foot Forward.** Room S412. Moderator: Mike McCormick, WTMJ-TV Milwaukee. Presenters: Doug Clemenson, CBS Inc.; Peter Hoffman, McHugh & Hoffman Inc.; Don Wells, Frank Magid Associates. **The Crisis in Funding for Public Broadcasting.** Room S413. Moderator: Ralph Baruch, Viacom International. Panelists: William Baker, Group W; William McCarter, WTTW-TV Chicago; FCC Commissioner James Quello; Martin Rubenstein, Corporation for Public Broadcasting; Representative Harold Rogers (R-Ky.); Thomas Rogers, House Telecommunications Subcommittee.

RADIO ENGINEERING

Radio New Technology. 9-11:45 a.m. East ballroom D. Session chairman:

Russell Pope. **Signal Processing for FMX Broadcasts.** 9:40 a.m. Emil Torick, CBS Technology Center. **Transmitter Remote Control via Dial-up Telephone.** 9:40 a.m. John Leonard, Gentner RF Products Division. **Off-Premise Remote Control of a Radio Station Using a Personal Computer.** 10:05 a.m. Wesley Becker, Family Stations Inc. **Novel Remote Control System Uses Packet Radio to Conserve Broadcast Auxiliary Spectrum.** 10:30 a.m. Harold Hallikainen, Hallikainen & Friends. **Panel on Remote Control & ATS.** 10:55 a.m. John Leonard, Wesley Becker, Michael D. Callaghan, KHIS-AM-FM Los Angeles; John Reiser, FCC.

Engineering luncheon. 12:30-2:15 p.m. Hyatt Regency, Reunion ballroom. Presentation of Engineering Achievement Award to George H. Brown, retired RCA engineering executive. Speaker: George Waters, director, European Broadcasting Union Technical Center.

Radio Production. 2:30-5:50 p.m. East ballroom D. Session chairman: Dan Lacy, KIXQ-FM Durango, Colo. **Setting up a Regional Sports Network.** 2:45 p.m. Robert Smith Jr., WRKO(AM) Boston. **On-Air Computerized Telephone System for Broadcasters.** 3:10 p.m. Jacques Coultellier, Normex Ltd. **The WLS Radio Remote Vehicle.** 3:35 p.m. Edward Glab, WLS(AM) Chicago. **The New ABC Radio Network Broadcast Center.** 4:10 p.m. Richard Martinez, ABC Radio. **Unique Features of the New NBC Radio Networks.** 4:35 p.m. Warren Vandever, NBC Radio Networks. **Designing Cost Effective, Good Sounding Production and Air Studios.** 5 p.m. Robert Hansen, Robert Hansen & Associates. **Building a Cost Effective, Format Flexible, Competitive Radio Facility.** 5:25 p.m. Paul Donahue, Gannett Radio.

Non-Ionizing Radiation. 3-5:45 p.m. East ballroom B. Session chairman: Jules Cohen, Jules Cohen & Associates. **Radio Frequency Radiation and FCC Requirements Under the National Environmental Protection Act.** 3:15 p.m. Robert Cleveland, FCC. **Real-Time Data Averaging for Determining Human RF Exposure.** 3:40 p.m. Richard Tell, Environmental Protection Agency. **Controlling Occupational RF Energy Exposure on the Mt. Sutro Broadcast Tower.** 4:05 p.m. Donald Lincoln, Sutro Tower Inc. **Antenna Sidelobe Control to Reduce Occupational RF Energy Exposure.** 4:30 p.m. G.W. Collins. **Panel on Meeting the New RF Guidelines.** 4:55 p.m. Tell; William Hassinger, FCC; Lincoln; Barry Umansky, NAB.

AM Stereo. 4-5:30 p.m. East ballroom C. Session chairman: Michael Rau, NAB. **Convincing**

Station Management of the Potential of AM Stereo. 4:15 p.m. Ronald Frizzell, WLAM(AM) Lewiston, Me. **Words of Wisdom in Making the Conversion to AM Stereo.** 4:40 p.m. James Stanley, Stanley Broadcast. **AM Stereo Conversions: Reducing ICPM in AM Transmitters.** 5:05 Dominic Bordonaro, WAAF(AM)-WGTO(FM) Worcester, Mass.

Tuesday evening workshops. 7-8:30 p.m. Hyatt Regency. **Radio Contact Engineers.** Lattimer room. James Loupas, James Loupas Associates; James Stanley, SBE; Thomas Osenkowsky, Radio Engineering Broadcast; Barry Victor, Victor Group. **Studio Acoustics.** Brisbane room A. Peter D'Antonio, RPG Diffuser Systems; Chips Davis, LEDE Designs; Russel Berger, The Joiner-Rose Group; William Ryan, KVIL-FM Dallas. **AM Antenna Tuning.** Brisbane room B. Karl Lahm, A.D. Ring & Associates; Alan Gearing, Jules Cohen & Associates; Ronald Rackley, duTriel-Rackley Consulting Engineers; John Reiser, FCC. **Non-Ionizing Radiation Measures.** Duncan Room. Richard Tell, EPA; James Hatfield, Hatfield & Dawson; John Kean, Connecticut Educational Telecomm.; Reed Holaday, Holaday Industries.

FM NEEDS "THAT EXTRA MILE!"

When it comes to designing and building towers for radio transmission, especially for Class C FM, no company is more demanding of itself than we are. We believe in "going that extra mile" for excellence . . . every time.

When you choose STAINLESS, you get 39 years of proven performance; the best design for your present and future needs; the most reliable, state-of-the-art fabrication, and the kind of thorough, knowledgeable service that will make your life a lot simpler, easier, and worry-free.

STAINLESS . . . because "going that extra mile" does make a difference . . . especially for FM.

The
EXPERIENCED
Tower People.



Stainless, inc.

North Wales, PA 19454 U.S.A.

Phone: (215) 699-4871

Telex: 510-661-8097

See us at the
NAB Show.
Booth 2735.

AF0486

TELEVISION ENGINEERING

Television Satellite Systems. 8:15-11:45 a.m. East ballroom B. Session chairman: Max Berry, ABC Television. *New Techniques in Duplex Voice Services for SNG Operations.* 8:30 a.m. Sidney Skjei, GTE Spacenet. *ABSAT: The ABC Satellite News Gathering System.* 8:55 p.m. Ben Greenberg, ABC Television. *RADET: The CBS News Gathering System.* 9:20 a.m. Jayaram Ramasastry, CBS Television. *Second Generation Fly-Away SNG System.* 9:45 a.m. William Walisko, Spectra Communications. *Digital Techniques Solve SNG Communications Problems.* 10:10 a.m. Heinz Wegener, Wegener Communications. *SNG, The Ka Band and Future Satellites for Broadcasters.* 10:35 a.m. Bramwell Flynn, Dalsat. *Panel on Satellite Interference and Uplink Operator Training.* 11 a.m. John Bowker, RCA Corp.; David Baylor, PBS; Russell Summerville, WNDU-TV South Bend, Ind.; Chris Summey, Midwest Communications; Ralph Haller, FCC.

Non-ionizing Radiation. 3-5:45 p.m. East ballroom B. Session chairman: Jules Cohen, Jules Cohen & Associates. *Radio Frequency Radiation and FCC Requirements Under the National Environmental Protection Act.* 3:15 p.m. Robert Cleveland, FCC. *Real-Time Data Averaging for Determining Human RF Exposure.* 3:40 p.m. Richard Tell, Environmental Protection Agency. *Controlling Occupational RF Energy Exposure on the Mt. Sutro Broadcast Tower.* 4:05 p.m. Donald Lincoln, Sutro Tower Inc. *Antenna Sidelobe Control to Reduce Occupational RF Energy Exposure.* 4:30 p.m. G.W. Collins. *Panel on Meeting the New RF Guidelines.* 4:55 p.m. Tell; William Hassinger, FCC; Lincoln; Barry Umansky, NAB.

Tuesday evening workshops. 7-8:30 p.m. Hyatt Regency. *Radio Contact Engineers.* Lattimer room. James Loupas, James Loupas Associates; James Stanley, Stanley Broadcast Engineering; Thomas Osenkowsky, Radio Engineering Broadcast; Barry Victor, Victor Group. *Studio Acoustics.* Brisbane room A. Peter D'Antonio, RPG Diffuser Systems; Chips Davis, LEDE Designs; Russel Berger, The Joiner-Rose Group; William Ryan, KVIL-FM Dallas. *AM Antenna Tuning.* Brisbane room B. Karl Lahm, A.D. Ring & Associates; Alan Gearing, Jules Cohen & Associates; Ronald Rackley,

duTriel-Rackley Consulting Engineers; John Reiser, FCC. *Non-Ionizing Radiation Measures.* Duncan Room. Richard Tell, EPA; James Hatfield, Hatfield & Dawson; John Kean, Connecticut Educational Telecommunications Corp.; Reed Holaday, Holaday Industries Inc.

Wednesday, April 16

RADIO MANAGEMENT

Three Concurrent Sessions. 8:30-9:45 a.m. *NAB Radio Swap Shop.* Room W103. Moderator: David Parnigoni, NAB. Panelists: Bob Flotte, KPSA(AM)-KUUX(FM) Alamogordo, N.M.; Zane Roden, WOKJ(AM)-WJMI(FM) Jackson, Miss.; Ron Ostland, KOH(AM) Reno; Harold Segal, WNEB(AM) Worcester, Mass.; George Allen, KLGA-AM-FM Algona, Iowa. *Acquisition Financing: Where to Get It and How to Get It with a Professional Business Plan.* Room W101. Panelists: Matthew Leibowitz, Leibowitz, Spencer & Freedman; Tom Buono, Broadcast Investment Analysts; David Schultz, ComCapitol. *Making It Happen in Spanish Radio.* Room W114. Moderator: George Hyde, WOBA-AM-FM Miami. Panelists: Raul Alarcon, WSKQ(AM) Newark, N.J.; Nathan Safir, KCOR(AM) San Antonio, Tex.; Carlos Aquirre, Radio Central Inc.

FCC Engineers Forum. 8:30-10 a.m. East ballroom B. Session chairman: Warren Happel, Scripps Howard Broadcasting. *FCC Technical Regulation Panel.* Ralph Haller, assistant chief, Policy and Rules Division; William Hassinger, engineering assistant, Mass Media Bureau; Thomas Stanley, acting chief engineer, and Robert Cleveland, physical scientist, Office of Engineering & Technology; John Reiser, assistant chief, Engineering Policy Branch; Clark Poole, electronic engineer, Field Operations Bureau.

Joint closing general session. 10 a.m.-1 p.m. *A Message to Broadcasters About the Bicentennial of the Constitution.* Arena. Closing remarks: Chief Justice Warren Burger and FCC Chairman Mark Fowler.

Related Events

Friday, April 11

Broadcast Education Association (BEA) events, all at Loews Anatole hotel: 8 a.m., registration; 8 a.m.-6 p.m., meeting; noon, luncheon (Khmer Pavilion); 6 p.m., reception (ballroom A).

Saturday, April 12

BEA meeting. 8 a.m.-5 p.m. Loews Anatole. *National Association of Black Owned Broadcasters (NABOB)* meeting. 9 a.m.-5 p.m. Loews Anatole, Cardinal rooms A & B. Luncheon, 12:30-2:30, Plum Blossom room. *NAB/American Bar Association* communications law forum. 9 a.m.-5:30 p.m. Loews Anatole, Miro room. Luncheon, noon, Morocco room.

Sunday, April 13

BEA meeting. 8 a.m.-noon. Loews Anatole. *NABOB* brunch. 11 a.m.-2 p.m. Loews Anatole, Fleur de Lis room. *Association of Maximum Service Telecasters (AMST)* meeting. 12:30 p.m. Dallas Convention Center, east ballroom C.

TARPAC Red, White and Blue Club reception. 1:30 p.m. Convention Center, room N401. *Society of Broadcast Engineers* annual membership meeting. 5 p.m. Convention Center, east ballroom D.

Monday, April 14

Broadcasters Christian Heritage prayer breakfast (interdenominational). 7:30 a.m. Hyatt Regency hotel, Duncan room. *Syndicators/Program Producers* breakfast.

7:30 a.m. Dallas Convention Center, room W116.

AMST engineering breakfast. 7:30 a.m. Adolphus hotel, grand ballroom A.

Ham radio operators reception. 6-7:30 p.m. Hyatt Regency, ballroom A.

Tuesday, April 15

Broadcasters Christian Heritage prayer breakfast (interdenominational). 7 a.m. Hyatt Regency, Duncan room.

Broadcast Pioneers breakfast. 7:30 a.m. Loews Anatole, grand ballroom A.

International visitors reception. 5-6:30 p.m. Hyatt Regency, ballrooms A, B & C.

Wednesday, April 16

Broadcasters Christian Heritage prayer breakfast (interdenominational). 7 a.m. Hyatt Regency, Duncan room.

NAB hospitality suites

Alias Research
American Radio Brokers
Americom Radio Brokers
Arent, Fox, Kintner, Plotkin & Kahn
Toby Arnold & Associates
Arter & Hadden
Asaca/Shibasoku Corp. of America
Associated Press
Aurora Systems
Automated Business Concepts

Loews Anatole 423
Loews Anatole 5182
Loews Anatole 610
Sheraton-Dallas
Loews Anatole 623
Fairmont 1100
Hilton 1604
Loews Anatole 1053
Sheraton-Dallas
Marriott Market Center 612

Basys Inc.
Birch Radio

Hyatt Regency 2628
Loews Anatole 2082

Blackburn & Co.
Blair Radio
Bonneville Broadcasting System
Robert Bosch Corp.
Bridal Fair
BROADCASTAP
Broadcast Investment Analysts
Broadcast Marketing Associates
Broadcast Microwave
BROADCASTING Magazine
Broadcasting and the Law
Bryce Video
BSM Broadcast Systems

Hyatt Regency 2217, Loews Anatole 810
Loews Anatole 823
Loews Anatole 434
Loews Anatole 434
Hyatt Regency 618
Loews Anatole 772
Fairmont 2100
Adolphus 733
Fairmont 1501
Plaza of the Americas
Loews Anatole 472
Sheraton-Dallas
Sheraton-Dallas

Burkhart/Abrams/Michaels/Douglas	Loews Anatole 1689	The Mahlman Co.	Loews Anatole 723
Capital Cities/ABC		Major Market Radio	Loews Anatole 553
Radio Network	Loews Anatole 27th floor	Management Solutions Computer Systems	Loews Anatole 2282
TV Network	Plaza of Americas 1524	Reggie Martin & Assoc.	Loews Anatole 710
CBS Inc.		Masla Radio	Loews Anatole 872
RadioRadio, Radio Network and Representatives	Loews Anatole 1134	McGavren Guild Radio	Loews Anatole 734
Television Network	Fairmont 1901	Ralph E. Meador & Associates	Loews Anatole 8189
Century 21 Programing	Loews Anatole 1172	Media General Broadcast Services	Loews Anatole 8172
Chapman Assoc.	Loews Anatole 923	Midwest Communications Corp.	Hyatt Regency 818
Chester Cable div.	Fairmont 1800	George Moore & Associates	Loews Anatole 1582
Churchill Productions	Loews Anatole 1189	Motorola AM Stereo	Loews Anatole 484
Chyron Corp.	Hilton 1146	Al Ham's "Music of Your Life"	Loews Anatole 1772
Donald K. Clark Inc.	Loews Anatole 1789	Mutual Broadcasting System	
CNN Radio	Loews Anatole 523	Westwood One	Loews Anatole 1034
Coleman Research	Loews Anatole 372	National Black Network	Loews Anatole 934
Comark Communications	Hyatt Regency 1418	National Broadcasting Co.	
Comedy Network	Loews Anatole 2682	Radio Network	Loews Anatole 1234
Communications Equity Associates	Fairmont 1101, Loews Anatole 753	Television Network	Fairmont 2500
Cotis Conner Cos.	Loews Anatole 1672	Nightingale-Conant Co.	Loews Anatole 334
Continental Electronics	Greenelefe 1115	Norpak Corp.	Sheraton-Dallas
Conus Communications	Fairmont 1021	O'Grady & Associates	Wyndham 2914
Convergence Corp.	Sheraton-Dallas	OPV Systems	Sheraton-Mockingbird
R.C. Crisler & Co.	Hyatt Regency 2117	PAG America	Sheraton-Dallas
CSI Electronics	Loews Anatole 5172	Paltex	Hyatt Regency 2018
Custom Audience Consultants	Loews Anatole 4165	C.R. Pasquier Associates	Plaza of the Americas 601
Data Communications	Hyatt Regency 1118	Pepper & Corazzini	Adolphus 931
Digital Broadcast Systems	Best Western-Hacienda 119	Peters Productions	Loews Anatole 9165
DiversiCom	Loews Anatole 310	Philips Television Systems	Adolphus 920
Dow, Lohnes & Albertson	Fairmont 1801	Pierson, Ball & Dowd	Loews Anatole 584
Drake-Chenault	Loews Anatole 1210	Pioneer Electronics	Hyatt Regency 1718
Durpetti & Associates	Loews Anatole 784	Jeff Pollack Communications	Loews Anatole 1465
Eastman Radio	Loews Anatole 7172	Ward L. Quaal Co.	Hyatt Regency 1618
EEV	Hilton 2028	R&R Syndicators	Loews Anatole 572
Elcom Bauer	Hilton 1667	Radiation Systems	Fairmont 521
Encom Telecommunications & Technology	Hyatt Regency 1918	Raymond & O'Grady Associates	Loews Anatole 1889
William A. Exline Inc.	Loews Anatole 710	Resort Broadcasters	Wyndham
Fidelipac Corp.	Loews Anatole 672	Cecil L. Richards	Hyatt Regency 1018
Film House	Loews Anatole 1282	Thomas L. Root, P.C.	Fairmont 821
FirstCom Broadcast Services	Loews Anatole 1872	Robert W. Rounsaville & Assoc.	Plaza of the Americas 833
Firstmark Financial Corp.	Loews Anatole 7189	Satellite Music Network	Loews Anatole 2072
Norman Fischer & Associates	Loews Anatole 1010	Selcom/RAR	Loews Anatole 384
Fisher, Wayland, Cooper & Leader	Adolphus 525	Shane Media Service	Loews Anatole 1565
Fletcher, Heald & Hildreth	Hyatt Regency 518	Sheridan Broadcasting Corp.	Loews Anatole 834
Milton Q. Ford & Assoc.	Loews Anatole 1765	Barry Sherman & Associates	Loews Anatole 1665
Frazier, Gross & Kadlec	Loews Anatole 953	Burt Sherwood Inc./Mesa Broadcasting	Loews Anatole 1265
Gammon & Ninowski Media Investments	Hyatt Regency 617	Shrinsky, Weitzman & Eisen, P.C.	Adolphus 425
Gray Communications Consultants	Hilton 2067	Jon Sinton Associates	Loews Anatole 353
Grumman Electronics	Fairmont 801	Society National Bank	Loews Anatole 684
Bob Harper's Co.	Loews Anatole 1589	Stainless Inc.	Adolphus 435
HEDCO	Hilton 1904	Strategic Radio Research	Loews Anatole 1989
Jhan Hiber & Associates	Loews Anatole 6189	TA Associates	Loews Anatole 1882
Hillier, Newmark, Wechsler & Howard	Loews Anatole 1272	Telerep	Fairmont 921
Holt Corp.	Loews Anatole 653	Thoben-Van Huss & Associates	Loews Anatole 510
ITS Corp.	Fairmont 1500	Thomson-CSF Broadcast	Hilton 2004
Jamar-Rice Co.	Loews Anatole 1165	TM Communications	Loews Anatole 2272
JAM Creative Productions	Loews Anatole 9172	Torbet Radio	Loews Anatole 1782
Kadison, Pfaelzer, Woodard, Quinn & Rossi	Fairmont 1600	Edwin Tornberg & Co.	The Mansion
KalaMusic	Loews Anatole 1982	Townsend Associates	Hyatt Regency 1518
Kalil & Co.	Loews Anatole 1682	Transtar Radio Network	Loews Anatole 2172
Katz Communications	Loews Anatole 1472	Unidyne Direct Mail	Loews Anatole 1123
Kline Iron & Steel Co.	Hyatt Regency 1218	United Stations Radio Networks	Loews Anatole 2372
Koteen & Naftalin	Fairmont 621	USA Radio Network	Loews Anatole 1572
Lake Systems Corp.	Hyatt Regency 1017	Wall Street Journal Report Radio Network	Loews Anatole 2189
H.B. LaRue	Loews Anatole 1489	Weiss & Powell	Loews Anatole 984
LeBlanc & Dick Communications	Hilton 2066	Jim West Co.	Loews Anatole 1772
Leibowitz, Spencer & Freedman	Loews Anatole 472	Western Union	Sheraton-Dallas
Listec TV Equipment	Hyatt Regency 1617	Ronald Wooding & Assoc.	Loews Anatole 453
Listec Video Corp.	Fairmont 501	Adam Young Inc.	Fairmont 901

High definition TV:

So close and yet so far away

It might be worthwhile to begin with the basic case for high-definition television. What is going to be accomplished out of this, and what are the implications of a worldwide standard?

First of all, the television service we have today began with studies made in this country and elsewhere in the middle of the 1930's. The first major public demonstration of modern television—which, by the way, was called high definition in those days—was at the 1939 World's Fair. And 525 lines was what was possible. The British had started earlier with 405 lines. And that was the best the technology could do.

We picked an aspect ratio three to four because that's the way cinema was made. Then there was an intervening war. At the end of the war, rather than starting over with a whole new design, because technology did advance dramatically during the war, they went on with this program to get the service launched to the public.

Now, once we were started and there were a lot of receivers proliferating, it's not easy to change it without some major change in technology.

The first major change came with color. And here, by the way, is an interesting case. Today the opponents of the present high-definition standard talk about the importance of an evolutionary, or compatible, system, as opposed to a revolutionary system, which is being proposed. But when color came, it was the United States that took the evolutionary solution, added color to the existing 525-line system, while England and France and parts of Europe took the revolutionary approach, abandoning the old scanning altogether, completely obsoleting the sets that were there and starting 625-line color in PAL and SECAM, which were absolutely incompatible with 819 or 405.

So you come to breaking points where you can make major changes. The rationale for the present sort of high-definition system is that you can't extend forever a system that's 40 years old. It does continue to get better. And we're going to keep working to make it better. But if you're going to make a change, it's not worth going through the agony to make a small improvement. We decided to make a very large improvement, and we had a very specific target in mind. The target was to make the system as good as the 35 millimeter cinema in the theater, not on television. That was the standard of excellence considered by the public to be the optimum of quality. So we set out to make the system as good as the 35 millimeter cinema and that's been achieved.

It isn't just a sharper picture. It's a good deal sharper picture, of course, but it's very much improved for color information without the severe bandwidth limitations of NTSC and SECAM, to fit narrow channels. It's very much better color. It's also a wide screen; it's now moved to 1.78:1, from 1.66:1—it's even wider now under the latest proposals. So it's wide screen similar to the cinema. It's not only stereophonic sound but it's digital sound—at a time when the public is racing to buy compact disks at a rate more than twice that of phonograph records.

Now, the stereo system that we have just improved for terrestrial broadcast is an analog system. We have a way to go to convert that to

digits. So HDTV has digital sound as well.

This opens the door to large-screen television, and means that we don't have to continue looking at the world through keyholes.

Does it also open up the possibility or does it not accomplish the elimination of NTSC, PAL, PAL-2 and SECAM, the four incompatible standards under which the world operates?

Well, for the production side, those are already rapidly disappearing with the emergence of the digital film. NTSC, PAL's and SECAM will sooner or later disappear from the production scene in favor of digits, and they are already disappearing even in the analog domain with the component small format tape system. Nevertheless, they are very good transmission standards and they are in place. There's a very large worldwide network of stations, so they're not going to disappear tomorrow. But it was just last year when the 405-line and the 819-line systems that ran in parallel with 625 for some 20 years in Europe were finally shut down.

I personally believe that we will find ways to transmit enhanced and high-definition pictures on those terrestrial links. The old standards will sooner or later give way to new transmission standards, but it's not going to be overnight.

The effort toward standardization began four years ago?

The first study question was in the previous study period, seven years ago. But my impression is that there weren't many papers filed. The real work began four years ago.

The first really official document that said there were a lot of people interested in the single standard came out of the Inter Union meeting [of world broadcast organizations]. That was the first official document that said these broadcast unions are interested in a single standard and in achieving it during this next study period, and that we should do studio production first and then transmission.

There really was no outspoken opposition from any administration until about two weeks before the final meeting of study group 11-6, which was September 1985. People were not saying yes or no. Some were saying yes, some were saying maybe, but there was no really outspoken opposition. There were people concerned about whether we can take a production standard without considering the bandwidth implications of broadcasting. But it was not possible to define the transmission standard until you knew what you had to transmit, so you had sort of a chicken and egg thing there.

Most of the opposition in various parts of the world is very sincere. There is a large segment of the world on 50 hertz television systems; it's probably half of the world audience. It's a much larger percentage of the world's surface, but it's about half of the world's audience. High definition will stay at 60 hertz, so they'll have to transition from 60 hertz to 50 hertz for some period of years to feed the present systems. And that's not an inconsequential problem.

Standards converters are around, and they've been shown to work and they're not that expensive and so on, but if you put yourself in that position, put America in that position, this is not something that we would just think about for an hour or so.

It's important to remember that this is, after all, a production



The effort to rally the world behind a single standard for HDTV climaxes next month in Dubrovnik, Yugoslavia, when the CCIR (International Radio Consultative Committee) meets in plenary session. For the world's senior engineering organization, those deliberations will determine whether the 1,125-line, 16:9 aspect ratio, 60 hertz system developed by Japan's NHK will become the target all shoot for beyond today's 525- and 625-line systems. Joseph A. Flaherty, vice president and general manager of engineering and development for the CBS Operations and Engineering Division, has been a leader of the American effort to develop HDTV's parameters and to walk them through the laborious process leading to Dubrovnik. As the issue goes down to the wire, Flaherty met with BROADCASTING editors to discuss HDTV's merits and its chances for success.

standard. This is not the domain of the broadcasters. This is not something to be transmitted or something to be delivered to the home on a cassette as is a recording in the studio for production, editing, post-production. This is in the domain of the producers, the large producing companies that in some cases also are broadcasters, and it's in some way more important what they decide. Some of the people ready to express opinions really have not studied the problem.

So in my view, at least, it's extremely important what the broadcasting people do, and at this last Inter Union meeting there was a very strong recommendation in favor of the standard. I've forgotten the numbers now, but I think it was six or seven supporting and no opposition, with several asking for more time.

So there are a lot of sincere people working on this. Now, it doesn't mean there aren't some political problems. This is not just another tape standard, it's not a new lens mount or a new camera connector. This is the foundation system that will carry us into the 21st century.

Can you eliminate the 50 hertz-60 hertz differentials in the world?

It certainly can be eliminated on the production side if the world's producers are willing to do that. The advantage of doing that is that you can produce programs anywhere in the world on the same standard. It becomes more difficult when you consider this on the broadcasting side, or the transmission side. And each nation is going to have to decide whether it wants to remain on the 50 hertz format or 60 hertz format, or whether it's going to change. I don't believe that there's any need, or indeed any possibility, of having a single world transmission standard. Each country is going to do that; in fact, there'll be a series of high-definition standards. At this very moment the VCR tape machine you have at home does not record an NTSC signal. It's turned into a pseudo NTSC signal at the output of the tape machine, and that's what's going to happen. VCR's and videodisks and cable may indeed transmit the high-definition signal in a different way than it's transmitted by satellite or than it's transmitted by terrestrial stations. Or there may be a hierarchy of qualities. If you

can't transmit the whole high definition, you might transmit part of it in some system.

That will evolve. But the issue here, the important first step, the sort of irretrievable first step, is whether the world's production organizations adopt the single standard.

Now, if they do, it can't really be any lower than 60. It's very important to record the maximum number of pictures per second possible with practical light sensitivity and videotape utilization. The more pictures you record, the smoother the motion is and the more flexibility you have in post-production—in slow motion, for example. The slow motion on 50 hertz is really terrible. Even on 60 hertz, it's bad enough. You see the smear, you don't really quite see in every case whether the baseball or the football was in bounds or out of bounds because you have a smear. That's the reason the super slow motion was developed. So less than 60 hertz is really not the practical production system.

The question is, should it be more? You know, we studied 80 hertz for a while during this process and the problem is that the faster you photograph the scene, the more often you take the charge off the pickup device, the less time you have for the light to build up a charge. So the more light you need on the scene.

Now, we are already in marginal conditions in many sporting events with light. You can't go to the basketball arenas and put up lights around the periphery that will shine in the eyes of the players. It's vertical light coming down, and the horizontal component of that is pretty marginal. We already need an improvement of perhaps two to one.

In addition to that, the more pictures you record per second, the more videotape you use. Forever. No matter what the packing density ultimately is, it could always be less than that if you're recording fewer pictures, so the secret is to pick a practical number that's as high as possible, consistent with practical tape usage and light levels. That's the secret.

Now, certainly we didn't pick 60 hertz. That was done by some power engineer I suppose a hundred years ago. But it was for similar reasons, by the way—so you wouldn't see the lights flicker. When I

first came to New York as a boy, the subway lights used to run on 30 cycle power and when you went through the subway the lights were all flickering.

But in any case, 60 hertz happens to be about at the breaking point in this, and we certainly can't come down. And whether anyone would consider going up depends on these utilization figures and sensitivity figures.

I have the impression that two years ago there was greater optimism about world standards than there is today. Indeed, there is but a month to the final decision and things seem to be getting worse if not desperate.

I think that's true.

There are several factors at work. First, if you look at the various minutes of the meetings and the results of the tests and so on, they were all quite positive. All the tests that were requested by the various broadcasting organizations in the world were done, and they were all successful. I don't think a lot of people expected them to be successful—particularly the difficult problem of standards conversion. I think most figured that was going to be a failure. So if it was going to fail, you might as well be in favor of it, and if it failed, it's too bad. I think there's some of that.

But there's another factor that affects all of us in human life: The closer you get to the moment of truth, the more unsure and, in some cases, desperate you get. I mean, you do your income tax the last night, and most people pay the rent and look for an apartment as late as possible and so on. This is part of human nature.

So as you come to that moment of truth, suddenly high-level management people, or high-level political people, or manufacturers who have ignored the problem from the beginning, leaving it to the technicians to decide, have suddenly awakened to the fact that, "My God, we have to confront this decision." That happens in companies, that happens in private life, and it certainly happens in world life. I think that's happened here.

It's a very advanced technology. It's not a technology that's been worked on everywhere in the world, and people who are starting from zero realize that there was a fairly large investment of time and money to do that and they see themselves playing catch-up. Whether that's right or wrong, that's the way it often happens in the world, and they of course are reacting with opposition.

I frankly don't believe it has anything to do with the standard, by the way. That problem is going to face those same manufacturers whether or not there's a standard. No matter how many standards there are, the people who are already well advanced in the technology, whether it's the Japanese or the British or the Americans, the ones who are already advanced, can make that same technology in any standard they want. So the ones that are behind are going to stay behind, if they're not willing to spend a lot of money and time to catch up. And it is certainly a technology that's coming down the road.

It's worth remembering that for these 30 years, ever since the time of *I Love Lucy*, all three of the American television networks have made virtually all their prime time programs in high-definition 35 millimeter film. And yet, not one single broadcaster, not one single station, has ever delivered one frame of that to the home. So why do we do that?

It's expensive. But the residual value of those programs is grossly impacted by how they're recorded. If you put yourself in the position of a producer today, he's spending about \$1.2 million to produce a prime time hour. Having spent that on scripts and actors and so on, if you were that producer would you record that on 525-line or 625-line videotape? Probably not. Would you record it on 35 millimeter film? Well, that happens to be the best around. Will you record it in the future in high definition? Well, maybe. If it works, if it really fulfills its promise, you probably will. And you'll down-convert to whatever medium—cassettes or disks or broadcasts or whatever there is. But you'll have in the can, for this enormous investment, a very valuable commodity.

Just how serious is the jeopardy to the standard?

One never knows. The standard has gone through all the technical

committees of the CCIR. Study Group 11-B and the last one. U through Study Group 11, and in the various technical organization working on this, you generally have some 30 to 40 countries working on it. And these are more or less advanced countries with laboratories and research facilities—industrial countries. The next step, the plenary of the CCIR, involves the whole membership of some 158 countries. Not all those countries have been completely informed. There's an information lag. And those people will, of course, go to Dubrovnik to make a decision about this very important issue, and it is a very important issue. It's not a small issue. Small issues, you can deal with quickly. This is an important issue.

Certainly, opposition from important industrial nations with good reputations and good engineers is not helpful in coming to a unified position. On the other hand, a failure to obtain a position probably means that we simply move in to the domain of *de facto* standard again, and there'll be more than one. Whether it's two or three or four, I don't know, but it will be more than one. Unhappily, that



becoming the trend in standards, isn't it? In small format tape, and AM stereo, and teletext.

Can you address with more specificity who are the principal opponents to this proposal?

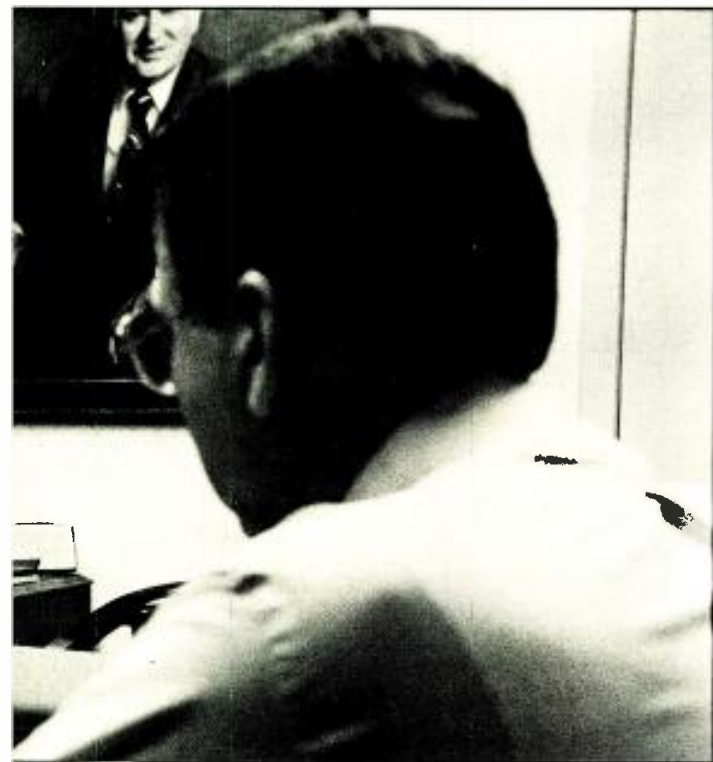
Well, if you can judge this from Study Group 11 and 11-6 experience, the opposition came in general from the Western European industrial countries: The Netherlands, because of its Philips operation; West Germany, with its industrial operation—and I'm addressing consumer electronics here. Professional electronics is not such a problem. The professional people build to all standards now and they really don't care so much what the standard is. It's the consumer we're talking about.

It's the United Kingdom, and it's France. So they're really four of the major Western European industrial nations. They have made a proposal for dual standards, a 50 and 60 hertz standard, which is a compatible one, similar to the digital standards we have. And that is, of course, really a nonstandard, because that involves the conversion at the high-definition level. They have also addressed the European Economic Community Council to try to achieve an overall European position. I am not personally enough of an expert to know whether that will succeed or not, but these things are not so much based on technical facts as they are on the political and industrial ones.

And now they see, of course, this enormous catch-up job that could cost a great deal of money. Some people have estimated that high-definition developments until now have cost somewhere around \$100 million. If it's half of that, it's still a great deal of money and it doesn't seem clear to me that anyone who is presently opposing this is willing to put up that kind of money to design a different system. If they did, it probably would take four or five years to bring it up to a manufactured development, and in four or five years the present standard can be for sale everywhere at prices roughly competitive with present equipment prices—perhaps 20% or 30% higher. But there's an enormous gap. And it's like an arms gap, you can't just close it by wishing to do so.

With 158 nations appearing for the CCIR vote, can four countries stop adoption of the standard?

It's a little dangerous to predict very much about this because there are some very specific voting regulations, with very specific mean-



ings to words. It's a very United Nations-oriented legal type of organization, and the word we think we understand don't necessarily mean the same thing.

Sometimes it's just a consensus, without a vote. If there's voting, then you have to be qualified. Like a club. For one thing, it means you have to pay your dues, and there's always the delinquent list in any organization, and people who are delinquent can't vote.

The CCIR does not turn out standards. It turns out recommendations. But that has a specific meaning, and our recommendation does not have to be unanimous. Now, how un-unanimous it is depends on the recommendation and on who takes reservations. The United States took a reservation during the WARC-83 on the satellite power. There have been recommendations put through with 30 or 40 people taking reservations. So it's really very unclear to say in advance what constitutes a success. It's not a black and white situation, and it changes during the dynamics of a meeting.

So I don't know what the chances really are, although they're certainly not as good as they were a couple of years ago.

I believe that the high-definition standard we have been dealing with already has a life of its own; it's going to be at least one standard if not the only standard in the world. It's so far advanced, and there is so much infrastructure already built and already available, at really practical prices, that people will begin to buy it and produce it.

Where is it apt to be applied first?

It's already being applied in Japan, but I think that you will see it applied in Hollywood production and particularly post-production and distribution.

When you hear from film people that film will always be there, that we'll never replace that and all the creative sides and so on—that is on stage, those are the people on stage, and it's very important that we never disurb the creative atmosphere on stage by changing anything that they don't willingly want. But once you get off stage, in the post-production and certainly in the distribution areas, you're dealing with a different group, the businessmen.

Now, if you can conceive that high definition could be distributed on tape machines that are as small as the ones you'll see at the National Association of Broadcasters convention in the digital domain, you can encrypt the tapes. And this knocks a very big hole in the piracy that takes a major bite out of the producers' income. Not only that, but every theater in the country will have an individual address, and if a tape shows up copied, you know exactly which theater it came from.

Plus the fact that tape can be played perhaps 200 to 300 times, as opposed to a fraction of that on film, and that costs a fraction to begin with and is lighter and cheaper to ship. The one missing link was quality. If HDTV provides the quality, you will see it applied in these respects before there is ever a camera on stage.

Similarly, the major motion picture studios and owners of large film libraries are transferring those libraries onto videotape. The only mechanically based system is still the cinema. Everything else is electronic: Cable, VCR's and disks and satellite and DBS and terrestrial—these are all electronic systems.

So, sooner or later, a producer must get into the electronic domain to recover his full potential profits. They are now transferring these very valuable original films to 525-line, and then to 625-line, videotape. And they end up back in the library with a very high quality film product and a not very high quality videotape product. The sensible thing is to transfer to high-definition videotape and then down-convert to whatever market you happen to be interested in at the moment. Then you have in the library a high quality film product and a high quality tape product.

Notice, some of these are applications that will start in relatively closed systems, without a camera on stage, without any disruption to the creative community.

These are the places where it's most likely to start. But if you've seen any of the demonstrations, the things that are the most exciting, that are absolutely unique, are high-definition sports. With the importance placed today on sporting events, everywhere, I just cannot believe that in the future—the near future that is, the next five to 10 years—that there will not be an effort to produce and distribute sporting events by high definition. I wouldn't be at all surprised to see the big games done at least in part in high definition by 1992.

I don't think there's a revolution coming. These will be applied where it makes good business sense and where the system actually proves itself. We're not going to shut down all of our terrestrial transmitters and we're not going to suddenly go out of this business. No, the opposite is going to be true—we're going to improve those the same way we did when we added color to TV. We're just going to go to a new plateau.

Is the standardization process itself obsolete?

I sometimes wonder. There are certainly many factors at work making the standardization effort more difficult in America and worldwide. And there's no sign that those factors will change—in fact, the negative factors will accelerate. The increasing speed with which technological developments take place, and the increased speed of obsolescence of technology, mean that there is far less time to make a standard and use it. There are some who argue that because of that there's less reason to have it in the first place.

Some have argued that the standards have built-in sunset clauses, and maybe that is the case. But that's what's working against the system. Also working against the system, at least in this country, is

the total deregulation of the FCC and these standards matters. In general, deregulation is a good thing; we certainly were too far on the other side before. But a free market can exist sometimes only if you have a standard. Competition is what you put in the boxcars, but the rails have to be an equal width all the way across the country, or you don't have a free market.

What's the case for standards?

The main case for standards is the ability to interchange product—in our case, programs. You need to be able to move the programs in order to afford the large production investment required to produce a show. You need to have access to the markets to recover that investment, based only on the quality of the show and not on the fact that somebody has spiral scanning. That's the case for it, but there are other cases, as well.

Take electronic news. We always had a de facto standard in 16 mm film; then we had a de facto standard in U-matic tape.

I believe that the population of the world was suddenly served much better with electronic news. And multiplying a proliferation of standards out there where it's not possible to just go to the nearest station or the nearest facility, to edit and transmit your program, is in the end going to do poor service to the public at large. Hauling extra equipment, hauling extra tonnage, moving it in and out of customs—this is not an easy proposition. Even exchanging equipment on the site with other newsmen is a common practice.

In general, however, I think it's fair to say that standards serve users better than they serve manufacturers. The manufacturers do have a more common market and a chance to compete everywhere if they have a common standard; but in general, they perceive that a little monopolistic corner somewhere, where they already have a certain loyal customer group, serves them better. Because if they sell you a tape machine that isn't compatible with anybody else, or they sell you a camera or whatever piece of equipment it is, and they sell you the accessories and the lenses and the time-base correctors and so on, you're less free to buy those from somebody else.

So it's an after-sale support. I don't personally believe that's true, but there are a lot of manufacturers who seem to believe that.

Should our readers, in the final analysis, be optimistic or pessimistic? Should they think that high definition will soon be part of their lives or will a negative decision at the CCIR put it out of reach?

Viewed from the standpoint of North America, the decisions of CCIR will in no way affect the speed with which high definition advances or is introduced into the marketplace. It's going to go at just the same speed, which is going to be on a next-five-to-10-year time scale. I'm talking about production. It really isn't going to affect the standard very much because I think the standard will be a de facto one. In the end, it's the people who have done the research, who are able to manufacture and build the equipment for a reasonable price, that sooner or later dominate the market.

And in a sense, that's the way it should be because the focus here is on the software, on the programs, and not on the hardware.

So, if our programs are as attractive as they have been up to now, that probably is not a major impediment—that buyers will accommodate to that. If our product is not as attractive, then whatever standard it's on probably doesn't help.

But certainly, a success in CCIR would let us go on to other work. A failure there or an unsuccessful recommendation will drag out the effort as further work is done, and could result—and probably would result—in more than one standard.

If you did have a de facto standard situation, where you have the western European countries resisting use of the system, how would that affect the economics of introducing and further development of HDTV?

Well, in the early years, I don't think it would have any effect because the market in North America and Asia is already so large that it soaks up an awful lot of production capacity. In the long run, of course, the larger market over which you can spread the development, the lower the cost to everyone.

Is it possible that these countries might vote against the standard now and yet pick it up and use it on their own two years from now?

That has happened frequently at the CCIR. Countries that have taken a reservation on a standard later adopt it, and go back and remove the reservation. That has happened, and it could well happen here.

The standard is particularly important in Third World areas strangely enough. If you look at the developing mass communications in these parts of the world, they are largely being done by satellite, because the most expensive thing to do is to build massive terrestrial transmission systems, with thousands of transmitters off in hazardous or jungle areas, or mountains—undeveloped areas where there's neither power to power them nor people to operate them.

So those countries are moving toward the use of satellites, which of course is the modern technology for covering that kind of a nation, a growing nation.

Why would they consider doing that and then buying any of the 40-year-old television technologies? The difference between any of the standard systems and high definition is an insignificant percentage of the cost of putting in the satellite transmission system in the first place. And with a large screen, if you consider Arab countries with community viewing and educational problems, with large screen television and groups of viewers, there's no contest. High definition is the way to do that. And even with such simple things as having two pages of a book open, using the HDTV aspect ratio, and you can't do that in standard television and you can't read it on standard television without closeups.

Is high-definition television inevitable, regardless of whether or not it's NHK's 1,125-line system, and can the consumer anticipate that when it arrives, it's going to look pretty much like the system that's being proposed?

You have to start with the premise that progress is inevitable. This is the next logical step. You can project beyond that—three-dimensional television and sophisticated transmission schemes and chips with programs stored on them and so on—but the next logical step is to make a system that is at least as good as what we have been used to all these years with our cinema.

Now should it be better than that? On the resolution side, ultimate resolution is limited by the movements in a scene, the camera, even the vibrations of the room. If you're looking at a lens or measuring a lens for resolution on an optical bench, everything is massive to keep it from moving. The minute you unlock the camera and put your hand on it, everything above about 1,000 lines is probably gone. You certainly don't have 2,000 or 3,000 lines there.

So it probably does not need to be any better. If the measurements that we made and others have duplicated about the cinema show that the final resolution on the screen is about 600 or 700 television lines, then the delivery to the home in that region is probably good enough. So again, starting somewhere around 1,000 lines allows for loss in post production and blow-ups and scanning and all that—so it's probably very close.

In terms of color range, we're covering most of the color triangle; I wouldn't think there's a very large improvement there. In contrast, there is, always the need to increase contrast in the cinema and everything because the eye is easily adaptable. This contrast is as good as the cinema as far as we can tell, but there's always a need for further improvement there. So that work will surely continue.

Sound is digital, stereophonic. That's state of the art now. I don't know where that next step may go unless it's a surround sound of some kind. But that seems to have plenty of head room.

One of the problems with standards is taking it too soon, in which case you limit development, or taking it too late, when there are multiple standards.

George Brown, the former RCA engineer [see "Fifth Estater," page 191], may have said it better than anybody. He said no standard should ever be taken that is fully circumvented by the present technology nor should be so far advanced as to be unachievable in a reasonable amount of time.

So that is the dilemma and that is the standards issue. When is the right time?

Stock Index

	Closing Wed Apr 2	Closing Wed Mar 26	Net Change	Percent Change	P/E Ratio	Market Capitali- zation (000,000)
BROADCASTING						
Capital Cities/ABC	232 3/4	232 1/2	1/4	.10	21	3,024
CBS	142	145	- 3	- 2.06	32	3,328
Clear Channel	19 1/4	19 1/4			29	56
Gulf Broadcasting	1/8	3/16	- 1/16	- 33.33	5	
Jacor Commun.	7 1/2	7 3/8	1/8	1.69	42	
LIN.	44 7/8	45 5/8	- 3/4	- 1.64	31	1,185
Mairite	15 1/4	15 1/8	1/8	.82	18	127
Mairite 'A'	14 3/4	14 5/8	1/8	.85	17	62
Price Commun.	10 7/8	8 7/8	2	22.53	80	
Scripps Howard	52 1/4	51	1 1/4	2.45	17	539
SunGroup Inc.	4 3/8	4 3/8			7	
Taft	96 3/4	93 5/8	3 1/8	3.33	21	874
TVX Broadcast Group	10 7/8	11	- 1/8	- 1.13	45	63
United Television	28	28 3/8	- 3/8	- 1.32	84	306

BROADCASTING WITH OTHER MAJOR INTERESTS						
A.H. Belo	50 3/4	51 7/8	- 1 1/8	- 2.16	24	587
Adams Russell	33 3/4	33 1/2	1/4	.74	21	208
Affiliated Pubs	45 3/4	45 5/8	1/8	.27	28	841
American Family	28 5/8	29 1/2	- 7/8	- 2.96	14	1,144
Assoc. Commun.	42 1/4	41 1/4	1	2.42	201	
Chris-Craft	62 3/8	61 1/8	1 1/4	2.04	44	399
Gannett Co.	72 1/4	71 1/2	3/4	1.04	23	5,798
GenCorp	75 1/4	79 7/8	- 4 5/8	- 5.79	21	1,647
Gray Commun.	138	138			23	68
Jefferson-Pilot	52	54	- 2	- 3.70	7	1,485
John Blair	21 1/2	20 7/8	5/8	2.99	173	
Josephson Intl.	8	8 1/4	- 1/4	- 3.03	37	
Knight-Ridder	47 5/8	48 1/2	- 7/8	- 1.80	21	2,667
Lee Enterprises	26 3/4	25 1/2	1 1/4	4.90	22	677
Liberty	42	41 1/2	1/2	1.20	18	423
McGraw-Hill	57 7/8	60 3/8	- 2 1/2	- 4.14	19	2,916
Media General	91 3/4	86	5 3/4	6.68	19	645
Meredith Corp.	77 1/4	77 3/4	- 1/2	- 0.64	14	731
Multimedia	35 3/8	34 1/4	1 1/8	3.28	389	
New York Times	62 5/8	62 7/8	- 1/4	- 0.39	21	2,502
Park Commun.	27 1/2	27 1/4	1/4	.91	25	379
Rollins Commun.	30 1/2	31 1/8	- 5/8	- 2.00	35	445
Selkirk	25 1/4	25 1/2	- 1/4	- 0.98	54	204
Stauffer Commun.	117	117			19	117
Tech/Ops Inc.	30 1/4	29 5/8	5/8	2.10	5	66
Times Mirror	62 1/8	62 1/2	- 3/8	- 0.60	16	4,010
Tribune	67 7/8	66 1/8	1 3/4	2.64	23	2,753
Turner Bcstg.	17 3/8	16 3/8	1	6.10	40	378
Washington Post	153 1/2	152	1 1/2	.98	17	1,967

PROGRAMING						
All American TV	8 3/4	8 3/4			10	
American Nat. Ent.	3	3 1/4	- 1/4	- 7.69	15	7
Barris Indus	21 1/4	22	- 3/4	- 3.40	26	188
Century Commun.	13 1/2	13 3/4	- 1/4	- 1.81	270	261
Coca-Cola	103 7/8	105 7/8	- 2	- 1.88	20	13,587
Disney	36 1/2	37	- 1/2	- 1.35	25	4,722
Dow Jones & Co.	53 3/4	54 1/2	- 3/4	- 1.37	24	3,465
Financial News	8 1/4	8 3/8	- 1/8	- 1.49	206	89
Four Star	5 3/4	5 1/2	1/4	4.54	6	4
Fries Entertain.	9 1/4	10 1/4	- 1	- 9.75	11	32
Gulf + Western	57 5/8	59 1/4	- 1 5/8	- 2.74	16	3,550
Hal Roach	13 5/8	13	5/8	4.80	75	
King World	38	38 3/4	- 3/4	- 1.93	25	387
Lorimar-Telepictures	26	24 3/4	1 1/4	5.05	10	202
MCA	51 5/8	54 3/8	- 2 3/4	- 5.05	32	3,869
MGM/UA	26 5/8	26 5/8			1,322	
New World Pictures	17 1/2	18 3/8	- 7/8	- 4.76	70	149
Orion Pictures	11 1/4	11 5/8	- 3/8	- 3.22	107	
Playboy Ent.	8 1/8	8 3/8	- 1/4	- 2.98	76	
Reeves Commun.	14 5/8	14 3/8	1/4	1.73	182	
Republic Pictures 'A'	11 1/8	11 1/2	- 3/8	- 3.26	79	32
Republic Pictures 'B'	10	10 1/4	- 1/4	- 2.43	71	7
Robert Halmi	4 3/8	4	3/8	9.37	62	76
Sat. Music Net.	7 1/2	8	- 1/2	- 6.25	50	
Warner Communications	42	42			2,581	
Westwood One	26 1/2	26 1/4	1/4	.95	22	90

	Closing Wed Apr 2	Closing Wed Mar 26	Net Change	Percent change	P/E Ratio	Market Capitali- zation (000,000)
SERVICE						
Ally & Gargano	9	9			8	19
BBDO Inc.	62 1/4	61 1/2	3/4	1.21	21	401
Compact Video	6 7/8	6 5/8	1/4	3.77		29
Comsat	34 1/4	36 1/4	- 2	- 5.51	10	620
Doyle Dane B.	23 1/2	21 1/4	2 1/4	10.58	16	124
Foot Cone & B.	64 5/8	65 1/8	- 1/2	- 0.76	16	245
Grey Advertising	230 1/4	232	- 1 3/4	- 0.75	14	138
Interpublic Group	55 1/8	56 1/2	- 1 3/8	- 2.43	18	600
JWT Group	39 5/8	39	5/8	1.60	22	359
MovieLab	7 1/8	7	1/8	1.78		11
Ogilvy Group	39 1/2	38 1/2	1	2.59	12	542
Saatchi & Saatchi	43	44	- 1	- 2.27	25	540
Telemation	6	6 1/8	- 1/8	- 2.04	6	6
Tempo Enterprises	10 1/4	10 1/4			39	58
Unitel Video	9	8 1/2	1/2	5.88		19
Western Union	7 3/8	6 5/8	3/4	11.32		179

CABLE						
Action Corp.	1 7/8	1 7/8			11	
AM Cable TV	1 1/2	1 1/2			5	
American Express	67 3/4	68	- 1/4	- 0.36	19	15,064
Anixter Brothers	25 1/8	24 1/2	5/8	2.55	23	456
Burnup & Sims	6 7/8	6 3/4	1/8	1.85	12	61
Cardiff Commun.	1 3/8	1 1/4	1/8	10.00	3	2
Centel Corp.	52 1/2	51 3/4	3/4	1.44	11	1,452
Comcast	25 5/8	26	- 3/8	- 1.44	44	545
Gen. Instrument	18 3/4	19 1/4	- 1/2	- 2.59		605
Heritage Commun.	26 3/4	26 1/2	1/4	.94	52	422
Jones Intercable	11 1/8	11 3/4	- 5/8	- 5.31	48	115
Maclean Hunter 'X'	18 7/8	18 1/4	5/8	3.42	26	695
Pico Products	2 1/4	2 5/8	- 3/8	- 14.28		7
Rogers Cable	15	14 3/4	1/4	1.69		351
TCA Cable TV	26 1/2	26	1/2	1.92	35	177
Tele-Commun.	48 3/4	49	- 1/4	- 0.51		2,291
Time Inc.	74 3/4	72 7/8	1 7/8	2.57	23	4,689
United Artists Commun.	28 1/2	28	1/2	1.78	41	584
United Cable TV	28	29 1/2	- 1 1/2	- 5.08	42	423
Viacom	57	55 3/4	1 1/4	2.24	22	1,154

ELECTRONICS/MANUFACTURING						
3M	102 1/4	106 7/8	- 4 5/8	- 4.32	17	11,696
Allied-Signal	50 7/8	51 3/4	- 7/8	- 1.69	10	8,857
Arvin Industries	27 1/4	27 1/8	1/8	.46	12	424
C-Cor Electronics	5 1/2	5 3/8	1/8	2.32		16
Cable TV Indus.	3 1/2	3 1/2			175	10
Cetec	8 1/8	8 3/8	- 1/4	- 2.98	19	16
Chyron	6	6 5/8	- 5/8	- 9.43	19	60
CMX Corp.	1 5/8	1 3/4	- 1/8	- 7.14		6
Cohu	8 3/8	7 7/8	1/2	6.34	8	15
Conrac	16 5/8	17	- 3/8	- 2.20	19	100
Eastman Kodak	61 5/8	63 7/8	- 2 1/4	- 3.52	19	13,907
Elec Mls & Comm.	3 5/8	3 5/8			14	
General Electric	77 1/4	78 3/8	- 1 1/8	- 1.43	15	35,195
Geotek Inc.	1 1/2	1 3/4	- 1/4	- 14.28	25	5
Harris Corp.	27 3/8	28 1/2	- 1 1/8	- 3.94	18	1,101
M/A Com. Inc.	16 7/8	16 3/4	1/8	.74	22	734
Microdyne	6 3/8	6	3/8	6.25	28	28
Motorola	43 1/4	43 5/8	- 3/8	- 0.85	70	5,153
N.A. Phillips	45 7/8	45 3/8	1/2	1.10	16	1,324
Oak Industries	2	2 1/4	- 1/4	- 11.11		61
RCA	63 1/2	62 3/4	3/4	1.19	15	5,700
Rockwell Intl.	47 7/8	47 1/2	3/8	.78	12	7,148
Scl-Atlanta	10 7/8	10 3/4	1/8	1.16	14	254
Sony Corp.	21 7/8	21	7/8	4.16	14	5,051
Tektronix	55 5/8	55 3/4	- 1/8	- 0.22	16	1,100
Varian Assoc.	26 5/8	28 1/4	- 1 5/8	- 5.75	38	567
Westinghouse	54 3/8	52 3/4	1 5/8	3.08	15	9,497
Zenith	24 1/4	24 5/8	- 3/8	- 1.52		560
Standard & Poor's 400	260.22	262.26	-	2.04	-	0.77

T-Toronto, A-American, N-N.Y., O-OTC. Bid prices and common A stock used unless otherwise noted. "O" in P/E ratio is deficit. P/E ratios are based on earnings per share

for the previous 12 months as published by Standard & Poor's or as obtained by BROADCASTING's own research.

FCC staff urges rejection of plan for Group W to buy KHJ-TV

Mass Media Bureau says FCC would have to ignore rules to approve plan; WOR-TV and MCA deal also challenged

RKO General Inc.'s woes appeared to grow larger last week when the FCC Mass Media Bureau recommended rejection of the settlement agreement under which Group W has proposed to buy RKO's KHJ-TV Los Angeles for \$310 million (BROADCASTING, Feb. 10).

In a filing with FCC Administrative Law Judge Edward Kuhlmann, the bureau said approving the settlement agreement would require the commission to ignore or waive established precedent and current rules. "It cannot be determined that the settlement agreement is consistent with the public interest, convenience or necessity," the bureau said.

Kuhlmann is in charge of ongoing pro-

World Tower Company

Offering the communications industry Total Tower Systems and Services. Fabrication, installation and maintenance of AM-FM-TV-CATV & Microwave towers.

Call or write:

Mr. Nate Sholar, Pres.

World Tower Co.

PO Box 405

Mayfield, Ky. 42066

Phone: 502/247-3649

SEE US AT NAB BOOTH 2814

Washington Watch

Reducing legislation. Senate has approved legislation (S. 2179) that would shorten terms of five FCC commissioners from seven to five years. Bill is result of agreement between Democratic and Republican Commerce Committee members and would adjust terms of two seats to insure that one expires in 1989 and another in 1990 but would not affect terms of any sitting commissioners (BROADCASTING, March 17). Measure now moves to House where it is expected to pass without opposition.

□

No more saving. National Association of Broadcasters is opposing "Daylight Saving Extension Act of 1985" that is pending in Senate. Similar measure was adopted by House last year and would lengthen daylight-saving time by about four weeks (BROADCASTING, Oct. 28, 1985). NAB, in letter to senators, asked members to oppose legislation. Any change in daylight-saving time, NAB wrote, "may well affect and disrupt the balancing of interests among AM radio broadcasters."

□

Cutting back. Costs of FCC's public affairs activities have dropped from \$801,000 in fiscal 1981 to \$492,000 in 1985, according to General Accounting Office report based on figures supplied by agency. Costs of FCC's congressional affairs efforts also have dropped from \$294,000 to \$230,000 over same years, report said. William A. Russell Jr., director of FCC Office of Congressional and Public Affairs, attributed cost cuts primarily to reductions, through attrition, in personnel and through increased use of computers. "And that's at a time when our workload has increased dramatically," Russell said.

□

Pontiac combination approved. FCC has approved transfer of construction permit for WOKO-TV (ch. 53) Pontiac, Ill., from Woodrow D. Nelson to Nelson TV. Nelson TV is general partnership 50% owned by Woodrow D. Nelson and remainder owned by his son and daughter-in-law, Lawrence and Pamela Nelson, who also own WPOK(AM)-WJEZ(FM) Pontiac, Ill. Creation of new radio-TV combination in market is generally prohibited by one-to-market rule. But FCC said transaction here was eligible for exception permitting it to approve some such combinations involving UHF's. FCC said small size of Pontiac market indicated that development of UHF "will likely be dependent" on economies offered by joint operation with radio stations. "Further, grant of the application would foster the development of UHF television in Pontiac, bringing the community its first locally originated television programming service," FCC said.

□

Philadelphia settlement approved. FCC has tentatively approved settlement agreement that would end challenges to renewals of Independence Broadcasting's WHAT(AM)-WWDB(FM) Philadelphia and clear way for sale of those stations to firms controlled by minorities. FCC Mass Media Bureau had originally objected to parts of proposed agreement requiring payments of \$250,000 to National Black Media Coalition for consulting and referral services and \$125,000 to coalition's counsel for legal fees (BROADCASTING, Dec. 16, 1985). NBMC subsequently asked FCC to approve agreement minus those payments (BROADCASTING, Dec. 23, 1985). It also explained it was "abandoning all legal claim to the challenged payments and that there is no implied or informal agreement that the payments will be made," according to FCC. "By the deletion of the disputed payment provisions, the parties have resolved the only objection raised to approval of the settlement," FCC said. Final approval was conditioned on approval of transfers by Mass Media Bureau.

□

MMDS grants. Using lotteries, FCC has tentatively granted multichannel multipoint distribution service applications of Haddonfield Wireless Co. and Kannev Broadcast Technologies for Abilene, Tex.; Microwave Video Services Inc. and Starchannels Associates, Amarillo, Tex.; National Television Co. and Wireless Services Inc., Asheville, N.C.; Walter Communications Inc. and Broadcast Data Corp., Boise, Idaho; Meadow Microwave and Red Charleston F Partnership, Charleston, S.C.; Lawrence N. Brandt and Krisar Inc., Eugene, Ore.; Virginia Communications Inc. and Multi-Micro (DBA), Gainesville, Fla.; Stephen Communications Inc. and Wireless Services Inc., Green Bay, Wis.; National Television Co. and Multichannel Media Inc., Johnson City, Tenn.; Microwave Video Services Inc. and B.F. Investments Inc., Kalamazoo, Mich.; Affiliated Communications Corp. and MWTN Inc., Lincoln, Neb.; Stephen Communications Inc. and Krisar Inc., Lubbock, Tex.; Fortuna Systems Corp. and Microband Corp. of America, Lynchburg, Va.; Microwave Video Services Inc. and Solar Vision Corp., Modesto, Calif.;

International Broadcast Consultants Inc. and Affiliated Communications Corp., Portland, Me.; Belwen Inc. and Presco Corp., Roanoke, Va.; Paul Communications Inc. and Hubbard Broadcasting Inc., Saginaw, Mich.; HDH Telecommunications Inc. and Tulsa BDC-MMDS Co., Tulsa, Okla., and Walter Communications Inc. and Manabi Hirasaki, Visalia, Calif.

Winning Arizona applicant. Reversing initial decision, FCC Review Board has granted application of Newmountain Broadcasting Corp. for new FM station in Glendale, Ariz., denying mutually exclusive applications of Arizona Number One Radio Inc., Interstate Broadcasting System of Arizona Inc., Compadres Communications Corp., Diane M. Greenlee and Lee Optical & Associated Companies Retirement & Pension Fund Trust and dismissing application of Arizona Family Radio. In initial decision, FCC Administrative Law Judge Joseph Chachkin granted application of Lee Optical for Peoria, Ariz., on grounds it would bring first local outlet to that community while Glendale, which all other applicants had specified as their communities of license, already had local service. Board, however, said no applicant warranted preference for community of license and noted that both Peoria and Glendale lie within Phoenix "urbanized area," and that technical proposals of Lee Optical and most Glendale applicants for Class C channel involved offered "substantially similar" coverage. Newmountain prevailed with pluses on diversification and integration grounds. Donald C. Jerome is president and 51% owner of Newmountain, which is also owned by four others. Jerome is public affairs editor for KTSP-TV Phoenix.

Woodstock FM. FCC has approved settlement agreement clearing way for grant of new FM to Ruarch Associates in Woodstock, Va. FCC also permitted Ruarch to retain WA1OAZ, its low-power TV station in Woodstock, which Ruarch had previously agreed to divest. Under agreement, All Kountry Music Broadcasters, sole competing applicant, settled out for \$32,500. Ruarch Associates is owned by husband-and-wife team of Arthur and Virginia Stamler, who own ADS Audio Visual Productions Inc., Falls Church, Va., audio-visual consulting production company. Review Board had granted Ruarch's application, finding it preferred on integration grounds (BROADCASTING, Nov. 19, 1984).

Cuero reversal. Reversing decision by Review Board, FCC has granted application of J.B. Broadcasting of Texas Inc. for new FM station in Cuero, Tex., denying competing application of Gobbler Communications Co. Board (with member Norman Blumenthal dissenting) had granted application of Gobbler, which is commonly owned with KVCT(TV) (ch. 19) Victoria, Tex., on diversification grounds. Board contended that grant of application of J.B., which at time of application also owned daytime KEWS(AM) Cuero, would give it monopoly over broadcast outlets licensed to Cuero. (J.B. Broadcasting sold KEWS in July 1984; station, now known as KQRO(AM), is owned by Cuero Broadcasting Inc.) Board, however, noted that Cuero is within KVCT's Grade B service area. "We believe that our diversification policy is best served by granting J.B. its first full-time facility rather than providing Gobbler with its second," FCC said.

FCC publishing cutback protested. Howard University Law School Ad Hoc Student Committee for Access to Government has petitioned FCC to reconsider its decision to stop publishing full texts of notices of proposed rulemakings, decisions and policy statements in *Federal Register*. FCC announced last month decision to start publishing summaries instead of full texts for most items, citing budgetary constraints. Commission also said that, in *FCC Reports*, commission will only publish those rulemaking decisions and policy statements summarized in *Federal Register* and not published in *Pike and Fisher*. In petition for reconsideration, committee, among other things, said FCC's decision "will substantially hinder the right to free speech because it frustrates the right to know."

Donovan complaint rejected. FCC Mass Media Bureau has rejected complaint by former Secretary of Labor Raymond Donovan alleging that Nov. 3, 1985, segment of CBS's *60 Minutes* had contained personal attacks against Donovan and his Schiavone Construction Co. Complaint alleged episode conveyed impression that Donovan and Schiavone had connections with organized crime and had participated in illegal activities. Among other things, bureau said, Donovan had not made requisite showing for concluding that controversial issue of public importance had been involved.

CNN reduction. Cable News Network is reducing by about one-third its Washington-based investigative reporting unit. CNN is reviewing contracts as they come up for renewal, but of staff of 23, seven are leaving, four of them reporters. Remaining 16-member staff will include five reporters. CNN spokesman would say only that needs of unit had been "reassessed" and that others would be assigned new jobs elsewhere within CNN. But some staffers think cutbacks are result of belt tightening at network due to Ted Turner's acquisition of MGM.

ceedings exploring RKO's qualifications to be a licensee in the comparative contest in which Fidelity Television has been challenging RKO for the right to KHJ-TV's facilities.

On another front, a group of investors going by the name of Mainstream Television Limited Partnership is seeking to derail MCA's \$387-million acquisition of RKO's WOR-TV New York (BROADCASTING, Feb. 24). Mainstream has asked the FCC to consider its own competing application for the station's facilities.

Still pending at the FCC is a request by Los Angeles Television seeking a waiver of the commission's cut-off rules to permit it to file a competing application for KHJ-TV (BROADCASTING, March 3).

Under the proposed KHJ-TV settlement agreement, the transaction is supposed to work this way: RKO would dismiss its application for KHJ-TV's renewal; Fidelity would be granted a construction permit for the facilities; Fidelity's stock would be transferred to Group W, and Group W would acquire KHJ-TV's assets from RKO. RKO would come out of the deal with \$212 million, and Fidelity would get \$95 million.

In its filing with Kuhlmann, the bureau said the FCC's "recognized policy" generally held that licensees involved in hearings on their basic qualifications are not permitted to sell out unless those issues are resolved in the licensee's favor. The bureau also contended that permitting Group W to buy the construction permit from Fidelity for \$95 million would run afoul of the FCC rule prohibiting transfers of construction permits for more money than was spent seeking them. In addition, the bureau said the Communications Act held that comparative renewal proceedings can only be settled if no party to the settlement agreement has filed its application for the purpose of reaching or carrying out the agreement. "There can be no question that Group W filed its application for the express purpose of carrying out the settlement agreement," the bureau said.

In a footnote to its filing, the bureau also said it believed Kuhlmann had the authority to rule on the petition. But the bureau also supported the pending request of RKO and Fidelity that the petition be sent straight to the FCC commissioners. "Considering the significance of the proposed transaction, its effect upon the other RKO comparative renewal proceedings, and the likelihood of an appeal from any adverse ruling on the question of certification, the bureau submits that it would be prudent for the judge to certify the petition to the commission for resolution in the first instance," the bureau said.

Group W, in an internal document made available to BROADCASTING, argues, however, that the settlement is in the public interest and is fully consistent with FCC rules and policies.

Group W said that under Section 311(d) of the Communications Act as amended, the FCC is supposed to assess settlements of comparative renewal cases on their ultimate public effect.

Under the public interest standard of Section 311(d), Group W said the settlement was in the public interest for, among other things, ending the 20 years of KHJ-TV litigation. The public in Los Angeles, Group W

From the ALJ's

Lake Dallas TV. In initial decision, FCC Administrative Law Judge Byron Harrison has granted application of Women's Media Investors of Dallas for new TV on channel 55 in Lake Dallas, Tex., denying competing application of Opal Thornton. Judge found Thornton to be financially disqualified. Noland Hill is president and 50% owner of Women's Media's general partner. She is also president of Central Massachusetts Television Inc., which owns WHLL(TV) Worcester, Mass.

Nashville UHF. In initial decision, FCC Administrative Law Judge Byron Harrison has granted application of Ruth Payne Carmen for new UHF TV station on channel 58 in Nashville, Tenn., denying competing application of Dove Broadcasting Co. Judge preferred Carmen for her long-time local residence and civic activities. Carmen is executive director of Hartsville-Trousdale (Tenn.) chamber of commerce and is personnel officer for Hartsville.

Troy TV. In summary decision, FCC Administrative Law Judge Richard Sippel has granted application of Shelley Broadcasting for new TV on channel 67 in Troy, Ala. Shelley was sole remaining applicant after settlement agreement. Shelley also owns WRJM(FM) Troy, and creation of new radio-TV combinations is generally prohibited under FCC's one-to-market rule. But exception to rule provides for special consideration for combinations involving UHF's. Judge ruled that Shelley had met "burden of persuasion" on why combined ownership would be in public interest here. "The synergistic combination of an FM station with a [UHF TV station], sharing some or all of the same staff and plant facilities, in an area which has low income, is not growing and which has high unemployment, should be accepted as . . . being in the public interest," Sippel said.

Venice TV. In initial decision, FCC Administrative Law Judge Walter Miller has granted application of Venice Broadcasting Corp. for new TV station on channel 62 in Venice, Fla., denying competing application of Holiday Group Ltd. Venice Broadcasting prevailed on integration grounds. Nedra K. Brody is president and owns 60% of voting stock of Venice Broadcasting, which is also owned by two others. Brody is Pittsburgh housewife. None of Venice Broadcasting's principals have other media interests.

Batting .500. In initial decision, FCC Administrative Law Judge Walter Miller has granted Jesse R. Williams license renewal for WCSA(AM) Ripley, Miss., but denied him renewal for WJRL(AM) Calhoun City, Miss. Judge held that Williams lacked necessary qualifications to be licensee. But judge—noting that Williams had said that he would sell WCSA and get out of broadcasting—held commission blameworthy for failing to designate for hearing until last year character issues alleged against Williams in another proceeding in 1975. "Williams had the right to an expeditious hearing," Miller said. "The commission can make amends to Williams by granting his WCSA renewal. So be it." But with those "atonement considerations" expended there, judge ruled that Williams was "fresh out of equities" when it came to WJRL. Among other things, judge alleged that Williams had misrepresented to FCC, abused commission processes and kept latter station off air for more than three years even though he was financially able to operate it. "Expiation for commission misfeasance is one thing; rewarding a wrongdoer is another," judge said.

Yountville AM. In initial decision, FCC Administrative Law Judge John Frysiaak has granted application of Heritage Communications for new AM on 840 khz in Yountville, Calif., denying mutually exclusive application of Alegria I Inc. for Marina, Calif. Judge said Heritage's application would be preferred for providing first local service to Yountville while radio station is already licensed to Marina. But judge also held that Heritage would prevail on diversification and integration grounds. Phyllis Moore owns 25% of Heritage, which is also owned by three other women. Moore is former mayor of Napa, Calif. None of Heritage's principals have other media interests.

Madisonville AM. In initial decision, FCC Deputy Chief Administrative Law Judge James Tierney has granted application of Madisonville Media Co. for new AM on 1220 khz in Madisonville, Tex., denying competing application of Madison County Broadcasting Co. Madisonville Media prevailed on diversification grounds. Madisonville Media is equally owned by Robert F. Ritchey and William F. Carter. Ritchey, resident of Houston, is 25% owner of KPEP(FM) Gatesville, Tex., and 50% owner of Ritchey Communications, radio/TV consulting service. Carter is Madisonville attorney.

said, also would benefit "through the certainty that will come with the resolution of this case and the normalization of the station's license." Moreover, "the settlement will serve the commission's objective of insuring that the license is in the hands of a qualified licensee, since Fidelity will end up under the control of Group W, which has a well-established reputation as an outstanding broadcast licensee," Group W said.

Group W also alleged that the argument that the settlement is inconsistent with FCC policy that generally bars the sale of a license by a licensee whose qualifications are in question was off target. "RKO is not assigning its license, but rather is dismissing its renewal application as part of a settlement in which it is compromising its claim, in a manner that is consistent with Section 311," Group W said.

Group W also took issue with the contention that the transaction would violate FCC prohibitions against selling a "bare" construction permit for an "unbuilt station" for more money than was spent prudently obtaining it. Those prohibitions, according to Group W, "are inapplicable to the settlement because Fidelity is not selling a construction permit for an unbuilt station. Under the terms of the settlement, Fidelity will receive not only the permit but also the license to operate channel 9. Group W is not acquiring a construction permit, but control of a licensee who has all rights necessary for the full and immediate operation of the station, including the right to use the assets. Moreover, the rule—by its express terms—applies only to an 'unbuilt station.'"

In its petition at the FCC, Mainstream Television has asked the FCC to call in WOR-TV's license for early renewal and to waive its cut-off rule to permit the processing of Mainstream's competing application. Mainstream alleged that the record in the RKO qualifications proceeding had revealed "a pattern of massive and continuing" misconduct, and that RKO was seeking "refuge" from having to defend itself in renewal proceedings against that record by attempting to sell WOR-TV.

Mainstream's general partner is Jean

HELP!! — Your TV Stereo —
Wegener sub-carriers for TV audio are BEST —
Just add to your existing equipment.

W **The established leader in satellite stereo**

**EVERYTHING IN
 SATELLITE AUDIO
 (317) 962-8596**

ALLIED
Satellite Equipment

Jells, general sales manager of WLIB(AM) New York. Mainstream is represented by the law firm of Cohen & Berfield, which is also representing Los Angeles TV and several competing applicants in the proceedings exploring RKO's licensee qualifications. □

CBS, authorities skirmish over film

CBS and the U.S. attorney's office in Kansas City appear to be headed for a confrontation over whether the federal authorities have a right to film in a *60 Minutes* camera that had been used to cover antinuclear demonstrators at a missile site in western Kansas. Three members of the *60 Minutes* crew—correspondent Mike Wallace, producer Paul Line and soundman Craig Dixon—had been detained by federal and local authorities in the incident, on March 28, but were released without charges pressed against them. Five demonstrators were arrested at two sites and charged with trespass and destruction of government property. CBS says the authorities do not need its film to prosecute the protestors.

The *60 Minutes* crew appeared to have been in the right place at the right time for what it was doing—a piece on antinuclear demonstrators who seek publicity by trespassing on federal property, according to *60 Minutes* spokesman Roy Brunette. The missile site, at an Air Force base near Holden, Mo., is one of 150 Minute Man 2 bases in western Missouri. The crew was picked up by an Air Force response team, then turned over to the Johnson county sheriff's office and detained for about an hour. The CBS personnel were released, according to U.S. Attorney Robert Ulrich, when it was determined they had not crossed through the chain fence surrounding the site. The demonstrators are said to have cut their way through the barrier, then attacked the silo with hammers. The CBS crew's equipment and film, which had been seized, were returned.

But that did not end the matter. Ulrich said the authorities wanted the film as possible evidence to be presented in prosecuting at least some of the demonstrators—two of whom had been arrested at one site and three at another.

Ulrich said the film was returned after an agreement was struck with CBS lawyers. He wanted the film to present to a grand jury that was to consider the case of the protestors on Friday, April 4. But CBS lawyers requested additional time to present arguments in court opposing the subpoena in advance of the grand jury hearing. So Ulrich said a subpoena would be issued calling for presentation of the film at trial. In return, CBS would preserve the film and agree not to make a Fifth Amendment argument regarding self-incrimination. All other arguments, including the First Amendment, are open to it.

Brunette said CBS will resist the subpoena "on the ground the film in the camera contains nothing not seen by eyewitnesses." He said Air Force officers had been on the scene and witnessed whatever was recorded on the film. □

On your way up?

The next logical step is CBSI.

We believe in "upward mobility." That's what we build into every CBSI system.

For radio stations of all sizes and formats, CBSI offers proven system packages designed to move you toward your goals of growth and profitability. We give you complete control over Traffic, Accounts Receivable, Co-op Billing, General Ledger / Accounts Payable, Sales Management, Concert Music Library, and more.

We adapt our system to your station and move with you, step by step, through initial training, continuing service and future enhancements.

CBSI business computer systems are built to out-perform all other systems on the market... and to do it within your station's budget. Satisfaction guaranteed.

If your station is on its way up, increase both mobility and profitability with CBSI systems. Place one phone call today, and we're with you... at every step.

References upon request.

**PLEASE JOIN US AT
NAB BOOTH #2517.**

At every step
cbsi
Custom Business Systems, Inc.

Call CBSI 800-547-3930. Canada, Alaska & Hawaii
Call Collect 503-271-3681. In Oregon 800-648-8814.
P.O. Box 67, Reedsport, OR 97467.

CBSI is a registered trademark of Custom Business Systems, Inc.

RIDING GAIN

O N R A D I O

Fighting words

Malrite last week said it was "outraged" over Arbitron's recent decision to delist its New York contemporary hit WHTZ(FM) (licensed to Newark, N.J.), one of the country's top-rated stations, from the winter 1986 report due to "rating distortion" ("Riding Gain," March 24).

According to Arbitron, WHTZ was in violation of its rating distortion policy during the winter rating sweeps period—Jan. 9 through April 2—when "a morning personality" said over the air Feb. 6: "Radio Z-100 is WHTZ. Write that down. Please write it down. And especially if you're involved in a radio survey. Tell them you're listening to us. Tell them all day long, every day, you got 11,000 people living there. And you all listen 24 hours a day." (WHTZ's morning host is Scott Shannon.) Arbitron said another remark containing a diary reference was aired Feb. 10. Air checks of the station were supplied to Arbitron by WHTZ's chief rival, Capital Cities/ABC's WPLJ(FM).

Malrite, in a prepared statement, said the

contention that the "off-the-cuff" and "obviously humorous" remarks "could cause or were intended to cause ratings distortion is absurd. Moreover, Arbitron apparently violated its own procedures by bowing to pressure from WHTZ's competitors instead of reaching the decision independently." Malrite said WHTZ has retained a law firm "to fully investigate this matter and to advise the station on what legal options are available to it." An Arbitron spokesman said the company stands behind its rating distortion policy, which was not written with "intent or frequency in mind."

The winter report for New York is scheduled to be released the week of April 21.

Radio success stories

Los Angeles, an increasingly important market for generating national and regional advertising for radio, was the locale of the first-ever sales workshop sponsored by the Radio Advertising Bureau and the Southern California Broadcasters Association.

The half-day event, held at Los Angeles's

Sheraton Premiere hotel, attracted over 500 radio and advertising attendees and followed the same format as the Association of National Advertisers (ANA)/RAB annual workshop day in New York, in which the effectiveness of radio was illustrated by a series of success stories.

"At Bank of America, we look on radio as sort of a 'bread and butter' medium," Charles Stuart, vice president and director of advertising of San Francisco-based Bank of America, told the audience. He said Bank of America, which is based in California, uses radio—as a percentage of all media—50% more than other California banks and savings and loan institutions.

Stuart said one-third of the bank's multimedia budget for its recent "Home Loan Blues" campaign was spent on radio. The aural medium, he said, was used to target upscale adults between the ages of 25 and 54 with "high frequency, continuity and impact." Sixty-second spots ran on classical news/talk and beautiful music stations over a three-month period in all California markets. "Throughout the campaign, radio ran

Is your AM station playing their song in Motorola C-QUAM® AM Stereo ?

AMC/Jeep/Renault
American Audio
Audi
Audiovox
Carver
Clarion
Concord
Ford/Lincoln/Mercury

Chrysler/Plymouth/Dodge
GM/Delco
Grundig
Kenwood
Kraco
Marantz
Mazda
Mercedes

Mitsubishi
Nissan
Omnivox
J.C. Penney
Pioneer
Radio Shack
Saab

Sanyo
Sharp
Sherwood
Sparkomatic
Sunkyoung
Toyota
Volkswagen



All of these receivers are compatible with the Motorola system and are available now! Why not give your listeners the very best sound? Go Motorola C-QUAM AM Stereo today! Call collect 312-576-0554, ask for Steve Kravitz.



MOTOROLA

1216 REMINGTON ROAD, SCHAUMBURG, IL 60195

**SOUND QUALITY
YOUR LISTENERS
EXPECT**

Why Go Transtar?

Because We'll Listen
To Your Needs.

We'll listen to you —
to your needs — and we'll
help. Our four 24-hour
quality formats — Format 41SM,
Country, Adult Contemporary,
and now The Oldies ChannelSM —
are winning all across America
because they *solve problems* for
broadcasters like you. Call and tell
us your situation; we'll come through
for you.

Please send more information on Transtar:

Name/Title: _____

Station: _____

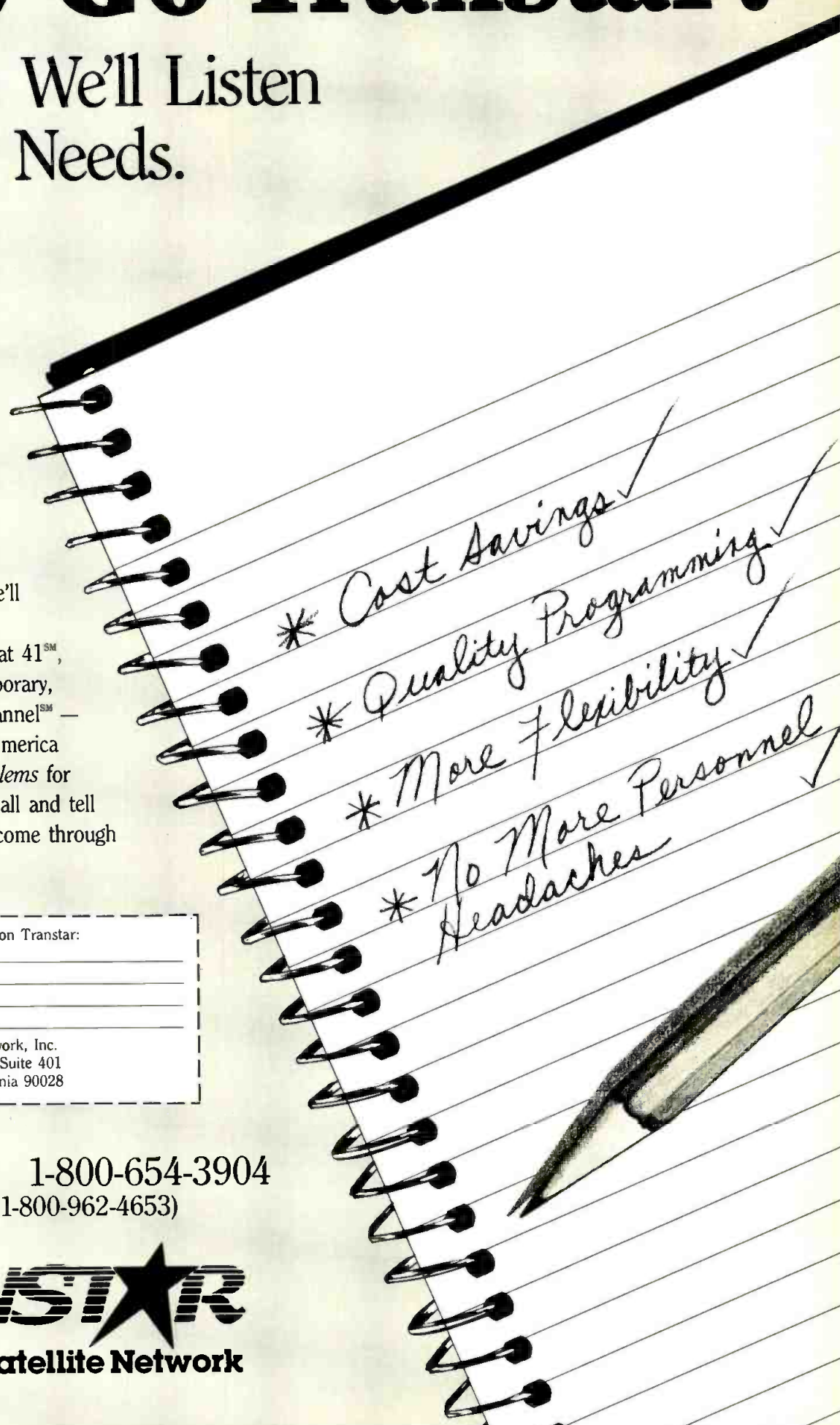
Address: _____

Phone: _____

Send To: Transtar Radio Network, Inc.
6430 Sunset Blvd. Suite 401
Los Angeles, California 90028

Better Yet,
Call Right Now: 1-800-654-3904
(California 1-800-962-4653)

TRANSTAR
The Quality Satellite Network

- 
- * Cost Savings ✓
 - * Quality Programming ✓
 - * More Flexibility ✓
 - * No More Personnel Headaches ✓

in combination with newspaper ads, proving to be an effective combination," said Stuart.

Evaluating the campaign, Stuart said that awareness of the bank as a real estate lender "jumped 10% in the first six weeks alone." Stuart credited radio's ability to narrowcast directly to prime customers with the fact that "the average loan size increased by nearly 40% over the previous year, exceeding our goal by \$31,000 per loan."

■ Campbell soup found radio particularly useful as "a different and relatively inexpensive way to launch a new product," said Paul Mulcahy, president of CSC Advertising, the advertiser's in-house agency.

Mulcahy focused on radio's immediacy, saying that the company plans some of its ad flights for what he called "pre-lunch radio"—that is, a meal that is "not planned, spur-of-the-moment and susceptible to suggestion where radio was the reminder."

■ Southern California Nissan Dealers Association Manager Robert Sharron cited record sales results from radio ads for the 300ZX car and Nissan trucks. Aiming for a male target of 18-to-49-year-olds, Sharron said, the Nissan dealers solved the problem of surplus 300ZX cars with a three-week radio ad campaign on 11 metro Los Angeles stations with a total reach of 70%, supplemented by spots on 13 outlying stations.

"The result was more 300ZX's sold than ever in the history of the association in a one-month period," said Sharron.

He added that a radio campaign linking Nissan trucks to a promotion to win Los Angeles Raiders season tickets, which used 18 spots per week for four weeks on 33 metro and outlying stations, "achieved the second biggest truck sales month in the association's retail sales history."

■ John Kelley, marketing manager of Chevrolet Trucks, said the "real impact" of radio advertising for his company is in the creative execution. Kelley said Chevrolet uses a full-range of production techniques to market its "light duty" trucks including pick-ups, vans and S-10 Blazers.

Measure for measure

The introduction of a new rating system for radio is moving closer to reality as the National Association of Broadcasters' year-old Radio Audience Measurement Task Force (RAMTF) completes its examination of 18 proposed concepts, including technological innovations such as attaching integrated chips to respondents to electronically record listening.

The 18 proposals were submitted to NAB in response to the task force's industrywide request in January for new radio audience

measurement systems ("Riding Gain," Jar 20). (Local radio audiences are currently being measured by Arbitron and Birch Radio "These proposals offer tremendous potential for improving the measurement of radio audiences' listening habits," said RAMT Chairman Ken MacDonald Sr., chairman and chief executive officer of MacDonald Broadcasting Co., Saginaw, Mich. The committee examined each proposal at a meeting at NAB headquarters in Washington.

According to an NAB spokeswoman, the proposed systems will next be reviewed by the RAMTF's technical subcommittee headed by NAB Executive Vice President Operations John Abel, as well as a newly established group of academicians and research experts. "Their recommendation will be returned to the task force, which will then select the best of the proposals at a meeting on May 13," said the spokeswoman. "Those selected will be asked to develop a more complete proposal, with financial assistance provided by the NAB," she said.

RAMTF was created out of a growing concern among radio broadcasters over number of issues related to audience measurement, including rising costs, inadequate sample size and response rate, accounting for listening behavior of nonrespondent measuring special audience segments and cross-media comparisons.

Programming

'Wheel' scores high in February syndicated ratings

Cassandras show 'Jeopardy' in second place, followed by 'New Newlywed Game'

Wheel of Fortune racked up its ninth consecutive first-place showing in Nielsen's Cassandra rankings of syndicated programs for February. The show also broke its own record and set another all-time sweeps mark for any program for the second time in a sweeps ranking.

The King World-distributed show bettered its mark in the February 1985 sweeps by 3% with a 20.3 rating. *Wheel* was also first in all demographics, with the exception of teen-agers (it was sixth) and children 2-11 (15th). The access show (fewer than 10 markets carry it in early fringe) was first in 164 markets in its time period. *Wheel* was also up from its rating in the November 1985 sweeps by 10%.

King World also had second place sewn up with *Jeopardy* (12.3), which was second again, as it was in the November 1985 sweeps rankings. The show was up from last year's fourth-place February results by 29%, and up from its November 1985 results by 10%. *Jeopardy* was second in adults overall, placing third in women 18-49, and seventh among men 18-49. Among teen-agers it ranked 27th, and among children it was 75th.

Barris Industries' *New Newlywed Game*, new to syndication this season, was third in

households and up from its fourth-place November sweeps performance (8.9) by 16% with a 10.3 rating.

Among the trends that could be discerned among the ratings was a fall-off in the ratings for half-hour, off-network sitcoms, accompanied by a less precipitous fall in their rankings among all programs. 20th Century Fox's *M*A*S*H*, for example, fell only from third to fourth place in comparison to the previous February's *Cassandras*. But in ratings, that show was off 11% from a year ago. Taffner's *Three's Company* fell from third to fifth in the rankings, but 13% in the ratings, and Embassy's *Diff'rent Strokes* fell from sixth to 10th place and 12% in the ratings.

Comparing the February 1985 *Cassandras* to the February 1984 report, *M*A*S*H* was off by better than 6%, *Three's Company* was off by nearly 3%. *Diff'rent Strokes* was just hitting the air in syndication in February 1985.

Among first-run, weekly sitcoms, *Small Wonder* was first for the second straight sweeps period with a 7.7 household rating. The weekly program from Metromedia Producers Corp. also ranked fifth among teen-agers and second among children 2-11. *Small Wonder* bettered its 7.4 for the November 1985 sweeps by 4%, with a 7.7.

Among other first-run sitcoms, D.L. Taffner's *Too Close for Comfort* was up from a 6.9 household rating in the November 1985 sweeps by 6% with a 7.3; Columbia

Pictures Television's *What's Happening Now!* had a 5.2, compared to a 5.1 in the November 1985 sweeps, and LBS's *It's a Living* had a 4.0. Taffner said that although *Too Close for Comfort* rated second in households, its show was first in average audience ratings, covering October through March with a 6.3. In the average audience ratings *Small Wonder* had a 5.8, *What's Happening Now!* had a 5.6 and *It's a Living* a 4.9. Cassandra, or NSI, ratings are based on a compilation of diary averages for markets weighted according to their size. Average audience, or NTI numbers, are based on meters within households.

Among talk-show strips, Multimedia's *Donahue* was up 13% from its February 1985 ratings mark and 26% above its rating in the November 1985 sweeps. Group W Productions' *Hour Magazine* was down 2% from its February 1985 ratings, but up 10% since the November 1985 sweeps. *Donahue* improved its demographic delivery greatly during February, according to Multimedia.

In nongame access properties, Group W Productions' *PM Magazine* continued its ratings growth. That show was up 2% from its February 1985 mark, and 6% from the November 1985 sweeps. Paramount's *Entertainment Tonight*, on the other hand, fell 5% from its February 1985 rating.

In the realm of animated strips, prized by independents for getting a children's audience during the daytime, Tribune Entertain-

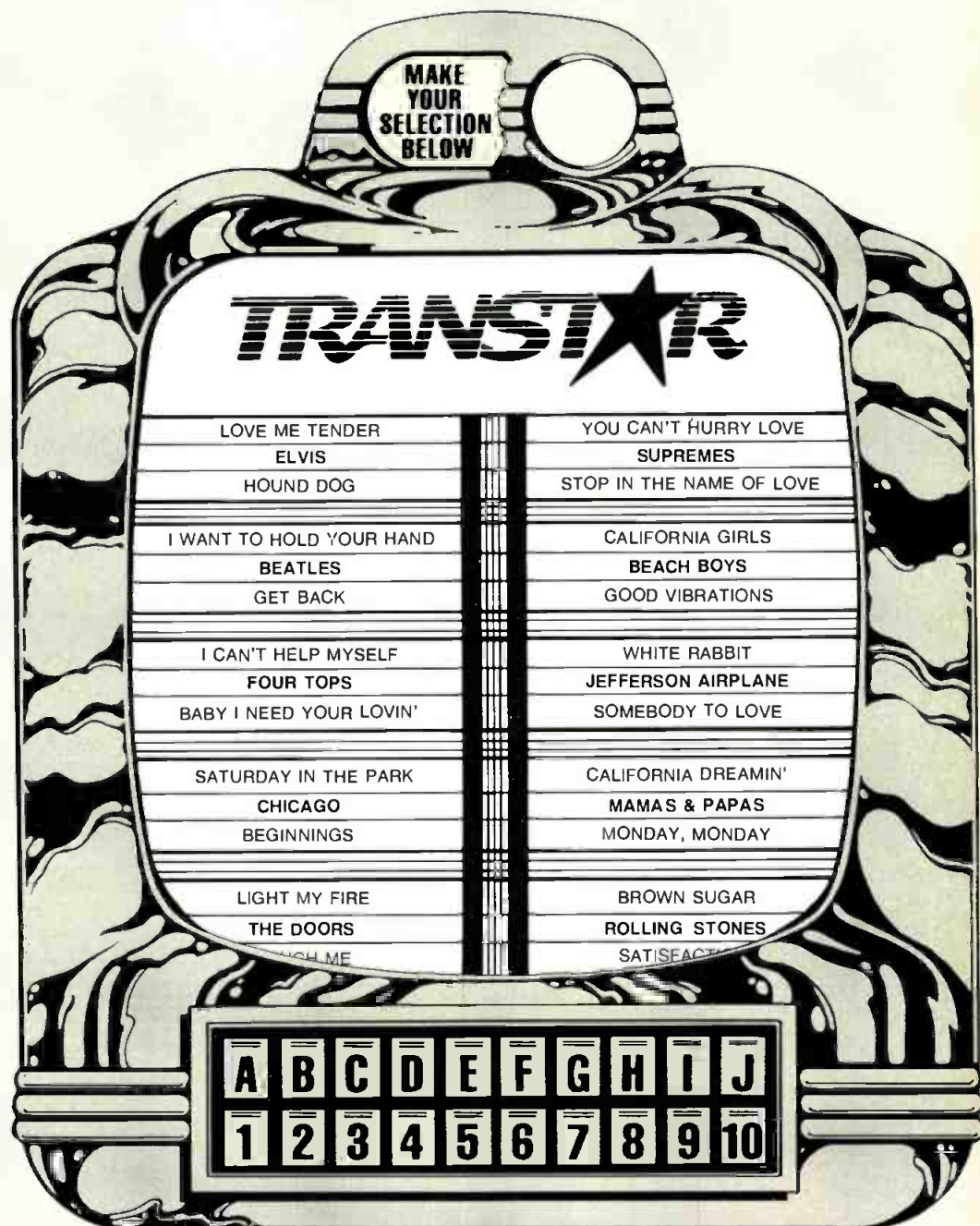
Great News For Radio!

AM and FM stations all over the country
have been asking us for it and it's finally here...

THE OLDIES CHANNEL*

The greatest hits of the late 1950's, classics from the 1960's and the best of the 70's — in stereo — *live* 24 hours a day. And it's from the people known for *quality* satellite programming: Transtar. "The Oldies ChannelSM" has a flexible spot load and is built to save you operating costs and personnel headaches, while it targets the lucrative 25-54 adult market. "The Oldies ChannelSM" is available on a first come, first served basis.

Call and tell us about your needs. We'll listen and we'll help. But do it today while "The Oldies ChannelSM" is still available in your market.



Please send me more information on
"The Oldies ChannelSM":

Name/Title: _____

Station: _____

Address: _____

Phone: _____

Send To: Transtar Radio Network, Inc.
6430 Sunset Blvd. Suite 401
Los Angeles, California 90028

Better Yet, Call Right Now: 1-800-654-3904 (California 1-800-962-4653)

TRANSTAR
The Quality Satellite Network

*Service mark of Transtar Radio Network, Inc.

ment's *G.I. Joe* had a 4.2 household rating to rank first, and was followed by Claster Television Production's *Transformers* (4.1), Lorimar-Telepictures' *Thundercats* (4.0),

and Group W Productions' *He-Man and the Masters of the Universe* (3.6). But in children 2-11, the number-one show was *Diffrant Strokes*, with its 14.6 rating for that

demographic. It was followed by *Sma Wonder* (13), *Thundercats* (11.8), *She-Ra: Princess of Power* (11.6) and *G.I. Joe* (11.5).

Syndication Marketplace

■ **Group W Productions** fed a presentation on *The Beauty Affair with Jose Eber*, which features cosmetic makeovers, to stations on Wednesday, April 2, via satellite. Two other makeover shows that were to have been distributed by Samuel Goldwyn and Fox/Lorber have already been cancelled, leaving Group W to itself in the makeover market. The presentation covered the results of a March 12 survey of 261 women, 18-65, who view daytime television. Among the presentation highlights, 74% of the women rated the show as "excellent" or "very good"; and 77% rated host Jose Eber as "excellent" or "very good." Group W has cleared the show in an undisclosed number of markets, including the Group W stations, and other top 10 stations. The show is being sold on a barter or cash plus barter basis. The women in the survey, who live in cabled areas, saw the show via a special presentation, and were later interviewed by phone.

■ **D.L. Taffner** has cleared *The Ted Knight Show* in 74 markets, and *Check it Out*, starring Don Adams, in 65 markets. The two sitcoms, which debut this week, are each sold on a cash plus barter basis, with Taffner holding back one and-a-half minutes. Sales are of 22 episodes. Taffner has also cleared *The Benny Hill Show* on 83 stations covering 70% of the country. Taffner is now the only company with three first-run sitcoms (on March 31, *Too Close for Comfort* celebrated its second anniversary). The Thames Television production's most recent clearances are WJPR(TV) Roanoke, Va.; WWM-TV Grand Rapids, Mich.; KGM(TV) Oklahoma City; KOB-TV Albuquerque, N.M.; KSHB-TV Kansas City; WCCO-TV Minneapolis; WCEE(TV) Mt. Vernon, Ill.; KHTV(TV) Houston; KLF(TV) Davenport, Iowa; WDLH-TV Duluth, Minn.; WOSI-TV Chattanooga; WMSN-TV Madison, Wis., and WNDV-TV Manchester, N.H. There are currently 85 episodes available for cash sales, but 10 more will be added in the near future.

■ **LBS Communications**, in association with Dr. Pepper, is offering *Canned Film Festival*, a 13-week series of 90-minute campy comedy films hosted by Laraine Newman for a June 16-Sept. 14 window. Dr. Pepper, handled by Young & Rubicam, will be the full national sponsor. Sales are on a barter basis with eight minutes national and 10 minutes local. Titles include "They Saved Hitler's Brain," "The Slime People" and "Untamed Women." LBS is also offering *My Friend Liberty*, a half-hour "clay-animated" special set for June 21-July 6. It will debut on all of the CBS owned stations. The release of the humorous and educational look at the Statue is being sold on a barter basis with two-and-a-half minutes for LBS and four minutes for stations. Additional clearances are WCVB-TV Boston, WDIV-TV Detroit and Wews(TV) Cleveland.

■ **American Programs International**, a new syndicator, has been formed by Klein & Midge Barnett. Barnett will serve as president of the new company whose offering will include features, variety specials, children's programming, documentaries and music specials assembled from from Compact TV, the Sherman Grinberg Library and several Canadian sources. API will attend MIP.

■ **Viacom Enterprises** says that *MTV Top 20 Video Countdown* will debut April 12 on 101 stations covering 81% of the country. Hosted by MTV veejay Mark Goodman, the one-hour show is sold on a barter basis with five-and-a-half minutes national and six-and-a-half minutes local. MTV will sell the barter time for Viacom. Clearances include WGBS-TV Philadelphia, WBZ-TV Boston, WFTY(TV) Washington, KRIV-TV Houston, KDKA-TV Pittsburgh, WAGA-TV Atlanta, KIRO-TV Seattle and WOIO-TV Shaker Heights, Ohio (Cleveland).

■ **MG/Perin** has been appointed exclusive domestic sales agent for the Independent Television Network for sales of a 16-title theatrical film package. Among the titles are "They Call Me Bruce," starring Bruce Lee, "The House on Sorority Row" and "Cardiac Arrest." MG/Perin also represents ITN in sales of *GLOW* (Gorgeous Ladies of Wrestling), 26 hours. *GLOW* will be available in June for cash.

■ **King World** has now cleared *Rock n' Roll Evening News* in 103 markets covering 76% of the country. Sales of the weekly hour-long pop music show are on a barter basis with six minutes for King World

and six minutes for stations. Recent clearances include KDKA-TV Pittsburgh; WJTV(TV) Elkhart, Ind. (South Bend); WWAY(TV) Wilmington, N.C.; KJAC-TV Port Arthur, Tex.; KFDX-TV Wichita Falls, Kan.; KNOE-TV Monroe, La.; WTHR(TV) Indianapolis, and KHSL-TV Chico-Redding, Calif.

■ **Warner Bros. Television Distribution** says that it has cleared *Night Court* in 81 markets, including 29 of the top 30. Sales are for cash for airdates in 1988. Recent sales include WBNS-TV Columbus, Ohio; WPM(TV) York, Pa.; WTVK(TV) Knoxville; WXEX-TV Richmond, Va.; KGAN(TV) Cedar Rapids, Iowa; WEVN-TV Evansville, Ind.; KDLT(TV) Sioux Falls, S. D.; KTVL(TV) Medford, Ore., and KEVN-TV Rapid City, S.D. Warner has also cleared *Matt Houston* in cash sales in 36 markets. Recent sales include KIRO-TV Seattle; WDBB-TV Birmingham, Ala.; KMSS-TV Shreveport, La.; WFLX-TV West Palm Beach, Fla.; WUHF-TV Rochester, N.Y.; KMSB-TV Tucson, Ariz., and KYTV(TV) Springfield, Mo.

■ **Syndicast** says that it has cleared *The Raccoons and Lost Star* for a window beginning May 15 in 31 markets covering 35% of the country. Sales on the one-hour animated special featuring the Raccoon family of characters, are on a barter basis with seven minutes local and five minutes national. Clearances include WNYW-TV New York; WGBS-TV Philadelphia; WBZ-TV Boston; WVIC-TV Hartford, Conn., and KNAZ-TV Flagstaff, Ariz.

■ **Access Syndication** is adding a new three-to-five-minute segment, "The Hollywood Reporter," to its half-hour weekly, *Hollywood Closeup*. The new segment is based on the magazine of the same name. LBS ran "The Hollywood Reporter" as part of *Inday*. The access version will not consist of segments used on *Inday*. The show, now in 47 markets covering 71% of the country, is produced at KABC-TV Los Angeles, and carried on all of the ABC-owned stations. Sales are on a barter basis with four minutes local and two-and-a-half local.

■ **Eagle Media** says that it has now cleared *Rocky Mountain Inn* in 68 markets covering 40% of the country. The country-music variety show features video and live performances, as well as interviews. Sales are on a barter basis with two-and-a-half minutes national and three-and-a-half local. Clearances include WHT(TV) Newark, N.J. (New York); WJUE(TV) Atlanta; WVAR-TV Pensacola, Fla., and WTOG(TV) Tampa, Fla.

■ **Orbis Communication** is offering *Distant Replay*, a one-hour special based on the book of the same name by former Green Bay Packer Jerry Kramer, with Dick Schaap. Marking the 20th anniversary of the Super Bowl, the special will feature the Green Bay Packers who played in the first Super Bowl and will include their memories of the game and their coach, Vince Lombardi. Sales for the January 1987 window will be on a barter basis with five minutes for stations and five minutes for Orbis. Orbis is also offering a one-hour *Defenders of the Earth* special that will air throughout April on 80 stations covering 75% of the country as a preview to the series debut in September. Produced by King Features Entertainment, the special is designed as a launch opportunity for a variety of spin-off toys and other children's products. Stations carrying the special are the same as those carrying the series in the fall, including WNYW-TV New York, KTTV(TV) Los Angeles, WFLD-TV Chicago and WPHL-TV Philadelphia.

■ **Tribune Entertainment** says that it has cleared *The Mystery of Al Capone's Vaults* on 164 stations covering 94% of the country. The two-hour special will be hosted by Geraldo Rivera, and produced by Tribune Entertainment and The Westgate Group. The two-hour live broadcast will feature the opening of Capone's vaults in the basement of Chicago's Lexington hotel. Sales are on a barter basis with 13 minutes national and 12 minutes local. Among advertisers committed are Nabisco, Kentucky Fried Chicken, G.D. Searle, A & W Root Beer, Gillette, Sheraton, Warner Lambert and Quaker Oats. Viacom Enterprises has international rights. Among sales are KTVU-TV San Francisco, WTAF-TV Philadelphia, WLVI-TV Boston, KXAS-TV Dallas and WKBD-TV Detroit. Tribune has also cleared *Dempsey and Makepeace* in 43 markets in cash sales. Recent sales of the weekly one-hour action-adventure series include WSPA-TV Greenville, S.C.; WTVX(TV) Fort Pierce, Fla., and KUTV(TV) Salt Lake City.

'Perfect Match': too similar to 'New Newlywed Game'?

**Lorimar-Telepictures sued
or copyright infringement
by Barris, which seeks
\$5 million in damages and
injunction against further
production, distribution**

Barris Enterprises Inc., producer and distributor of *The New Newlywed Game*, has filed a \$5-million copyright infringement lawsuit against Lorimar-Telepictures for producing and distributing its game show, *Perfect Match*. In a six-page complaint filed in a California federal court, Barris charged that *Perfect Match*, a midseason "insurance" strip produced and distributed by Lorimar-Telepictures and now airing on 80 television stations, is an unlawful copy of Barris's own *The New Newlywed Game*.

Lorimar-Telepictures, in a statement, denied any infringement of copyright and said the Barris claim was without merit.

Barris has also asked the court to issue an injunction order preventing Lorimar-Telepictures from continuing to produce and distribute *Perfect Match*.

Barris Enterprises introduced *The New Newlywed Game* in first-run syndication in September 1985 after an 18-month first-run absence from television. The show, created by Chuck Barris and hosted by Bob Eubanks, has shuttled back and forth between network and syndication since it first premiered in 1966, as *The Newlywed Game*. After *The New Newlywed Game* was reintroduced last fall, it immediately shot up to the top of the ratings and became the third-ranked show in all of syndication during the November 1985 sweeps, according to Nielsen's quarterly Cassandra report on syndicated program ratings.

It maintained that ranking during the subsequent February 1986 sweeps when it earned a 10.3 average national rating on 170 stations.

Lorimar-Telepictures' *Perfect Match* premiered on Jan. 13, 1986, as the replacement for *Catch Phrase*, a couples-oriented game show that Telepictures introduced the previous fall and that bombed in the ratings. *Perfect Match* airs on 80 stations, mostly in daytime and early-fringe time periods, and during the February sweep averaged a 2.9 rating—below the national 3.3 rating achieved for its predecessor series.

Bud Granoff, president of Barris Enterprises, said Barris was prompted to file the suit because it had received several complaints from its client stations carrying *The New Newlywed Game*. "We don't like to sue, particularly colleagues in our business," said Bud Granoff, president of Barris Enterprises, "but stations were calling and saying, 'What are you going to do about it?' It was the stations that fed the fire."

According to Granoff, the problem is not so much in the format of the show as it is in Lorimar-Telepictures' "presentation" of that format—which Granoff stressed is strikingly similar to *The New Newlywed Game*. He acknowledged that to some extent, formats are in the public domain and available for all to use—similar to a language. "You can't copy-



The New Newlywed Game



Perfect Match

right the English language," he said. But Granoff also said that "when you present the same idea in a similar way, then you're getting much too close to the bone. They not only ask married people questions about each other, they present it in the same way. I could have used [their] pilot to sell *The New Newlywed Game*."

Lorimar-Telepictures said: "We are always sensitive to the possibility of claims like this. So when we created the show, *Perfect Match*, it received a thorough review from outside counsel and based on their opinion, we feel there is no infringement of their copyright."

Although *Perfect Match* and *The New Newlywed Game* are not dissimilar in overall

concept—both ask married couples questions to find out how well they know each other—there are differences between the two shows. Four couples are featured on *The New Newlywed Game* compared to three on *Perfect Match*. In addition, *The New Newlywed Game* features only couples recently married, while *Perfect Match* has featured couples married for 25 years or more. Winning couples on *Perfect Match* receive cash awards; winners on *The New Newlywed Game* get prizes.

Barris filed for a copyright of *The New Newlywed Game* with the U.S. Library of Congress Copyright Office on March 1, 1986, and it became effective on March 17.

Perfect Match was first proposed as an in-

Please visit with us at the
NAB Convention
in our Loews Anatole
Parlor 723.

Bob Biernacki Bob Mahlman
Nancy Mahlman Josh Mayberry and
Lou Faust look forward to seeing you.



When confidentiality, experience and integrity are important.

THE MAHLMAN COMPANY
ONE STONE PLACE, BRONXVILLE, NY 10708 914-779-7003
73-981 HIGHWAY 111, PALM DESERT, CA 92260 619-341-0855

insurance show for *Catch Phrase* in December when it became evident the ratings for the latter did not bode well for a sustainable future. *Perfect Match* was developed in-house at Telepictures and went on the drawing boards shortly after the 1985 NATPE convention in San Francisco. *Perfect Match* and *\$1 Million Chance of a Lifetime* were the first two Telepictures shows to be completely developed and produced in-house. Although originally slated for a fall 1986 premiere, *Perfect Match* was rolled out early when it became clear *Catch Phrase* was not doing well. □

CBS pilot addenda

Additional pilot orders have been disclosed by CBS-TV for the 1986-87 prime time season (BROADCASTING, March 17). Programs announced include:

Half-hours

■ *Blue Skies*. CBS Productions. A comedy starring Beau Bridges, Debra Engle and Kim Hauser about a divorced New Yorker who marries an Idaho widower and moves to a Midwestern farmhouse, where their disparate families are merged. Glenn Jordan is the director, Carol McKeand and Mark Nasatir the writers. Executive producers are Carol and Nigel McKeand.

■ *Mixed Company*. Lorimar Television. Jordan Moffet writes and Joel Zwick directs this comedy exploring the personal lives of six off-beat New York City fire fighters.

■ *Shelley*. The Landsburg Co. Shelley Winters stars as "a happily-married wife and

Ready to play ball. New York Yankees and superstation WPIX-TV New York have reached a compromise on the presentation of news and Yankee baseball. The station will carry 33 weeknight home games in their entirety beginning at 7:30 p.m. After much deliberation over the Yankees' new and earlier 7:30 p.m. start for home games, WPIX said it would pick up those contests "in progress" at 8 p.m. because it did not want to move its *Independent Network News* broadcast from its 7:30 p.m. slot. The compromise calls for WPIX to present three "newsbreaks" between innings during game telecasts and to preempt its 30-minute newscast "while maintaining the option of going to 7 o'clock newscasts later in the season."

grandmother who has elected to transform her 'quiet' retirement years into the hectic world of motherhood when she and her husband adopt three boisterous kids." Michael and Jake Weinberger are the producers and writers, with a director to be announced.

■ *Together We Stand*. Universal Television in association with Al Burton Productions and Redwood Productions. A domestic situation comedy about an American family consisting of one natural-born son and three adopted children from three ethnic backgrounds. The writer is Michael Jacobs, director Alan Rafkin.

■ *Bloodbrothers*. An upscale, contemporary comedy about two life-long friends suddenly reunited after one becomes a yuppie

and the other a committed idealist. Directed by Gene Reynolds and written by David Chambers.

Hours

■ *All The News*. Universal Television. A drama about the world of crime reporting, focusing on a group of big-city journalists and their police contacts. Dan Pyne is the writer, Rick Rosenthal the director and William Sackheim the producer. Creative consultants are Richard Levinson and Bill Link.

■ *Downtown*. Ron Samuels Productions. A drama about a hard-core Los Angeles policeman who is supervising a group of four colorful parolees, who fight rehabilitation every step of the way. Don Petrie is the director, Marc Norman producer and writer. Cast members announced are Michael Nouri, Robert Englund, Milicent Martin, Blair Underwood and Mariska Hargitay.

■ *Power's Play*. Furia/Oringer Productions in association with Procter & Gamble Productions. An action/adventure series about a young woman who suddenly inherits a multi-million-dollar empire and a dashing, impetuous business partner. John Furia is the executive producer. Writers are Harry and Renee Longstreet, Noreen Stone and James David Buchanan. Cast and director to be announced.

■ *R.E.L.A.X.* CBS Productions. An action drama that "spotlights an elite law enforcement task force that operates out of the country's most notorious smuggling crossroads: Los Angeles International Airport." Alan Levin and Bernie Sofronski are supervising producers, Paul Michael Glaser is the director and Floyd Mutrux the writer. □

Lowest-rated Oscars still lift ABC to tie NBC

For the second time in two weeks, the prime time ratings ended in a tie, with ABC and NBC each having a 15.8 average rating and 26 average share for the week of March 24-30. The previous week NBC and CBS tied. CBS scored a 14.2/24 for the week.

ABC's ratings strength came from the *58th Annual Academy Awards* (despite a new low in ratings for the show at 27.3/43), and its regular schedules on Tuesday and Wednesday. ABC had four top 10 shows (including a tie for 10th place).

ABC premiered *Perfect Strangers* behind the fifth-ranked *Who's the Boss* (22.6/36) and it came in eighth with a 21.3/33. ABC's two other premieres did not fare as well—*Mr. Sunshine* and *Joe Bash*, on Friday night, got a 13.2/23 and 11.3/19, respectively.

NBC won on Thursday, Friday and Saturday, with four of the top 10 shows including first- and second-ranked repeats of *The Cosby Show* (32.5/54) and *Family Ties* (28.5/47). CBS had a Sunday win on the strength of its normal lineup, which included the ninth-ranked *CBS Sunday Night Movie* (21/35).

CBS's premiere of *Morningstar/Eveningstar* on Tuesday from 8 to 9 got a 9.7/15, and dragged down the rest of that night's lineup to make it the lowest-rated night on a network during the week.

HUT levels for the week were at 60.1, down 4% from a 62.7 for the same week a year ago. Combined network ratings were at 45.8, down 5% from a 48.3 last year. And combined network ratings were at 76.7, compared to a 76.8 last year.

Rank	Show	Network	Rating/Share	Rank	Show	Network	Rating/Share	Rank	Show	Network	Rating/Share
1.	The Cosby Show	NBC	32.0/54	23.	Highway to Heaven	NBC	16.3/26	45.	Remington Steele	NBC	13.0/25
2.	Family Ties	NBC	28.5/47	24.	Nat. Lampoon's Vacation	CBS	15.5/27	46.	Sin of Innocence	CBS	12.5/21
3.	Academy Awards	ABC	27.3/43	25.	Hotel	ABC	15.5/27	47.	Love Boat	ABC	11.7/21
4.	Murder, She Wrote	CBS	23.7/39	26.	Sound of Music	NBC	15.4/27	48.	Magnum, P.I.	CBS	11.7/20
5.	Who's the Boss?	ABC	22.6/36	27.	You Again	NBC	15.4/23	49.	Twilight Zone	CBS	11.3/20
6.	Cheers	NBC	22.3/35	28.	Valerie	NBC	15.4/22	50.	*Joe Bash	ABC	11.3/19
7.	Golden Girls	NBC	21.8/38	29.	Hill Street Blues	NBC	15.3/26	51.	Charlie Brown Special	CBS	11.2/18
8.	*Perfect Strangers	ABC	21.3/33	30.	Kate & Allie	CBS	15.3/22	52.	Cagney & Lacey	CBS	11.2/18
9.	Delafield WTS—Marry	CBS	21.0/35	31.	Dynasty II: The Colbys	ABC	14.9/24	53.	Equalizer	CBS	10.6/20
10.	60 Minutes	CBS	20.9/41	32.	Mr. Belvedere	ABC	14.7/26	54.	Postman Rings Twice	CBS	10.6/19
11.	Barbara Walters Special	ABC	20.9/31	33.	The Ten Commandments	ABC	14.7/26	55.	Fast Times	CBS	10.6/18
12.	Dynasty	ABC	20.2/31	34.	Webster	ABC	14.2/26	56.	Amazing Stories	NBC	10.6/18
13.	All is Forgiven (Thurs.)	NBC	19.1/30	35.	Newhart	CBS	14.2/21	57.	Fall Guy	ABC	9.9/18
14.	Moonlighting	ABC	18.2/29	36.	Stingray	NBC	14.1/26	58.	Mary	CBS	9.8/16
15.	Knots Landing	CBS	18.1/31	37.	Airwolf	CBS	14.1/25	59.	*Morningstar/Eveningstar	CBS	9.7/15
16.	Hunter	NBC	18.1/29	38.	Blackie's Magic	NBC	14.1/25	60.	Foley Square	CBS	9.0/15
17.	Facts of Life	NBC	18.0/32	39.	Spenser: For Hire	ABC	14.0/26	61.	Benson	ABC	8.9/16
18.	A Team	NBC	17.2/27	40.	Simon & Simon	CBS	14.0/22	62.	Redd Foxx Show	ABC	8.6/16
19.	MacGyver	ABC	17.1/28	41.	Dirty Dozen: Next Mission	NBC	13.8/21	63.	Kissyfur	NBC	8.1/15
20.	*All is Forgiven (Sat.)	NBC	16.9/30	42.	Jeannie 15 Years Later	NBC	13.7/23	64.	Smurf Special	NBC	7.0/14
21.	Gimme a Break	NBC	16.4/30	43.	Scarecrow & Mrs. King	CBS	13.6/20	65.	The Fourth Wise Man	ABC	6.6/9
22.	20/20	ABC	16.3/28	44.	*Mr. Sunshine	ABC	13.2/23				

*Indicates premiere episode

PUTTING BUYERS AND SELLERS TOGETHER FOR 32 YEARS.



CHAPMAN ASSOCIATES®

nationwide media brokers

<u>Location</u>	<u>Mkt. size</u>	<u>Type</u>	<u>PRICE</u>	<u>Terms</u>	<u>Contact</u>	<u>Phone</u>
MW	Metro	AM	\$10,000K	Cash	Ray Stanfield	(818) 366-2554
TX	Metro	AM/FM	5750K	SOLD	Bill Whitley	(214) 680-2807
AR	Metro	TV	5620K	SOLD	Brian Cobb	(202) 822-8913
RocMt/MW	Group		5500K	Terms	David LaFrance	(303) 234-0405
GA	Medium	AM/FM	5000K	SOLD	Charles Giddens	(202) 822-8913
SC	Metro	FM	2500K	Cash	Mitt Younts	(202) 822-8913
VA	Metro	FM	2200K	Terms	Mitt Younts	(202) 822-8913
NV	Metro	FM	2100K	SOLD	Elliot Evers	(415) 495-3516
Plains	Metro	AM/FM	2000K	Terms	Peter Stromquist	(818) 366-2554
Rky Mts.	Major	AM/FM	2000K	\$500K	Greg Merrill	(801) 753-8090
CO	Medium	FM	1900K	Cash	Elliot Evers	(415) 495-3516
FL	Medium	AM/FM	1700K	SOLD	Randy Jeffery	(305) 295-2572
LA	Metro	AM/FM	1700K	SOLD	Ernie Pearce	(404) 998-1100
IN	Metro	AM/FM	1700K	SOLD*	Charles Giddens	(202) 822-8913
TX	Metro	FM	1625K	\$350K	Bill Whitley	(214) 680-2807
MS	Metro	AM/FM	1500K	Terms	Mitt Younts	(202) 822-8913
ME	Small	AM/FM	1400K	Cash	Ron Hickman	(401) 423-1271
CA	Metro	FM	1250K	\$400K	Jim Mergen	(818) 366-2554
NE	Medium	AM/FM	1100K	\$300K	Bill Lytle	(816) 941-3733
WY	Medium	AM/FM	1100K	\$175K	David LaFrance	(303) 234-0405
CA	Small	AM/FM	1100K	\$150K	Elliot Evers	(415) 495-3516
ID	Metro	AM/FM	1000K	\$333K	Peter Stromquist	(818) 366-2554
FL	Medium	AM/FM	975K	SOLD	Randy Jeffery	(305) 295-2572
ME	Small	AM/FM	800K	Terms	Ron Hickman	(401) 423-1271
Rky. Mts.	Metro	AM/FM	795K	\$100K	Greg Merrill	(801) 753-8090
NY	Small	FM	750K	Terms	Ron Hickman	(401) 423-1271
IL	Medium	AM	700K	SOLD	Ernie Pearce	(404) 998-1100
Islands	Medium	FM	675K	\$75K	Randy Jeffery	(305) 295-2572
PA	Small	AM	575K	SOLD	Warren Gregory	(203) 364-5659
KY	Small	AM/FM	535K	\$165K	Ernie Pearce	(404) 998-1100
NE	Medium	FM	500K	\$100K	Bill Lytle	(816) 941-3733
NE	Small	FM	500K	Terms	Bill Lytle	(816) 941-3733
NY	Small	AM/FM	500K	Cash	Randy Jeffery	(305) 295-2572
OK	Small	FM	425K	SOLD*	Bill Whitley	(214) 680-2807
TX	Small	AM/FM	450K	SOLD*	Bill Whitley	(214) 680-2807
ME	Small	AM/FM	450K	Terms	Ron Hickman	(401) 423-1271
WY	Small	AM	450K	\$75K	David LaFrance	(303) 234-0405
NC	Small	AM	360K	\$90K	Mitt Younts	(202) 822-8913
UT	Metro	AM	325K	\$100K	Greg Merrill	(801) 753-8090

**See us at the NAB in Loews-Anatole
Suite 923 Atrium**

Executive Offices: 8425 Dunwoody Place, Atlanta, GA 30338 (404) 998-1100

**subject to FCC approval.*

Turning up the volume against ASCAP

Both money and numbers seen needed to hold off latest demand for industrywide rate increase, and all-industry committee is beating the bushes for both

The All-Industry Radio Music License Committee, which negotiates music licensing agreements on behalf of all radio stations, may soon be extinct if it doesn't quickly secure financial support from more stations.

That's the message from Bob Henley, chairman of the committee and president and general manager of KGNR(AM)-KCTC(FM) Sacramento, Calif., who is asking radio stations that are not already financially backing the committee—only 2,218 stations are currently chipping in—to contribute a minimum of \$400 each. What the committee needs, said Henley, is at least an additional \$600,000 to \$800,000 for legal fees, to successfully wage its licensing contract fight with both the American Society of Composers, Authors and Publishers (ASCAP) and Broadcast Music Inc. (BMI). (The committee's legal counsel is the New York-based law firm of Weil, Gotshal & Manges.) Hen-



Henley



Thurston

ley noted that the amount of money being paid to both ASCAP and BMI, collectively, by the radio industry has reached \$100 million.

Henley's financial request was also sent to all radio stations in early March in the form of an "emergency" Mailgram ("Riding Gain," March 10).

In an interview with BROADCASTING editors, both Henley and Don Thurston, president of Berkshire Broadcasting, North Adams, Mass., who is a member of and a principal negotiator for AIRMLC, stressed the urgency of the committee's fiscal prob-

lem, which is primarily due to mounting legal costs of a court battle with ASCAP over new music licenses. The industry has been operating with interim ASCAP licenses since the last agreement expired on Dec. 31, 1982.

Talks between the committee and ASCAP regarding new rates for blanket music licenses broke off last April although both parties agreed on a number of provisions for a new contract (BROADCASTING, April 8, 1985). That led both sides to seek action by the so-called "rate court," which was established by the Justice Department in a 195C consent decree settling an antitrust action against ASCAP. The music licensing organization is seeking a new, five-year contract. The committee has said ASCAP is looking for a rate increase in blanket licenses of about 18%. ASCAP, however, has placed the figure at 16%. The industry's current dispute with ASCAP followed a new, two-year BMI contract issued in 1984, with an 8.8% rate hike retroactive in 1985.

In the present federal rate court proceeding in the Southern District of New York, ASCAP is attempting to show that the radio industry is profitable and can afford a rate increase for music licenses. And although it's still in the discovery stage, the court, at ASCAP's request, has ordered 500 of the 2,200 committee-represented stations to provide it with the following documents: the past five years' financial statements, station sale (change of ownership) contracts and documents related to the cost of operating music vs. nonmusic outlets, if the stations have switched formats ("Top of the Week," Feb. 24).

But Henley said the committee still has a "strong case" against ASCAP for a "reduction" in fees. "We base this on documentation, mainly supplied by BMI, which shows that slightly more BMI-licensed music is being played on radio stations across the country today than ASCAP music," said Henley. "But ASCAP, without the [rate] increase, gets more money from broadcasters than BMI."

Henley said ASCAP challenges the committee's argument saying that its repertoire of music is larger and contains more "hits." But Henley said the committee, because of the wide variety of formats, has questioned what constitutes the definition of a hit. "A hit to easy listening stations of a CHR [contemporary hit radio] record doesn't mean anything, because they won't play it anyway," he said. (Last summer, ASCAP filed an affidavit with the federal court in the Southern District of New York saying it was entitled to a larger increase than BMI because radio stations are playing a higher proportion of ASCAP music found on the "hit charts" ["In Brief," July 29, 1985]). Henley also noted the committee's long-standing po-

Please visit us during the NAB
at either one of our
Hospitality Suites

LOEWS
ANATOLE
Suite 810
745-5535

HYATT
REGENCY
Suite 1249
760-9629

Scheduled Limousine Service Between
Suites is Available.

BLACKBURN & COMPANY
I N C O R P O R A T E D

Media Brokers & Appraisers Since 1947

WASHINGTON, D.C. 20036
1100 Connecticut Ave., NW
(202) 331-9270

ATLANTA, GA 30361
400 Colony Square
(404) 892-4655

CHICAGO, IL 60601
333 N. Michigan Ave.
(312) 346-6460

BEVERLY HILLS, CA 90212
9465 Wilshire Blvd.
(213) 274-8151

No knowledge. Intelsat Director General Richard Colino has denied any knowledge of an anonymous statement that disclosed the status of PanAmerican Satellite Corp.'s ongoing efforts to secure Colombia as a foreign correspondent with which to establish international communications satellite service that would compete with Intelsat (BROADCASTING, March 31). Rene Anselmo, chairman of PanAmSat, had suggested in a letter to Colino last month that Intelsat's "dirty tricks" department was the source of the mysterious document. In a "Dear Rene" response, Colino said he had "ascertained that there is no knowledge here" of either the document or its writers. In fact, he said he had "no or little understanding" of matters discussed in the document (which did not seem to fit with the knowledge that Intelsat's deputy director general, Jose Allegretti, said he had had of Colombia's interest in the PanAmSat proposal). Colino suggested that "your efforts to involve Intelsat in this anonymous documentation be dropped."

music licensing dispute]," he said. As for BMI, Thurston said the radio industry has "crossed the bridge" with BMI and "I think we'll be successful in negotiating a new BMI contract."

The central issue remains, in Thurston's opinion, the matter of industry support. "I think the committee feels that they have an extremely good case to fight off any increase from ASCAP. I think what all of us are fearing is that without a very strong showing in the numbers of radio stations supporting this committee—not only do we need money but we need numbers—that it's easy for ASCAP as a single company to outlast us in a litigation, and to get people worried and weary. I think this has to be part of their strategy. The larger the number of radio stations, the easier it will be to convince ASCAP that it's up against a formidable, unified industry opposition."

Henley seconded the motion about industry support, saying the size of the war party was more important than the size of the war chest. The \$400 contribution the committee has set as a goal "is not sacred," he said. "They can send \$25, or \$50, anything. The important thing is to get those stations that have not made any contribution to get involved." □

Changing Hands

PROPOSED

WLNS-TV Lansing, Mich., and WKBT(TV) La Crosse, Wis. □ Sold by Backe Communications Inc. to Young Broadcasting Inc. for \$72 million. **Seller** is owned by John Backe, former president of CBS Inc. It purchased stations in 1984 for \$48 million ("In Brief," March 19, 1985) and has no other broadcast interests. **Buyer** is subsidiary of Adam Young Inc., New York-based station representative. Subsidiary is owned by Adam Young and his son, Vincent. WLNS is CBS affiliate on channel 6 with 100 kw visual, 20 kw aural and antenna 1,000 feet above average terrain. WKBT is CBS affiliate on channel 8 with 316 kw visual, 57.5 kw aural and antenna 1,540 feet above average terrain. **Broker:** R.C. Crisler & Co.

WBSP(TV) Ocala, Fla. □ Sold by Big Sun Television Inc. to Wabash Valley Broadcasting for approximately \$7.5 million. **Seller** is principally owned by brothers, Donald and Norman Savey. It has no other broadcast interests. **Buyer** owns WTHI-AM-FM-TV Terre Haute, Ind. It is principally owned by Mary F. Hulman and family, who also own Indianapolis Motor Speedway. WBSP is independent on channel 51 with 2,931 kw visual, 239.1 kw aural and antenna 924 feet above average terrain.

KLDH-TV Topeka, Kan. □ Sold by KLDH-TV Inc. to Joseph L. Brechner for \$6.5 million. **Seller** is owned by Larry D. Hudson, who also has interest in new TV in Omaha. and cable system in St. Louis. **Buyer** is owned by Joseph L. Brechner, partner in John Kluge's

sition that music licensing fees automatically rise each year because they are tied to station revenues.

"Without the strong showing of radio stations supporting this committee, it will be easy for ASCAP to out last us in the litigation," warned Thurston.

"You have to remember," he said, "that for radio stations these license fees are expense dollars, not income dollars. So for the radio broadcasting industry to spend \$100 million a year they've got to go sell an awful lot of advertising time. We're already operating on tiny margins in comparison with the rest of the world. It is a very meaningful expense dollar that this committee is trying to protect."

Henley amplified that point by noting that, assuming an average margin of 16.6% for the radio industry (based on 1982 levels), the industry would have to generate \$600 million in advertising to pay music licensing fees at the \$100 million level. He contrasted that with widespread concern over the possible loss of \$150 million in beer and wine revenues to indicate that many have trouble appreciating the enormity of the problem.

Besides the ASCAP court struggle, the music licensing battle, said Henley, is also being conducted on two other "fronts."

One is to change the consent decree of the Justice Department under which BMI operates in order to set up a federal rate court similar to the one in place for the ASCAP proceedings.

The other is to continue negotiating with BMI for new music licensing contracts, which the committee is seeking at a reduced rate. (The previous BMI agreement expired last Dec. 31 and stations have been asked by the committee to sign a one-year contract extension pending negotiations with BMI.)

Thurston noted that the outcome of the ASCAP litigation will be "critical" for future music licensing negotiations with that organization. "It's the first time the committee has gotten to this point [the rate court for

NAB Convention Headquarters

HYATT REGENCY DALLAS SUITE 1018

Cecil L. Richards/Bruce A. Houston/Lee M. Hague

CECIL L. RICHARDS INC.

A Confidential Service to Owners & Qualified Buyers

NEGOTIATIONS FINANCING APPRAISALS
TV CATV RADIO NEWSPAPERS

7700 LEESBURG PIKE
FALLS CHURCH, VA 22043
(703) 821-2552

4320 DUNDEE ROAD
NORTHBROOK, IL 60062
(312) 291-0188

Tougher translator rules requested. Alleging that some commercial FM broadcasters are unfairly using translator stations to expand their service areas, the National Association of Broadcasters last week asked the FCC to toughen its regulation of commercial FM translators. In a petition for rulemaking, NAB recommended that the FCC adopt clearer and stricter technical standards for FM translators; prohibit using translators to make a profit; limit the number of FM translators in areas well served by primary broadcast stations; further restrict primary station support of FM translators outside their 1 mv/m contours; more strictly enforce policy proscribing use of translators as relay stations, and permit FM translators to rebroadcast AM radio stations. On the last point, NAB said FCC would need to consider whether stations that change power at sunset should be permitted to rebroadcast on FM translators located within their daytime or nighttime contours and whether daytime-only stations should be permitted to transmit studio feeds directly to translators at night. "NAB believes that allowing FM translators to carry AM signals would be of great benefit to many AM broadcasters," NAB said. "If such a policy were effectuated in the context of the rule changes requested in this petition, AM radio could experience this augmented service without experiencing the problems outlined in this petition."

original investment in radio, WGAY(AM) Silver Spring, Md., later sold. Brechner now has interest in WMDT(TV) Salisbury, Md., and WKFI(AM)-WSWO(FM) Wilmington, Ohio. KLDH-TV is ABC affiliate on channel 49 with 3,475 kw visual, 347.5 kw aural and antenna 1,507 feet above average terrain.

WNKS(FM) Columbus, Ga. □ Sold by Aylett B. Coleman to M&M Partners for \$3,250,000 cash. Seller also owns WXLK(FM) Roanoke, Va. Buyer is owned by J.T. Milligan (75%) and James R. Martin (25%). It also owns WPNX(AM) Phenix City, Ala. WNKS is on 102.9 mhz with 100 kw and antenna 1,521 feet above average terrain.

WXXX(FM) South Burlington, Vt. □ Sold by Champlain Valley Broadcasting Corp. to Lewis Lloyd and Richard Borel for \$3,250,000. Seller is owned by John Hughes

and his wife, Eve; Howard Ginsberg; Martin Chester, John C. Nichols and H. Lawrence McCrorey. Hugheses own WYNH(AM) Salem, N.H. Buyers were formerly, respectively, financial officer and vice president of WHDH Corp., licensee of WHDH(AM) Boston and subsidiary of John Blair & Co. They have no other broadcast intetests. WXXX is on 93.5 mhz with 3 kw and antenna 225 feet above average terrain.

WBRQ(FM) Cidra, P.R. □ Sold by Radio Musical Inc. to Thomas Carrasquillo and two others for \$615,000. Seller is owned by George Arroyo, who also owns WONQ(AM) Orlando, Fla. Buyer is station's general manager. WBRQ is on 97.7 mhz with 2.7 kw and antenna 866 feet above average terrain.

WLKV(AM)-WBBC(FM) Blackstone, Va. □ Sold by Blackstone Communications Inc. to

Nottoway Radio Inc. for \$450,000. Seller is owned by Michael Rau, who has no other broadcast interests. Buyer is owned by Plati Eliades, attorney of Hopewell, Va, with no other broadcast interests. WLKV is daytime on 1440 khz with 5 kw. WBBC is on 93.1 mhz with 1.8 kw and antenna 370 feet above average terrain.

KSLE(AM) Seminole, Okla. □ Sold by Prime Media Group to One Ten Broadcast Group for \$375,000 cash. Seller is principally owned by Charles Morriss, who has no other broadcast interests. Buyer is owned by Eileen C. Howard and two others. Howard's husband, Tom, is radio sales consultant based in Massapequa, N.Y. KSLE is on 105.5 mhz with 3 kw and antenna 300 feet above average terrain. Broker: Chapman Associates.

WUEZ(AM) Sanford, Fla. □ Sold by Emme Broadcasting Co. of Florida to Seminole Orange Broadcasting Co. for \$314,000. Seller is owned by Grenville T. Emmet, who also owns WSME(AM)-WEBI(FM) Sanford Me., and has interest in WAGE(AM) Leesburg Va. Buyer is owned by Larry R. Hadley Donald L. Unger and Mitchell W. Carroll. Carroll is salesman at WRAW(AM)-WRFY-FM Reading, Pa. Hadley and Unger are automobile dealers also from Reading. WUEZ is on 1400 khz full time with 1 kw. Broker: Chapman Associates.

CABLE

Systems serving Lawrenceburg, Fayetteville and Pulaski, all Tennessee □ Sold by Roger Cablesystems Inc. to Rifkin & Associates for approximately \$10 million. Seller is Toronto, Canada-based cable MSO with 17 U.S. systems in 10 states and seven systems in Canada. It is publicly traded and headed by Edward S. Rogers. Buyer is Denver based MSO with six systems in six states. It is owned by Monroe Rifkin. Fayetteville system passes 3,500 homes with 2,850 subscribers and 48 miles of plant. Lawrenceburg system passes 4,500 homes with 3,300 subscribers and 73 miles of plant. Pulaski system passes 6,000 homes with 3,500 subscribers and 50 miles of plant.

System serving Bishop, Calif. □ Sold by Summit Communications to Westar Communications Inc. for approximately \$7 million. Seller owns Bellevue, Wash.-based cable MSO serving 33 communities in four states. Buyer is Sacramento, Calif.-based cable group owning systems in Roseville Truckee and West Lake Tahoe, all California. It is owned by Rodney A. Hansen and Barry K. Hyne. System passes 6,300 homes with 5,000 subscribers and 100 miles of plant. Broker: Daniels & Associates.

System serving eastern Polk county, Florida □ Sold by Kennedy Cable of Florida to Centel Cable Television for approximately \$2 million. Seller is Reidsville, Ga.-based cable MSO with five systems in Georgia. Buyer is publicly held, Oak Brook, Ill.-based cable MSO serving over 280,000 subscribers. System passes 4,321 homes with 2,000 subscribers and 97 miles of plant. Broker: Communications Equity Associates.

For other proposed and approved sales, see "For the Record," page 169.

Closed:

WELE (FM) Orlando (Deland), FL.



*Art Kern & Alan Beck closing a
\$7,500,000.00
transaction with Otto Schoepfle
March 14, 1986*

AMERICOM
RADIO ★ BROKERS

900 Seventeenth St. N.W.

Washington, D.C. 20006

(202) 737-9000

ABC reports strong sales for 'Liberty'

Coverage of lighting of statue of Liberty by ABC parks advertiser interest; some portions of festivities will be covered by all media

ABC's television coverage of *Liberty Weekend*, July 3-6, is now better than 80% sold, according to Robert I. Silberberg, ABC vice president and general sales manager. The network was previously 90% sold for its 11 hours of prime time and three hours of daytime coverage, but has decided to increase its total number of hours to 13 hours of prime time coverage and four hours of daytime, creating the slack.

ABC purchased the rights to exclusive coverage of portions of the four-day tribute to the restored Statue of Liberty from "The Statue of Liberty—Ellis Island Foundation" last fall for \$10 million. (The total cost of the event will reportedly be between \$28 million and \$30 million.) The ABC exclusives include coverage of the lighting of the statue by President Reagan from aboard the U.S.S. John F. Kennedy; two classical and jazz concerts in Liberty State Park, N.J., and the Great Lawn in Central Park; an "International Sports Salute" at the Byrne arena in N.J., and the closing ceremonies at Giant Stadium, in East Rutherford, N.J.

A 30-second spot during the ABC coverage is going for \$165,000 during prime time and \$60,000 during daytime. There are 181 30-second spots in prime time and 108 in laytime. Among the sponsors that have signed up are IBM, K-Mart, Chrysler, Prudential, Stroh's, Avon, Lipton, Van Heusen, the U.S. Treasury and Castle & Cook. Advertising schedules being purchased range from \$1.5 million to \$4 million. ABC has been selling the event since the beginning of the year.

Jeff Gralnick, vice president and executive producer, special programming, ABC News, said ABC coverage will be coordinated from a control room, "TV1," located on West 66th Street in Manhattan, where Rooney Arledge, ABC group executive vice president, news and sports, and president, ABC News, will act as executive producer of the network's television coverage. Television producer and producer of the opening and closing ceremonies at the 1984 Olympics, David L. Wolper, is chairman and executive producer of *Liberty Weekend*. Gralnick estimated that ABC personnel involved in the coverage will number in the hundreds. "We're dealing with a fairly unique interconnection" of a variety of broadcasts, that will be covered by helicopters and on-location crews.

Among the nonexclusive events available for coverage by other broadcast networks and stations are "Operation Sail," a parade of "Tall Ships" in New York harbor, and what is being billed as the largest fireworks display in the history of the country. It is esti-

ated that between 3,500 and 4,000 members of the press will be accredited to cover the event during the weekend.

NBC is tentatively planning to cover two hours of the festivities on July 3 during prime time, and CBS is planning broadcasts from Governor's Island. CBS-owned WCBS-TV New York has already been carrying news reports on the progress of the restoration and will air four hours of special programming in the month before Liberty Weekend, as part of "the most ambitious campaign in the history of the station" according to a spokesman. □

Pulitzer heirs file suit

The fate of Pulitzer Publishing Co. may be determined in court, as seven shareholders of the company filed suit last week against the company, certain of its officers and other shareholders. The suit alleges the defendants have historically misrepresented the company's value to shareholders; attempted to entrench existing management; violated their fiduciary duties, and used their control

Hearing the future in San Diego. More than 700 noncommercial radio executives are expected to attend National Public Radio's 15th annual Public Radio Conference. Under the banner, "Hear the Future," conference attendees will gather at the Town & Country hotel in San Diego April 13-17.

Unlike last year's PRC agenda, in which the NPR membership discussed and adopted a business plan that left NPR to rely on its member stations for financial support, or the meetings in 1984 and 1983, when discussion of the network's \$7-million debt was still in the forefront—the main thrust of this year's event will be NPR's membership moving forward. "We're celebrating," said vice president for representation, Midge Ramsey. It's "wonderful not to have a crisis this year," she said, adding that this year's PRC will have a "very real orientation" toward running public radio as a system-wide venture.

Former congressman and chairman of the House Telecommunications Subcommittee, Lionel Van Deerlin, will address this year's gathering, as will noncommercial radio station directors and NPR personnel. Throughout the four-day meeting in San Diego, there will be sessions on "Doubling the Audience in Four Years—Can it Be Done?", building a satellite earth terminal and the regulatory area. There will also be sessions on the "goals and prospects" for public radio, digital recording, marketing and on the Corporation for Public Broadcasting—"What Does CPB Think It's Doing and Where Does All the Money Go?" There will be opening remarks from NPR Chairman Jack Mitchell, NPR President Douglas Bennet and CPB President Martin Rubenstein.

Other highlights, NPR said, will be live performances by musicians featured on NPR's music programs and meetings with hosts of several of NPR's programs. Additionally, nine regional public radio organizations will hold meetings.

Kalil & Co., Inc.

Frank Kalil, Howard Duncan and Kelly Callan

will be at the

**LOEWS ANATOLE in Dallas
for the "N.A.B." CONVENTION**

Please phone for a confidential appointment

Radio, TV and CATV Brokers

Appraisals, Media Investments, Consulting



Kalil & Co., Inc.

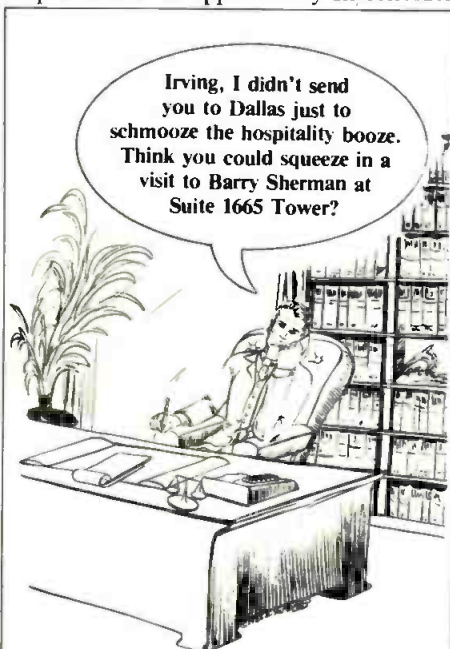
3438 North Country Club • Tucson, Arizona 85716 • (602) 795-1050

of the company for personal profit, "most recently through amendments to various compensation arrangements and executive benefit and pension plans."

Among the relief sought in the complaint are an ending of the voting trust which now controls 79% of shareholder votes; an injunction against Pulitzer's proposed initial public offering, and a liquidation of the St. Louis-based media company. A trial has been scheduled for May 12 in United States District Court for the Eastern District of Missouri before Judge William L. Hungate.

Among the 13 defendants in the complaint are Joseph Pulitzer Jr., the company's chairman; Michael Pulitzer, its vice chairman; Ken J. Elkins, president and chief executive officer of Pulitzer Broadcasting, and Harold O. Grams, director and former head of Pulitzer Broadcasting. The seven plaintiffs are all family members: Clement C. Moore II; Kate Davis Pulitzer Quesada, one of Joseph Pulitzer's granddaughters; her two sons, T. Ricardo Quesada and Peter W. Quesada, and three sons of her cousin, Cynthia E. Weir. Three of the defendants were among those who optioned off their 20% holdings to Alfred Taubman, a Bloomfield Hills, Mich.-based investor whose \$500-million offer for all of Pulitzer Publishing Co. (BROADCAST-ING, March 3) has been turned down.

The company meanwhile is proceeding with plans for an initial public offering and intends to make a filing with the Securities and Exchange Commission within the next few weeks. Preliminary to the offering, certain amendments of the company's articles of corporation were approved by shareholders



Barry Sherman & Associates

full service media brokers
and consultants

1828 L St., N.W. Suite 300
Washington, D.C.
(202) 429-0658

Midwestern contact:
Walter H. Westman
(313) 881-5432

BottomLine

Officers and consultants. Proxy for Capital Cities/ABC Inc. details consulting agreements with chairman of board's executive committee and former ABC Chairman Leonard Goldenson and former ABC President Fred Pierce. Goldenson will receive \$250,000 for 1986 while Pierce will receive \$500,000 per year through Aug. 31, 1989—as consideration for termination of previous contract—as well as one-year consultancy agreement paying \$250,000 and ending Jan. 10, 1987. Each also receives \$20,000 director's fee. In 1985, Thomas S. Murphy, chairman and chief executive officer of CC/ABC, received cash compensation of \$625,000 and deferred compensation of \$84,080. Daniel B. Burke, president and chief operating officer, received cash compensation of \$589,500 and deferred compensation of \$80,405. John B. Sias, executive vice president and president of ABC Division, received cash compensation of \$500,000 and deferred compensation of \$73,485. Joseph P. Dougherty, executive vice president, received cash compensation of \$455,000 and deferred compensation of \$61,925. Board of Capital Cities/ABC Inc. authorized company to repurchase "from time to time" some or all of 2,850,000 outstanding warrants that were issued at time of merger. Warrants, currently trading at roughly \$35 each, enable holder, through July 29, 1988, to purchase share of common stock (NYSE:CCB) for \$250.

New Century. Initial public offering of Century Communications Corp. was completed at \$12.50 per share. Net proceeds to company of at least \$24 million were used to reduce bank debt. Offering, through Shearson Lehman Brothers, consisted of 2,150,000 shares sold by company and 1,700,000 shares sold by selling stockholders, including 833,333 sold by MSO's president and chief executive officer, Leonard Tow. Century owns at least 34 cable systems in 18 states, which as of March 1986, served 355,000 basic subscribers. New Canaan, Conn.-based company is one of five MSO's in partnership to purchase Group W Cable, which, if accomplished, would give Century an additional 237,000 basic subscribers. To finance proposed acquisition of its share of Group W systems (nine systems in California) at cost of roughly \$250 million, company indicates it would initially try to expand its current bank credit line to \$340 million. If not successful, it would raise capital through other means, including possible issuance of additional securities, both debt and/or equity. Company said it might issue additional securities in any event to refinance possible bank debt. Now 10% of outstanding stock is publicly held but division into class A and class B shares continues to give Tow and family, and other previous 50% owner, Sentry Insurance Co., control of 98% of votes. Century had revenue for year ending May 31, 1985, of \$55.2 million with cash flow (operating income plus depreciation and amortization) of \$28.7 million and operating income of \$14.2 million.

Acquisition kitty. Fries Entertainment Inc. filed for offering of \$30 million (principal amount) of 7½% convertible debentures due 2006. Offering, through L.F. Rothschild, Unterberg Towbin, will also include 225,000 shares of common stock (ASE: FE) being sold at \$10 by Charles W. Fries, chairman of board and chief executive officer. Stock sale will reduce his ownership from 29.2% of outstanding shares to 25.9%; 26.5% is owned by former wife, Carol Fries Escalante. Offering prospectus said company intends to use significant portion of proceeds "to acquire distribution rights to filmed entertainment product and for the acquisition of radio or television broadcast facilities or stations." For six months ending Nov. 30, 1985, company had revenue of \$9.4 million and pre-tax earnings of \$931,000.

Just in case #1. A.H. Belo said it would distribute to shareholders "preferred stock purchase rights" designed to discourage hostile takeover attempts. Rights—similar to those issued last year by RCA and those issued two months ago by Tribune Co.—would enable rights holders, under certain conditions, to purchase hostile bidder's stock for half price. Rights will be exercisable "only if a group acquires 30% or more of A.H. Belo Corp. common stock or announces a tender offer for 30% or more of the common stock." Belo Chairman James M. Moroney Jr. said he knew of no current effort to acquire control of Dallas-based media concern.

Just in case #2. Grey Advertising said shareholders approved issuance of Class B stock that has 10 times voting power of common stock but will convert back to one vote upon transfer of ownership. New issue will be effected through two-for-one stock split.

Just in case #3. Dow Jones & Co. said it would propose several "antitakeover measures" at company's April 16 annual meeting. Amendments to company's charter would provide for staggered terms for board of directors, include "fair price" provision requiring prospective bidder to make same offer to all shareholders and "a requirement that the board consider noneconomic factors in evaluating any takeover bid." Dow Jones Chairman Warren H. Phillips said he knew of no current efforts to take control of company away from Bancroft family. Company's previous proposal to set up Class B stock with 10 times voting power of current stock has been delayed by shareholder suit.

at a meeting last Wednesday. Approval was guaranteed because certain trustees controlling the Pulitzer voting trust had already stated their support for the amendments.

Among the changes were reducing the total number of directors from 14 to 9 and staggering their election; requiring a supermajority (80%) vote to remove a director, with or without cause; requiring that only a supermajority of shareholders can call a special meeting, and requiring that certain business combinations could be approved only by a majority of the board or a supermajority vote of shareholders. The plaintiffs had asked Judge Hungate to enjoin last Wednesday's shareholder's meeting but their request was denied.

The lawsuit noted that the \$134-million book value of the company—which is currently used to determine the price at which selling shareholders in the voting trust must first offer their stock—compared poorly to the Taubman offer and that the company's own investment banker, Morgan Stanley & Co., had estimated a "range of fairness" of Pulitzer's value at between \$620 million to more than \$700 million.

In a March 19 letter to shareholders, Joseph Pulitzer Jr. noted published reports of possible litigation (BROADCASTING, March 24) and said that such litigation could, because of changing stock market conditions, delay the initial public offering; change the possible price per share, or "frustrate the offering entirely." The letter said that over the five-year period ending in 1985, Pulitzer's net income rose at a compound annual rate of 24% to \$20 million. Pulitzer also wrote that the contemplated dividend policy of a publicly held Pulitzer would likely increase the annual income of family shareholders "at least two-and-a-half times over the present annual rate." □



On the dotted line. The contract for the \$72-million sale of the Backe TV stations (see "Changing Hands," page 153) is signed by (seated, l-r) Vincent Young, chairman of Young Broadcasting, and John Backe, chairman of Backe Communications. Standing (l) are Adam Young, founder of Adam Young Inc., and Larry Wood, vice president of the brokerage firm R.C. Crisler & Co.

Entertainment business news. BBC Enterprises, the for-profit subsidiary of the BBC, has announced an "agreement in principle" for the purchase of Lionheart Television International from Western World Television Inc. and Public Media Inc. Publicly traded over the counter, WWTV and PMI each owned 49% of Lionheart. BBC Enterprises owns the other 2%. Lionheart is the principal U.S. distributor of BBC productions, Australian Broadcasting Corp. productions and independent product. In 1985, Lionheart reported 1985 sales of \$10 million, up 45% over the year before. . . . Primetime Entertainment has been purchased by Southbrook Entertainment Corp. for \$10.3 million (\$7.5 million cash and \$2.8 million in liabilities). Primetime's library includes the films, "My Bodyguard," "Oliver Twist" and "Zorro, the Gay Blade." Three members of Primetime's staff will also join Southbrook, including Harvey Reinstein, executive vice president.

Loews Corp. buys more CBS shares

Latest purchase gives Loews 16.7% of company, suggesting its investment may be long term; Jankowski gets new contract

In the aftermath of last week's news of Marvin Davis's rejected offer for CBS ("Top of the Week," March 24), Loews Corp. increased its ownership of CBS with a \$149-million purchase of CBS stock. Just over one million shares were bought in a single block last Tuesday noon at 143½, 75 cents below the previous sale. The purchase increases Loews's ownership in CBS by 4.5%, to 16.7%.

The purchase had two possible implications. One is that sellers of the large block were presumed to be the Fisher brothers, New York-based real estate developers who previous reports suggested were attempting to organize a takeover of CBS. If true, last week's news suggested the threat had subsided. The sale further implied that Loews Corp.'s investment is for the long term. Previously, some observers were wondering whether the New York-based conglomerate might sell some CBS stock at the end of a required one-year holding period so that Loews could exclude from taxation 85% of \$112.5 million it received in a CBS share repurchase last July. The more recent purchase points in the direction of longer ownership, which it has informally told CBS might reach 25%. Also, rule 16-b of the Securities and Exchange Commission requires any purchase by a director or 10%

holder (both criteria that Loews now meets) must own stock for at least six months, or return any trading profit. CBS shares declined \$3 on Wednesday, the day of Loews's purchase, and \$2 the following day.

A proxy statement CBS mailed to shareholders in advance of its shareholders' meeting revealed that CBS/Broadcast Group President Gene F. Jankowski has received a new five-year contract, effective this year, providing for a signing bonus of \$200,000; an annual base salary of not less than \$475,000, plus annual bonus credits of \$150,000 that are payable, with accrued interest, beginning six years from now. The credits would be forfeited if Jankowski left voluntarily or was terminated for cause. The various compensation is in addition to his participation in the standard CBS benefit and incentive plans. The previous five-year contract provided Jankowski with base salary of \$275,000 and bonus credits of \$140,000. The contract also provides that following a change in control of CBS, he would get a lump sum severance payment equal to three times his base salary plus some additional bonus payments. The parachute would be activated if he were fired or resigned for "good reason," a term that includes "...changes in his positions, duties, responsibilities and status with CBS."

Thomas H. Wyman, chairman, president and chief executive officer, received a salary of \$679,808 in fiscal 1985 and additional bonuses of \$350,000. Jankowski received total compensation of \$847,885 in fiscal 1985. Walter R. Yetnikoff, president CBS/Records Group, received total compensation of \$897,192; Peter A. Derow, president CBS/Publishing Group, received \$459,270, and Fred J. Meyer, senior vice president, finance, received \$393,885. □

We'll write the book on your station.

We'll even prepare a sales presentation book to help you sell your station. Call Bruce Cranston at (303) 321-7550. 2930 East Third Avenue. Denver, CO 80206

BROADCAST BROKERS.
**DANIELS
& ASSOCIATES**

Linking Hollywood to the stars. A new \$18-million satellite communications center will be built in Hollywood by Los Angeles-based Robert Wold Co. and its subsidiary, Wold Communications. Scheduled for completion in early 1988, the Wold Communications Center will include a five-level building, three-level parking structure and complex of 10 earth stations. The last include two international earth stations handling traffic to and from Intelsat satellites over the Pacific and Atlantic oceans. Existing Wold offices and technical facilities will be relocated to a 50,000-square-foot building near Paramount studios. Ground breaking is expected in September, with the total construction costs budgeted at about \$12 million. About \$6 million worth of equipment will be installed by Wold. Financing is being arranged privately by Demco Properties West, which will lease the building and site to Wold under a 10-year agreement.

According to Robert N. Wold, chairman and president, terrestrial microwave, coaxial cable and fiber optics will interconnect the new center with major sports venues and program originators throughout Los Angeles.

Something new on Westar. In the wee hours of July 24, earth stations at television stations across the country may be turning to Westar IV to receive a different kind of programming service from International Television Network of Salt Lake City. Using satellite time on Westar IV leased from Bonneville Satellite, said ITN President David Hemingway, the start-up company plans to deliver four hours of "very high quality" foreign programming early each morning to broadcast affiliates. ITN doesn't yet have any affiliates, Hemingway said, but it has talked to and received positive responses from many stations, including at least one in 14 of the top 20 markets. ITN will feed its four-hour block of programming at 12:30 a.m. NYT and repeat it at 4:30 NYT. Affiliates will be free to use all or part of the programming live or tape it for later use.

According to Hemingway, ITN expects to fill most of the advertising time (10 to 12 minutes per hour) with direct-response ads. Affiliates will be free to substitute local ads for up to one-third of the national ads, he said, but will be compensated by ITN on a prorated basis for those national spots they don't preempt. Although ITN's programming will comprise programs produced from around the world, Hemingway said, most of it will come from one source—the Special Broadcast Services, one of Australia's government-owned television networks, which collects international programs for prime time broadcast down under. Programs not produced in English, he said, will have English subtitles.

According to Hemingway, ITN is principally owned by Simmons Family Inc., owner of KDYL(AM)-KSFI(FM) Salt Lake City. Simmons also owns the Zions First National Bank, of which Hemingway is executive vice president.

Deflation. Comsat's Intelsat Satellite Services Division has lowered its rates for Intelsat satellite time by an average of 3.3%. In filings with the FCC, it also asked to reduce by 15% rates for new, long-term International Business Satellite Service circuits and by

about 10% rates for customers using TDMA/DSI transmission equipment.

Bruce Crockett, vice president and general manager, Intelsat's Satellite Services Division, said the rate reductions are the result of lowering costs and greater demand in 1985 and 1986.

Joining the club. Group W has joined the growing number of stations and group broadcasters with their own SNG truck or van. It announced last week it will lease a Ku-band truck from BAF Communications for use by its stations in Pittsburgh (KOKA-TV), Philadelphia (KYW-TV) and Baltimore (WJZ-TV). "The state-of-the-art satellite truck will give these Group W television stations advanced newsgathering technology," said Joseph Gianquinto, vice president, broadcast operations and technical services, Group W Television Stations, in a prepared statement. "We want to be there first when there's a late-breaking story of local or national importance, no matter where that story takes place. This new hardware will give us that capability."

BAF Communications' SNG 340T truck is equipped with an Andrews 2.3-meter dish and two 300-watt amplifiers. For off-air voice communications, it's also equipped with a cellular telephone, a two-way radio and a SCPC communications system.

Class acts. Videostar Connections of Atlanta will distribute the three-hour *Wrestlemania II* today (April 7) to as many as 500 sites using three transponders and two scrambling systems. According to a company spokeswoman, it will beam the professional wrestling show to closed-circuit sites via Galaxy III and GSTAR I, scrambling the signal with Telecast's MAST system, and it will beam it to cable systems as a pay-per-view offering via Galaxy I, scrambling the signal with M/A-Com's Videocipher II system, which has become the cable industry's de facto scrambling standard. The show is being produced by Titan Sports.

Wrestlemania II is a challenge to Videostar, not only in its distribution, but also in the backhaul of its various segments which will originate from arenas in three cities—Los Angeles, Chicago and New York. (The show's chief attractions: professional football players, Andre the Giant and Big John Stud in an "anything-goes elimination match," Mr. T versus Rowdy Roddy Piper in a "boxing" match and Hulk Hogan versus King Kong Bundy in a steel cage.) So far, 190 cable systems and 232 closed-circuit ventures had signed aboard the ad hoc network.

Sounding the alarm. While Videostar prepares for *Wrestlemania II*, Brightstar Communications of America is getting ready for The Alarm, a popular Welsh rock group. On behalf of IRS Records, The Alarm's label, Brightstar will distribute via satellite on two continents the group's April 12 concert from the campus of the University of California at Los Angeles. Set to receive the live feeds are MTV, the MuchMusic Network (the Canadian version of MTV) and an ad hoc network of television stations in the United Kingdom, France, Italy, Portugal, West Germany and Scandinavia. The concert will be transmitted live starting at 3 p.m. NYT.

Another uplink. American Satellite Co., hoping to pick up some

of the voluminous data transmission business emanating from New York, has leased space at the New York Teleport to install an 8-meter Ku-band earth station next August. As part of the Teleport, ASC's earth station will be linked to a 150-mile fiber optic network connecting users in New York and New Jersey. The earth station will also be linked to ASC's hub on the 110th floor of the World Trade Center.

According to ASC, its earth station will be the fifth antenna to be installed at the Teleport. Three of the existing antennas are owned by Teleport Communications, owner and operator of the Teleport, and one is jointly owned by Comsat International and TRT Communications.

SATELLITE SYSTEMS ENGINEERING, INC.

- Satellite, Cellular and FM Engineering
- Economics and Satellite Appraisals
- Regulatory Affairs and FCC Applications
- Accurate, timely data published in SSE's *Satellite Digests*



7315 Wisconsin Avenue Bethesda, Maryland 20814
Tel. (301) 652-4660 Telex (710) 824-0096 Est. 1974

ABC cuts news staff

Layoffs represent 6% of news force; another 10-20 expected to be laid off in next few weeks; goal is to operate news division at lower cost

ABC News laid off about 70 employees last week, mostly editorial staffers, such as producers, production assistants, writers, researchers, as well as some administrative people (BROADCASTING, March 24). The cuts, which were expected, represented about 6% of the news division's work force of 1,150 employees, and executives at the division say that another 10 or 20 employees will also be let go in the next week or two, reducing the staff by a total of 7% or 8%. The layoffs are effective April 11, for the most part.

The layoffs, however, are a part of an overall plan to make the news division operate more efficiently at lower cost, said Richard Wald, senior vice president, ABC News. A task force was assembled last fall and charged with examining ways of improving the division's efficiency. It concluded that not only were some layoffs appropriate, but that some of the division's production facilities were underutilized. "Over the years, what happens to you as you change," said Wald, "is you start to use additional control rooms [or other facilities] and they aren't really necessary. And you don't bother examining [the situation] because that is the way you do it." Just a short time ago, the news division at ABC was small in comparison to its counterparts at CBS and NBC, said Wald. It then went through an "explosive growth" stage, without, perhaps, appropriate checks on the associated costs.

Two examples of how the division will reduce its facilities costs: 1) Two control rooms for news show production in New York that are not used to full capacity will be shut down. Smaller and cheaper post-production rooms will be used instead; 2) The practice of automatically ordering an extra half hour of satellite time for transmission of video footage or live feeds will be eliminated. With the current abundance of satellite capacity, that practice is seen as wasteful. It used to be seen as an appropriate "protective" measure, said Wald. He stressed last week that the cost-efficiency plan would not affect either the number of bureaus in operation (22 worldwide) or any on-air correspondents.

The news division budgets at the three broadcast networks are estimated to be in the \$250-million range. Wald would not confirm that figure for ABC News. Asked if the cuts would reduce the division's annual budget, he said it was hard to say because of the impossibility of predicting what stories will

break this year or their magnitude and thus what it will cost to cover them. "You're asking a question that doesn't have an answer," he said. The staff reduction, Wald said, will insure that "the regularly scheduled work will cost me less, but it doesn't mean my annual expenditure will be lower. We are hoping obviously for cost efficiency."

ABC's news division is the leanest of the

three networks'. When the current round of cuts is complete, its staff will total between 1,050 and 1,100. Both NBC and CBS say their news divisions have about 1,300 employees. NBC has 29 bureaus worldwide, CBS has 27 and ABC, 22. Spokesmen at NBC and CBS said no staff cuts were imminent at their news divisions. CBS underwent cutbacks last year. □

Census Bureau study shows discrepancies in perceived effects of election projections

A study conducted by the Bureau of Census casts some doubt on the ability of voters to accurately recall whether they heard media election projections prior to voting.

"Large numbers of voters who reported having heard a media projection of the winner in the presidential election also reported having voted before such projections were aired in their areas," the study said. According to the report, 25.4% of voters surveyed nationwide said they heard the media project a winner in the presidential election before they went to the polls. Approximately

14,000 people responded to the bureau's questions on election projections.

To verify the respondents' claims on hearing the projections, the bureau also asked what time of day they had voted. "Among the 87.6 million who reported on the time of day they voted, 46% voted before noon, 40% in the afternoon and 14% after 6 p.m."

The data on the time of day people voted, the bureau said, raises questions about the validity of their responses concerning the projections. "Clearly such widespread reports of exposure to media projections be-



Full service financial counseling to the broadcast industry.

NAB Convention Residence
The Hyatt

R.C. CRISLER & COMPANY
580 WALNUT STREET CINCINNATI, OHIO 45202 (513) 381-7775

Richard C. Crisler, Clyde Haehnle, Alex Howard,
Larry Wood, John Babcock, Carl S. Ward, Graham Quaal
Special Consultant: Ward L. Quaal

fore any were aired by the networks indicate misunderstanding of the intent of the media exposure questions on the part of the respondents," the study said. It concluded that part of the misunderstanding "likely arose because respondents failed to differentiate between reports of a projected winner and reports of who was leading in the election."

The study also found that in the Eastern time zone, 22.9% said they had heard a winner projected before noon on election day. "In other time zones, the proportions of voters reported hearing a media projection before 6 p.m. their time did not vary greatly from the percentage reporting for the Eastern time zone. In fact, a substantial percentage of those who voted before noon (22%) also reported hearing an announcement of the winner of the presidential election," it said.

The results of the bureau's study follow criticism of the networks' use of early elec-

tion projections. Congress objected to early projections, claiming they had an adverse effect on voter turnout.

One argument said that when the networks project a winner based on polls in Eastern time zones, voters in the West are discour-

aged from voting. Last year the networks agreed to refrain from making election projections until all the polls were closed. That agreement, however, is contingent on Congress passing a bill establishing uniform poll closing.

More winners. The Scripps Howard Foundation presented its annual National Journalism Awards at a banquet at Cincinnati's Westin hotel last Wednesday, April 3. Awards were given to winners in the foundation's 11 separate contests, six in print journalism, two in television, two in radio and one for aspiring cartoonists.

The broadcasting winners:

The Jack R. Howard Awards for public service programming: in large television markets went to WCVB-TV Boston for *A World of Difference*, whose aim was to ameliorate racial, religious and ethnic intolerance in the Boston area; in small TV markets to KGBT-TV Harlingen, Tex., for *Project Child Abuse*; for large-market radio stations: KMOX-AM-FM St. Louis, for four "related but separate" news reports highlighting the dependence of the U.S. population on agriculture and the effect of the farm problem on both urban and rural residents of the St. Louis area; for small-market radio stations: WVAW-AM Wheeling, W.Va. for *Unanswered Prayers, Appalachia in the Eighties*.

In Sync

CD update

Sony Corp. is preparing a major expansion of its compact audio disk pressing capacity, with its Terre Haute, Ind., subsidiary, Digital Audio Disc Corp., increasing its output by 200% over the next two years. The plant, which opened a year and half ago producing 300,000 disks per month, will increase its capacity to two million per month by the end of 1986 and four million per month by late 1987. The Sony subsidiary made the announcement after producing its 10-millionth CD.

Warner Communications announced it is adding compact disk production capability to its record plant in Olyphant, Pa. Along with a disk plant planned for West Germany, the company will have an initial annual CD production capacity of 21 million units. Warner did not disclose the cost of either proposed investment.

Sony also has a CD plant in Japan and is scheduled to build one in Austria, giving it a yearly CD production capacity of more than 70 million by end of 1986, the company said.

Football deal

The National Football League has reached an agreement with Sony Broadcast to sup-



Sony Broadcast President William Connolly and NFL Commissioner Pete Rozelle

ply Betacam video systems to all 28 NFL teams for use in the production and exchange of game tapes. The contract has an estimated value of \$14 million with deliveries beginning immediately to teams taking the recommended package of field production, editing and playback equipment.

The NFL now uses film systems to meet its policy requiring each franchise to provide opposing teams with videos of three preceding games before each scheduled meeting.

Engineering kudos

The Los Angeles-based San Fernando Valley Engineers Council has given its 1986 Engineering Merit Award to Robert E. McCarthy for "outstanding achievements leadership and contributions" in special effects. The council, consisting of 25 engineering and scientific organizations representing more than 40,000 members, cited McCarthy for his accomplishments in theater, film, television and music video, including his patented creation of "Scent Media," which "adds scent and fragrance to sight and sound."

Planning ahead

The Society of Motion Picture and Television Engineers has announced plans for its upcoming annual conferences and winter TV meetings. The 1986 convention in New York, Oct. 24-29, is to be the society's first meeting at the new Jacob K. Javits Convention Center, a 22-acre facility with about 900,000 square feet of exhibit space, scheduled for completion by April.

The annual convention will return to the Los Angeles Convention Center Oct. 30-Nov. 4, 1987, and again on Oct. 22-27, 1989 with New York meetings at the Javits Center scheduled for Oct. 14-19, 1988. Dates for 1990 are not set.

The annual winter TV conference, held this year in Chicago, will be at San Francisco's St. Francis hotel Feb. 6-7, 1987. Nashville's Opryland hotel will be the site of the 1988 meeting, scheduled for Jan. 29-30, and the show will return to San Francisco Feb. 3-4, 1989, and again in 1992 and 1994.

No city has been selected for 1990, but Detroit, where the first winter TV meeting was held in 1966, has been selected for the 25th annual meeting in 1991.

"TWENTY YEARS EXPERIENCE GOES INTO EVERY SALE"

H.B. La Rue, Media Broker

Radio TV CATV Appraisals

At the NAB, Loews Anatole, Tower Suite 1489

West Coast

44 Montgomery St. #500
San Francisco, CA 94104
415 434-1750

East Coast

500 East 77th St. #1909
New York, N.Y. 10021
212 288-0737

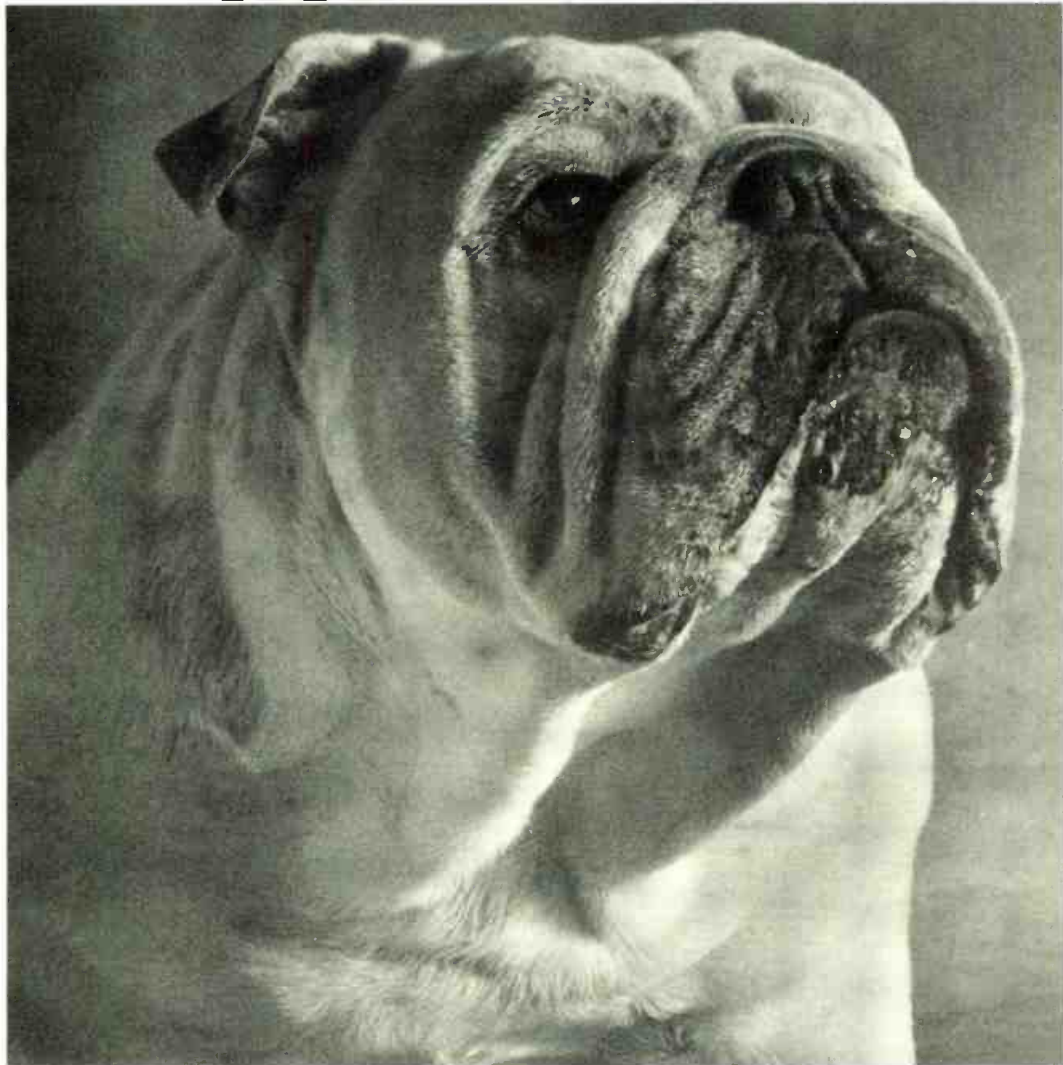
Atlanta

6201 Powers Ferry Rd., #455
Atlanta, GA 30339
404 956-0673 Hal Gore, V.P.

WHERE THINGS STAND

BROADCASTING's quarterly summary of major issues of the Fifth Estate

**ATTITUDE MAKES BLAIR
NUMBER ONE.**



BLAIR. ONLY BLAIR.

Television



Where Things Stand

A quarterly status report on the unfinished business of electronic communications

Copyright 1986 Broadcasting Publications Inc. May be quoted with credit

Advanced television systems. High-definition television studio production could be reality in near future, particularly if international negotiations this spring lead to selection of single, world wide standard system. Meeting in May of International Radio Consultative Committee (CCIR) is expected to decide whether U.S.-backed technology provides basis for future standardized HDTV studio production and international program exchange.

U.S. television industry consensus supports Japanese-developed high resolution, wide-screen HDTV system using 1,125 horizontal lines (compared to 525-line NTSC system currently used in U.S.), following decisive meetings last year of standards groups of Advanced Television Systems Committee and Society of Motion Picture and Television Engineers (BROADCASTING, March 25 and April 1, 1985).

Mixed European reaction to U.S. HDTV proposal has been expressed, particularly by France, Netherlands, United Kingdom and West Germany, at European and international meetings last fall and winter (BROADCASTING, Sept. 30 and Oct. 7, 1985, and March 3, 1986). But other strong support for HDTV standards recommendation has left it intact for final consideration by full gathering of 158 CCIR member nations in May.

Enhanced definition television systems (EDTV), which can use wider bandwidths with satellite or terrestrial broadcasting for improved 525-line systems, have also been subject of protracted debate in U.S., Europe and elsewhere. Two industry standards groups in U.S. are favoring Scientific-Atlanta's B-MAC (multiplexed analog component) satellite delivery system for different applications involving enhanced video (BROADCASTING, Feb. 17 and March 17).

In March, ATSC technology group considering issue for two years reached final stages of system standardization, selecting B-MAC for use by satellite services planning to transmit component video. B-MAC was also chosen for

direct broadcast satellite applications in controversial decision of Direct Broadcast Satellite Association board in February.

Issues remain complicated, however, by cable industry de facto selection of composite NTSC delivery system of M/A-Com for scrambled satellite delivery methods, as well as slowness of Ku-band DBS market to develop and European adoption of two-member component "family" of technical standards.

Desire to speed development of terrestrial broadcasting methods for EDTV, as well as for improved NTSC-compatible systems, has led National Association of Broadcasters and Association of Maximum Service Telecasters to plan series of over-the-air tests of advanced systems in Washington next fall. NAB's E. B. Crutchfield has been named director of project.

□

AM-FM allocations. United States and Mexico have reached agreement in principle on new AM broadcasting pact (BROADCASTING, Aug. 26, 1985). Agreement will permit AM daytimers to operate up to two hours past local sunset. It will allow full-time operations on Mexican clears. In addition, it will permit Mexicans to operate on U.S. clear channels, as long as full protection is provided. FCC had hoped agreement would be signed and put into "provisional" effect by fall 1985. Now FCC doesn't expect that to happen before end of April.

FCC has announced opening of first processing window for more than 1,000 new commercial FM stations that could result from its Docket 80-90 FM allotments (BROADCASTING, Sept. 30, 1985). Mass Media Bureau is hoping to open two 80-90 windows each month for about three years and is staggering acceptance of 80-90 applications during each window, taking one channel number at a time. Order in which applications will be accepted was determined by random ranking 80 FM channels (BROADCASTING, May 13, 1985).

FCC will give AM daytimers opportunity to get substantial preferences for all new FM stations (BROADCASTING, March 18, 1985). Commission

also discarded traditional cut-off procedures for new or modified commercial FM facilities, opting instead to use filing windows. First window for 167 vacant allotments and minor modifications, drew 1,181 applications (BROADCASTING, Aug. 26, 1985). That window closed July 1, 1985. Any new allotments resulting from additional FCC orders—responding to rulemaking to amend table under new Docket 80-90 separations criteria, which can be initiated now—also will be processed with windows. Commission will use comparative hearings, not lotteries, to award grants.

United States already has signed agreement with Canada enabling countries to establish new AM radio stations and expand service to existing stations (BROADCASTING, Jan. 23, 1984). Agreement with Canada, among other things, permits qualified U.S. AM daytimers to begin broadcasting at 6 a.m. and operate until up to two hours after local sunset. Agreement also cleared way for FCC to start accepting more applications for about 125 unlimited-time AM stations on clear and adjacent channels resulting from its 1980 action reducing protection to clear channel stations (BROADCASTING, May 29, 1980). More than 300 clear channel applications are on file or have been designated for hearing. In addition, agreement permits U.S. nighttime operations within 650 miles of U.S. Canadian border on Canada's seven clear channels.

FCC already has amended rules to permit full time operations on 14 Canadian, Mexican or Bahamian AM clear channels (BROADCASTING, April 29, 1985). FCC has notified AM daytimers on Canadian clears of their nighttime power authorizations.

Another agreement with Mexico permitted U.S. Class IVAM stations to quadruple nighttime power. Yet another permitted expanded use of FM baseband.

FCC has announced tentative agreement with Canadians on new FM broadcasting pact and implemented working arrangement updating technical standards for stations within 199 miles of Canadian border (BROADCASTING, Sept. 24, 1984).

On another front, FCC has adopted post-sunset authorizations based on compromise between Association for Broadcast Engineering Standards and Daytime Broadcasters Association, and Mass Media Bureau mailed out authorizations to all 2,560 Class II and III daytimers. Those specified post-sunset power are permitted operation as of Dec. 10, 1984 (BROADCASTING, Dec. 10, 1984).

U.S. and other western hemisphere countries will attend Regional Administrative Radio Conference in Geneva this month to begin developing plan for use of 100 kHz of spectrum that 1971 General WARC added to top of AM band, which now ends at 1605 kHz. James McKinney, FCC Mass Media Bureau chief, will head U.S. delegation.

□

AM stereo. With wide support among receiver manufacturers and broadcasters, Motorola is

STAUFFER COMMUNICATIONS, INC. TO PURCHASE

BURKE BROADCASTING CO. OF CHEYENNE, WY COMPRISING

KYCU-TV, Cheyenne, WY

KSTF-TV, Scottsbluff, NE ■ KTVS-TV, Sterling, CO

We Are Pleased To Announce This Sale

DURING THE NAB ... ARTHUR AND JACK AT LOEWS ANATOLE

Hogan - Feldmann, Inc.

MEDIA BROKERS • CONSULTANTS

P. O. Box 146

Encino, California 91426

Area Code (818) 986-3201

ong position to win hard-fought AM stereo standards battle and make its C-Quam system industry's de facto standard. But Leonard Kahn, inventor and chief proponent of incompatible Kahn system, may yet prevail by persuading major stations in major markets to stay on air with his system.

Key to Motorola victory is proliferation of C-Quam-only radios, which are being marketed by several manufacturers. Consumers will resist buying such radios, however, Kahn says, because they will be unable to tune in stereo signals of Kahn stations. Kahn is encouraging manufacturers to build multisystem radio receivers capable of picking up all stereo systems. So far, only Sony and Sansui are. It's still too early to judge acceptance of C-Quam-only radios by consumers.

Motorola's position in marketplace was strengthened in December 1984 when Harris announced it was quitting battle and planning to make and market C-Quam broadcast equipment. Systems proposed by Belar Electronics and North American Philips fell by wayside long ago.

FCC instigated marketplace standards battle in 1982 when it decided not to decide which of the proposed systems should be standard for AM stereo broadcasting (BROADCASTING, March 1982). Instead, FCC said broadcasters could begin broadcasting stereo programming using any system they desired. Marketplace forces—interplay of receiver manufacturers, broadcasters and consumers—FCC reasoned, would determine which system would be de facto standard. FCC's action was contrary to wishes of most broadcasters and receiver manufacturers, who feared marketplace approach would delay AM stereo or at least delay its introduction. Kahn system, whose equipment was first to gain type-acceptance, was first on air, in July 1982, at KDKA Pittsburgh and KTXA San Antonio, Tex. (BROADCASTING, Aug. 2, 1982). Today, some 10 stations in the U.S. are on the air in stereo using the Kahn system and 285 using the C-Quam system.

□

Broadcasting in Senate. Senate agreed in February to open its chambers for first time to live television and radio coverage, and in process to streamline number of Senate procedures. Gavel-to-gavel coverage was adopted by 67-21 vote and will be allowed at first on test basis, then reconsidered this summer as permanent arrangement (BROADCASTING, March 3). Radio coverage has been available to public since last month (BROADCASTING, March 17) and closed-circuit TV tests will begin by May 1 at latest, followed by unrestricted TV coverage from June to July 15. After two-week break in coverage, Senate will consider allowing permanent presence of cameras and microphones beginning July 29. C-SPAN is providing Senate audio feed until TV coverage begins. It will offer TV feed on second channel, free of charge, to cable affiliates.

□

Cable copyright. There has been little congressional activity on cable copyright matters this year. Most attention has been focused on negotiations between National Cable Television Association and Motion Picture Association of America over ways to improve method by which cable operators determine compulsory license royalties. Under discussion was proposal for fixed, per-subscriber, per-month payment to replace current percentage system. Talks col-



Senator Charles McC (Mac) Mathias (R-Md.) throws switch starting the Senate's audio feed.

lapsed, however, when MPAA board demanded elimination of compulsory license for distant signals by the start of 1991 (BROADCASTING, March 10).

Cable industry and House Copyright Subcommittee Chairman Robert Kastenmeier (D-Wis.) are interested in overall reform of copyright, but chances of legislative action appeared dependent on outcome of negotiations. Major reform of Copyright Royalty Tribunal was priority in 1985 for House Copyright Subcommittee, although no legislative action took place. Movement to overhaul agency was sparked by resignation of CRT Chairman Marianne Mele Hall after it was publicized she was co-author of book that some members of Congress considered racist (BROADCASTING, April 29, 1985). Two bills emerged in House calling for major revamping of CRT. Kastenmeier introduced H.R. 2784, which would substitute federal judges for CRT commissioners, creating Copyright Royalty Court to replace CRT (BROADCASTING, June 24, 1985).

Under provisions of measure, Chief Justice would designate three district or circuit court judges to sit on CRC for six-year terms, tapping one to be chief judge for two years. Administra-

tive Office of U.S. courts would take care of CRC's administrative needs. Bill would allow CRC to hire attorney and whatever other help it would require. Legislation would also permit parties to appeal CRC decisions to U.S. Court of Appeals for District of Columbia—same place CRT appeals are heard. It also would require disputing parties to try to settle differences through "mediation, negotiation, arbitration, appointment of special master or otherwise" before going to CRC. If parties couldn't agree on procedure, CRC would mandate one. Parties would have six months to settle out of court.

Measure, H.R. 2752, offered by Representatives Mike Synar (D-Okla.) and Patricia Schroeder (D-Colo.), who sit on Copyright Subcommittee, would eliminate tribunal and freeze cable royalty rates until 1988 (BROADCASTING, June 17, 1985). Bill gives Congress until Jan. 1, 1988, to come up with another process for determining royalty rates. If Congress failed to act, entire system would cease to exist.

Among other copyright activities under review at CRT is distribution of 1983 cable royalty pool among copyright holders. CRT also has been asked to act on Turner Broadcasting System petition to reconsider CRT's 3.75% royalty

STATE WID
LOEWS NATIONALE

The effective link between buyer and seller.

Confidential, ethical, professional and experienced.
The effective link between buyer and seller for
successful broadcast and cable transactions.

NF&A

Norman Fischer & Associates, Inc.
Media Brokerage Appraisals Management Consultants
1209 Parkway Austin, Texas 78703 (512) 476-9457

rate decision. Comment period for that proceeding has been extended to May 5.

□

Cable regulation. Basic cable rates become deregulated Jan. 1, 1987, freeing cable operators to charge whatever the market will bear for their packages of basic services. As a result of deregulation, industry analysts expect rates to jump at least 10% next year.

Rate deregulation is part and parcel of the Cable Communications Policy Act of 1984 that went into effect Dec. 29, 1984. The legislation established a national regulatory policy for cable TV, preempting patchwork regulation of municipalities in many areas. In addition to rate deregulation, the act requires cable systems to set aside channels for lease to "unaffiliated" companies, bans co-located cable-broadcast television crossownerships and codifies FCC's ban on telephone companies entering cable business in their home towns. It also caps franchise fees at 5% and establishes renewal procedure that doesn't involve presumption of renewal. Bill's equal employment opportunity standards require cable systems to implement affirmative action plans. Bill also prohibits treatment of cable as common carrier.

In implementing most of act, FCC has defined "effective competition" prerequisite for deregulation of basic cable rates as presence of three or more unduplicated broadcast signals (BROADCASTING, April 15, 1985). Standard should result in fewer than 20% of nation's cable systems' basic tiers still being subject to rate regulation.

FCC also has implemented EEO provisions of act (see "EEO" entry below).

□

Children's television. Discarding its 1974 policy statement on children's television, FCC has held that while commercial TV broadcasters still will be expected to serve needs of children, they will have broad discretion to determine how they do that. Commission won't attempt to mandate presentation of specific amounts (BROADCASTING, Jan. 2, 1984). FCC adopted policy on 3-1 vote. Commissioner Henry Rivera (who left agency in September 1985) dissented, contending FCC's action constituted "rape" of 1974 policy statement. That statement said broadcasters were obligated to provide programming designed especially for children, to schedule it throughout week, to develop more educational and informational programs and to air programs directed to specific age groups.

But U.S. Court of Appeals in Washington affirmed commission's new statement—although using language that Action for Children's Television President Peggy Charren said endorsed ACT's position that broadcasters are responsible for providing programming to assure needs of children are met (BROADCASTING, March 25, 1985).

Representative Timothy Wirth (D-Colo.), chairman of House Telecommunications Subcommittee, introduced bill that would require commercial television stations to carry at least seven hours per week of educational programming for children. It also would direct FCC to conduct inquiry into production of so-called "program-length commercials" for children. Companion measure was offered by Senator Frank Lautenberg (D-N.J.).

□

Communications Act. Other than introduction in 1985 of broadcasting deregulation legislation there has been no action on issue. Representatives Tom Tauke (R-Iowa) and Billy Tauzin (D-La.)

introduced bill that would eliminate comparative renewal process, among other things (BROADCASTING, April 1, 1985). Measure is identical to bill (H.R. 2182) offered in previous Congress.

Broadcasting industry's drive to achieve regulatory relief came to standstill in 1984 after hearing before House Telecommunications Subcommittee laid issue to rest (BROADCASTING, Sept. 24, 1984). Broadcasting industry made it clear that proposed legislation offered by Representatives Al Swift (D-Wash.); Tim Wirth (D-Colo.), subcommittee chairman; John Dingell (D-Mich.), chairman of parent Energy and Commerce Committee; Mickey Leland (D-Tex.), and John Bryant (D-Tex.) was unacceptable.

□

Crossownership. FCC Chairman Mark Fowler has hinted he might be willing to eliminate—or at least grant waivers of—crossownership rules prohibiting ownership of daily newspaper and broadcast station in same market (BROADCASTING, Sept. 30, 1985).

FCC's proposal to drop crossownership rule prohibiting television networks from owning cable systems drew strong support—and not just from networks (BROADCASTING, Dec. 20, 1982). Department of Justice and National Association of Broadcasters supported repeal, and National Cable Television Association and Time Inc. said they wouldn't stand in way. FCC is not expected to address rulemaking soon.

Co-located broadcast and telephone crossownerships of cable systems have been barred by Cable Communications Policy Act of 1984. Law permits co-located newspaper crossownership of cable, however.

□

Direct broadcast satellites. Future of DBS medium is much in doubt these days as DBS fore-runners have faltered badly. After planning for five and a half years and spending \$140 million, Comsat's Satellite Television Corp. announced in late November 1984 it would abandon its plans for six-channel national service. And United States Communications Inc., which began offering five-channel service in Northeastern U.S. in November 1983, signed up around 10,000 subscribers before going out of business April 1, 1985. Fatal blow for both ventures came in November 1984 when Comsat and Prudential, USCI's principal backer, could not come to terms on proposed merger.

Nonetheless, Hubbard Broadcasting's United States Satellite Broadcasting and Dominion Video Satellite, among first group to receive high-power DBS permits in 1982, are still trying to build and launch DBS system in 1987 or '88. Both have same problem: financing.

In March and September 1985, FCC granted permits to additional would-be DBS operators: Satellite Syndicated Systems, National Christian Network, Advanced Communications Corp., Hughes Communications Galaxy Inc., RCA Americom, Antares Satellite Corp. and Graphic Scanning. With exception of Hughes, none appears to have wherewithal to build satellites and enter business.

While high-power DBS founders, low-power variety combining cable programming on C-band satellite and more than 1.5 million home earth stations may soon flourish. Low-power satellite broadcasting should be born sometime this year after major cable services scramble their satellite feeds and owners of home earth stations have to begin paying to receive them.

DBS's first casualty was neither STC nor USCI, but Skyband Inc., start-up company

backed by Rupert Murdoch. Using SBS III, SK band had planned to launch nationwide, five-channel service. But early in November 1984 Murdoch pulled plug on venture, citing unavailability of home earth station equipment and programming and need for more powerful transponders that could transmit to smaller dishes. To get out of multiyear contract with Satellite Business Systems, owner of SBS III, Murdoch agreed to pay satellite carrier \$12.7 million.

FCC made room for high-power DBS service in June 1982, allocating 500 mhz (12.2-12.7 ghz) and granting construction permits to eligible applicants, including STC. But FCC year later also gave green light to USCI, Skyband and another company wishing to offer broadcast satellite service with fixed Ku-band (11.7-12.2 ghz) satellites (BROADCASTING, June 6, 1983). There talk of using RCA Americom's Ku-band satellites, Satcom K-1 and Satcom K-3, for satellite broadcasting. Satcom K-1 was launched in January 1986; Satcom K-3 is to be launched near end of decade.

If and when high-power DBS services get under way, choice of transmission standard will have to be resolved. Trade group Direct Broadcast Satellite Association (DBSA) in February suggested range of technical standards, including controversial selection of Scientific-Atlanta B-MAC (multiplexed analog component) video audio format. Organization made selection after extensive tests of B-MAC and competing General Instrument composite NTSC delivery system last fall. Findings were submitted to FCC, which while not widely expected to mandate any industry choice in matter, did open docket for technical standards in February 1985.

□

Equal employment opportunity. FCC has adopted rules implementing EEO aspects of Cable Communications Policy Act of 1984 (BROADCASTING, Sept. 23, 1985). It decided to use processing guidelines to monitor cable EEO compliance. As result, cable entities (and satellite master antenna television operations) serving 50 or more subscribers and having six to 1 full-time employees must have 50% parity with labor force overall and 25% parity in top four job categories; those same types of entities with 1 or more full-time employees must have 50% parity overall and in top four job categories.

Commission also has proposed to ease EEO reporting burdens of broadcasters by exempting licensees with no more than five employees (current ceiling is no more than four) (BROADCASTING, Nov. 18, 1985). It also proposed to change its EEO model program reporting form to emphasize that FCC's primary concern is EEO efforts, not numbers, and to make them less burdensome for broadcasters. Full-time and part-time employees could be lumped into same table in annual employment reports, instead of separate tables, as required now. Proposed revisions of EEO model program reporting form are, according to FCC officials, aimed at meeting objections of Office of Management and Budget. Four years ago, OMB refused to approve form, objecting to requirement that be filed routinely at renewal time. OMB had permitted FCC to continue using form through end of November 1985. And without further FCC action (FCC could have rejected OMB recommendation with majority vote), use of form would have been authorized past then. But FCC said had rejected OMB's recommendation in adopting rulemaking.

Under current EEO guidelines, stations with

ve to 10 full-time employees are required to ave 50% parity overall with available work rce. Stations with more than 10 full-time employees must reach 50% parity overall and in top ur job categories, and stations with 50 or more ll-time employees receive complete review of rir EEO programs.

□

Fairness doctrine. FCC wrapped up proceeding on fairness doctrine by concluding doctrine s not in public interest and, contrary to its intended purposes, inhibits broadcasters from resenting controversial issues of public importance (BROADCASTING, Aug. 12, 1985). FCC said will continue to enforce doctrine, even though asserted such enforcement infringes on "fundamental constitutional principles," furnishes overnment with "dangerous" tool that could be used and imposes unnecessary costs on roadcasters and FCC.

Commission has proposed to repeal personal ttack and political editorializing rules (BROADCASTING, May 16, 1983), but that proposal has reportedly been placed on back burner.

While commission has backed off from action n fairness doctrine, two court cases have been led challenging its constitutionality. One was rought by Radio-Television News Directors Association and number of media groups, appealing commission's fairness report. They contend ommission action referring matter to Congress isolates First Amendment and is arbitrary and apicious. CBS is providing principal legal and nancial support. Other was filed by Meredith orp., which is appealing commission decision at one of its stations, WTVH-TV Syracuse, N.Y., isolated doctrine. Both appeals are pending before U.S. Court of Appeals in Washington.

□

Federal Trade Commission. For first time in ree years, FTC authorization legislation assed both House and Senate, although measure must still be approved by conference committee. Latter met in March, but did not reach greement on legislative veto provision, definition of unfairness and advertising rulemaking rovision. Conferees are likely to reconvene in te April. In September 1985 House passed I.R. 2385 that set FTC reauthorization at \$63.9 million, \$64.2 million and \$64.3 million, for fiscal ears 1986, '87 and '88, respectively. House bill, nlike Senate version (S. 1078), lifts prohibition n FTC's authority to adopt industrywide ruleakings under unfairness standard, permitting TC to use unfairness standard for both adverting trade regulation rulemaking and on case-y-case basis. Under Senate bill (which would authorize FTC for FY's '86, '87 and '88, and set nding levels at \$65.8 million, \$66.8 million and 67.8 million, respectively), FTC retains authority to regulate commercial advertising on case-y-case basis for unfair or deceptive advertising. Senate also appropriated additional \$3.8 illion for one-time consolidation of headquarters offices of FTC in Washington. Both Senate nd House measures allow Congress to veto roposed FTC regulations.

On Oct. 8, 1985, FTC Chairman James C. iller III was sworn in as director of Office of lanagement and Budget, replacing David tockman. President Reagan has nominated aniel Oliver, general counsel at Department of griculture, as member of FTC and will designate him agency chairman once Senate has nfirming his appointment. Oliver's nomination as put on hold by Dennis DeConcini (D-Ariz.) In Brief," March 24). FTC Commissioner Terry

Calvani has been acting chairman in interim. On March 17, Andrew J. Strenio Jr., Democrat, was sworn in as new FTC commissioner to fill unexpired term of former commissioner George W. Douglas, ending Sept. 25, 1989.

□

International telecommunications satellite systems. President Reagan has determined that separate U.S. systems providing international communications satellite service are required in national interest, if restrictions are imposed to protect economic health of Intelsat. President acted in November 1984, eight months after State Department, on behalf of Senior Interagency Group, and Commerce Department submitted recommendations on issue to White House. Executive branch agreed restricted service by separate systems should be permitted. And FCC, following inquiry/rulemaking, conditionally authorized six applications for separate systems. One applicant—RCA American Communications—dropped out, but another applicant, Columbia Communications Corp., emerged in March (BROADCASTING, March 31). Thus far, no separate system has secured foreign correspondent with which to seek technical and economic coordination with Intelsat, but Pan American Satellite Corp. appears close to securing agreement with Colombia.

Intelsat Director General Richard Colino caused concern within U.S. government with proposal to board of governors for revising procedures for coordinating separate systems with Intelsat, proposal U.S. officials feel would bar virtually all separate systems. However, after board indicated at its quarterly meeting in June 1985, in Bergen, Norway, that it favors less restrictive approach than that reflected in Colino's proposal (BROADCASTING, June 24, 1985), director general revised it for submission to board in September. U.S. continued to object, though officials indicated new version was more acceptable. And Intelsat's Assembly of Parties approved revised criteria (BROADCASTING, Oct. 21, 1985).

□

Low-power television. FCC gave birth to new broadcast service four years ago, adopting rules for low-power television (BROADCASTING, March 8, 1982). Latest FCC list shows 352 licensed LPTV stations. Commission has granted construction permits for another 1,210. According to same list, there are now 4,646 translators licensed; commission has issued construction permits for another 609.

New-generation television stations are technically similar to translators, but are permitted to originate programming. (Translators had been restricted to rebroadcasting signals of full-service stations.) In adopting service, FCC estimated as many as 4,000 new stations could eventually be spawned by rules, adding to more than 4,000 existing translators that can rise to LPTV status simply by notifying FCC. LPTV stations have few regulatory obligations, and there are no cross-ownership or multiple-ownership restrictions. Stations must observe statutory prohibitions against broadcast of obscenities and lotteries, however, and they have limited equal-time and fairness doctrine obligations. Commission now has 14,400 LPTV and translator applications pending.

Freeze is in effect on major amendments and on new LPTV and TV translator applications (BROADCASTING, Sept. 19, 1983).

□

Multichannel MDS. FCC is now holding lotter-

ies for multipoint distribution service licenses. Its first took place on Sept. 27, 1985 (BROADCASTING, Sept. 30, 1985). Lotteries were necessitated by overwhelming number of applications: 16,499.

There are two four-channel MMDS licenses available in most markets. For service, FCC reallocated eight channels from instructional television fixed service to MMDS (BROADCASTING, May 30, 1983). Under FCC order, all ITFS channels that had been authorized or applied for as of May 25, 1983, were grandfathered. No further ITFS applications will be accepted on eight channels reallocated.

In rules, FCC also said ITFS licensees may lease, for profit, "excess" capacity on their channels. Commission has established eligibility and comparative criteria for ITFS service (BROADCASTING, June 3, 1985).

Several pay television operators are planning to take advantage of provision to lease ITFS capacity and jump into wireless cable business before FCC begins making large number of MMDS grants. In fact, American Family Theaters has already made pact with George Mason University and is offering four-channel service in Washington (BROADCASTING, Dec. 17, 1984). And, in Cleveland, Metropolitan Cablevision has introduced eight-channel service with backing from TA Associates.

□

Multiple ownership. FCC Chairman Mark Fowler and James McKinney, Mass Media Bureau chief, have indicated support for permitting struggling AM stations with overlapping signals to escape strictures of FCC's duopoly rules and join forces (BROADCASTING, Sept. 30, 1985).

Acting on reconsideration, FCC has revised multiple ownership rules (BROADCASTING, Dec. 31, 1984). Under new rules, which took effect April 2, 1985, entities may own 12 AM's and 12 FM's, and will be permitted to own 12 TV's as long as they don't reach more than 25% of nation's television homes. UHF's are assessed for only half of market's television homes. Group broadcasters who buy interests in stations more than half owned by minorities are able to own up to 14 stations in service, and are permitted to reach 30% of nation's television households through their TV's, as long as two stations in each service are controlled by minorities. Although commission's original order would have dropped all ownership restrictions in 1990, FCC, on reconsideration, eliminated sunsets for TV and radio.

Responding to mounting criticism of its original rule, FCC stayed television portion of that order until April 1, 1985, and Congress set that stay in legislative concrete (BROADCASTING, Aug. 13, 1984).

□

Music licenses. All-Industry TV Station Music License Committee, unable to come to terms with Broadcast Music Inc. and American Society of Composers, Authors and Publishers on new music licenses for TV stations, filed class action suit in U.S. District Court in New York in 1978, charging that ASCAP and BMI licenses are monopolistic and anticompetitive (BROADCASTING, Dec. 14, 1981); court agreed (BROADCASTING, Aug. 23, 1982). ASCAP and BMI appealed, and U.S. Court of Appeals for Second Circuit in New York overturned district court's decision (BROADCASTING, Sept. 24, 1984).

In February 1985, U.S. Supreme Court let stand September 1984 appeals court decision holding that blanket music licenses for televi-

sion stations did not violate antitrust laws or restrain competition (BROADCASTING, Feb. 25, 1985).

In memorandum decision of May 13, 1985, U.S. district court judge, Lee P. Gagliardi, ordered local television stations to "promptly" pay BMI retroactive fees for 22-month period during which Buffalo Broadcasting case was on appeal (BROADCASTING, May 20, 1985). BMI estimated



If a composer from your Congressional district asks you about H.R. 3521/S. 1980 give him this penny! Chances are it will be more than he or she has ever received from ASCAP/BMI from the licensing of music on local television stations.

Composers who receive some copyright payments from ASCAP/BMI may think these payments are represented by fees paid by local television stations, but in fact, they probably are not. ASCAP/BMI receives license revenues from many other sources which include commercial television networks (CBS, ABC, NBC), pay TV, cable TV, public TV, radio, nightclubs, bars, restaurants, concert halls, affiliated foreign societies, interest on investments, etc.

H.R. 3521/S. 1980 deals with none of the above, but only with license money paid to ASCAP/BMI by local television stations in local programs televised.

Of all the money collected from local television stations by ASCAP/BMI and paid out to composers, 95% of the money goes to only 6% of the composers. 85% of the composers never receive **ONE RED CENT**.

With the passage of H.R. 3521/S. 1980, local television stations will purchase syndicated programs that will include music performance rights with all other copyright elements included.

Music will be paid for fairly and the composer will continue to receive residual payments as the actors, directors, script writers, and others do now.

Local television stations will then have a requirement and economic justification to employ local composers, lyricists and music producers to supply custom music for television.



ALL-INDUSTRY TV MUSIC LICENSE COMMITTEE

1000 Thomas Jefferson Street, NW Suite 500 Washington, DC 20007
(202) 333-4299

Some recent ammo in the music licensing war

more than \$30 million is owed by 800 television stations for period between February 1983 and November 1984.

BMI mailed new blanket license agreements, effective July 1, 1985, that committee claimed represented 60% increase over old rates and 125% increase over frozen 1980 rates which stations have been paying on month-by-month basis since Supreme Court refused to hear Buffalo Broadcasting appeal (BROADCASTING, June 24, 1985).

At same time in separate proceeding, federal magistrate Michael H. Dolinger ordered that television stations pay American Society of Composers, Authors and Publishers interim license fee increase for four-and-a-half-month period beginning when district court judge's decision to terminate rolled-back 1980 fee levels went into effect and ending 30 days after appeals court issued its mandate (Nov. 16, 1984-March 31, 1985). ASCAP estimated that fees for interim period total about \$10 million. Still to be decided in rate court are fees broadcasters owe ASCAP for 22-month period while Buffalo Broadcasting case was on appeal, and period after April 1, 1985. For those two periods, broadcasters should continue paying at 1980 levels while matter is pending in rate court.

On June 21, 1985, Weinfeld rejected request made by committee that BMI be forced to recall new blanket license agreements BMI sent out.

All-Industry Television Station Music License Committee, representing broadcasters, conceded decision was "a setback" but said it would continue to press for fair price for music for TV stations.

When parties cannot agree, there is separate mechanism to negotiate blanket license fees. For ASCAP, under terms of consent decree with Justice Department, federal rate court has been established to set license fee payments. For BMI, licensing group met with broadcasters to set payments on monthly basis.

On Capitol Hill, meanwhile, licensing committee has enlisted support of Representatives Frederick (Rick) Boucher (D-Va.) and Henry Hyde (R-Ill.), who introduced H.R. 3521, which would require producers and syndicators to deliver syndicated programming to stations with music performance rights included (BROADCASTING, Oct. 14, 1985). In Senate, Judiciary Committee Chairman Strom Thurmond (R-S.C.) introduced companion bill, S. 1980 (BROADCASTING, Dec. 23, 1985). Hearing was held on legislation by House Copyright Subcommittee in March (BROADCASTING, March 24). Senate Copyright Subcommittee is scheduled to hold hearing on April 9.

■ As for radio, talks between All-Industry Radio Music License Committee and ASCAP regarding new rates for blanket music licenses broke off last April (BROADCASTING, April 8, 1985). That led both sides to petition federal "rate court" in New York to determine fees. Rate court was established by Justice Department in 1950 consent decree settling antitrust action against ASCAP. ASCAP is seeking new, five-year contract. Committee has said ASCAP is looking for rate increase in blanket licenses of about 18%. ASCAP, however, has said figure is 16%.

In February, rate court, at ASCAP's request, ordered 500 committee-represented stations to turn over financial statements and other documents to ASCAP (BROADCASTING, Feb. 24). ASCAP is attempting to prove that industry is profitable and can support rate hike. Committee opposes move, employing its long-standing argument that music license fees automatically rise because they are tied to station revenues. Industry has been operating with interim ASCAP licenses since last agreement expired on Dec. 31, 1982.

Two-year agreement between industry and BMI ended on Dec. 31, 1985, and committee has asked stations to sign one-year contract extension pending outcome of negotiations. Committee, with BMI's cooperation, is trying to set up federal rate court with Justice Department—similar to one in place for ASCAP proceedings—for determining fees when both parties failed to reach accord.

In August 1984, committee negotiated amendment to BMI's then newly-issued blanket music license that raised rates by approximately 8.8%—down from original estimated increase of 15%-18%. BMI contract was retroactive to January 1984, but 8.8% increase did not go into effect until January 1985. Committee is now asking BMI to roll back present blanket license rate "to at least the level of the pre-1984 license" ("Riding Gain," Nov. 25, 1985).

Recent events with ASCAP and BMI have led committee to issue "emergency" financial plea to industry, requesting stations not already financially supporting committee to do so with contribution of \$400 per station.

□

Must carry. FCC has agreed to provide 30 days (until April 25) for public to comment on must-carry compromise among the major broadcast and cable trade associations (BROADCASTING, March 31). Mass Media Bureau invited public to comment on any aspect of proposed rule under compromise agreement, which would generally

require cable systems with more than 20 activated channels to carry some local TV signal (BROADCASTING, March 10). But bureau also asked several specific questions that suggest believes burden will be on compromise proponents to demonstrate why commission should sign off on that which parties to agreement—National Cable Television Association, Community Antenna Television Association, Television Operators Caucus, Association of Independent Television Stations and National Association of Broadcasters—have wrought.

Court of Appeals in Washington, in *Quincy* decision, vacated must-carry rules, finding them unconstitutional (BROADCASTING, July 22, 1985). In declining to seek appeal, FCC majority—Chairman Mark Fowler, and Commissioner Mimi Dawson and Dennis Patrick—said it believed court's decision represented "positive first step toward recognizing full First Amendment protection for all forms of electronic media" (BROADCASTING, Aug. 5, 1985). Majority said it couldn't conceive of new set of rules that would accomplish commission's policy goal and meet constitutional test outlined in *Quincy*. It also said "better course" for bringing back into equilibrium market thrown out of balance by elimination of must carry would be to get rid of compulsory license in copyright law. Under barrage of pleas for action from broadcasters and key congressmen, however, Fowler agreed to launch combined notice of inquiry and notice of proposed rulemaking to seek comment on any proposal that included "a set of carefully crafted mandatory carriage rules, and a clear justification of the policy aims and constitutionality of such rules" (BROADCASTING, Sept. 30, 1985). Fowler added that any such inquiry would include "examination of the communications policy implications of cable's compulsory license in light of the *Quincy* case." NAB has asked Supreme Court to review *Quincy*, and that request is still pending.

□

Network standings. Prime time network rating for first 27 weeks of 1985-86 season: NBC, 15.1 rating/27 share; CBS, 14.2/24; ABC, 15.8/26. I recently completed first quarter of 1986, early evening news ratings were: 13.7 for CBS's *Evening News*, 12.7 for NBC's *Nightly News* and 12.2 for ABC's *World News Tonight*. Season-to-date daytime ratings: CBS, 6.2/22; ABC, 6.3/21; NBC, 5.0/17. Common time daytime ratings: CBS, 7.4/25; ABC, 6.8/22; NBC, 5.7/19.

□

Public broadcasting funding. After weeks of deliberation, Congress passed budget reconciliation bill that includes authorizing legislation for FCC and Corporation for Public Broadcasting. Bill, which is on its way to President Reagan, authorizes funding levels for CPB for fiscal 198 through 1990: 1987—\$200 million, 1988—\$21 million, 1989—\$238 million and 1990—\$254 million. Bill would also establish funds for National Telecommunications and Information Administration's public telecommunications facilities program (PTFP): 1986—\$24 million, 1987—\$2 million and 1988—\$32 million. President is expected to sign bill, although there was earlier threat of veto.

Reagan administration has proposed reauthorization for Corporation for Public Broadcasting at 1987—\$172 million, 1988—\$214 million, 1989—\$246 million and 1990—\$283 million. For PTFP, administration recommended \$4 million for 1985 and no funding thereafter. In 1984 President Reagan vetoed CPB authorization bill twice because funding was "excessive."

Meanwhile, President Reagan signed two appropriations bills: FY '86 appropriation included \$214 million to CPB for FY '88; other bill included funds for FCC, Federal Trade Commission, JSIA, Board for International Broadcasting and National Telecommunications and Information Administration for FY '86 ("In Brief," Dec. 9 and 6, 1985). Last included \$24 million for NTPF.

CPB board of directors took step in November 1985 toward altering method of distributing federal funds to public radio in FY 1987. Board has agreed that 71% (\$32 million) of radio funds be allocated to noncommercial radio stations in form of community service grants, 29% (\$13 million) to national program production, which includes 22% to stations for national program production and acquisition grants (\$9.9 million) and 7% (\$3 million) for "innovative programming." Board has yet to define national programming.

□

Radio Marti. Radio Marti, which Reagan administration proposed as means of breaking what it considers Castro government's monopoly on news and information in Cuba, went on air May 20, 1985, 17 months after Congress passed authorizing legislation. Delay was said to have been caused by difficulty in recruiting staff and obtaining necessary security clearances for prospective employees. Person administration had originally picked to head Radio Marti—Paul Drew, veteran broadcaster who had been serving as consultant since October 1984—resigned in January (BROADCASTING, Jan. 21, 1985). In September, Ernesto Betancourt, who had been acting director, was named director of new service. He is former high-ranking official in Castro government who served in Organization of American States for nine years before joining Radio Marti.

Thus far, fears of American broadcasters that Cuba would retaliate for Radio Marti broadcasts by stepping up interference to stations in Florida and other states in Southeast have not been realized. Nor has Cuba made significant effort to jam Radio Marti programs, which are being broadcast over transmitters and on frequency 1180 khz) used by Voice of America station on Marathon Key, Fla. Legislation creating Radio Marti has placed it under authority of U.S. Information Agency and VOA.

□

Scrambling. If press announcements are to be believed, most major cable programmers will have scrambled their satellite feeds by end of 1986. Indeed, Home Box Office (HBO and Cinemax) and Eastern Microwave (wor-tv New York) already have scrambled and Showtime/The Movie Channel is expected to follow suit in May.

Most of pressure to scramble has come from cable operators, who have watched number of homes installing C-band earth stations to receive cable and other satellite-delivered programming for free multiply rapidly over past five years. Estimates of homes with dishes start at .5 million.

Scrambling also creates new business opportunity for cable programmers and others: low-power satellite broadcasting or C-band direct. Once major cable services are scrambled, third party may package them and sell them to dish owners. First to announce plans to be in business was Tele-Communications Inc., nation's largest MSO. TCI plans to offer 15 services starting in early 1987.

Home satellite industry—manufacturers, distributors and dealers of home earth stations—is pressing for legislation in Washington that would

impose two-year moratorium on scrambling or would guarantee dish owners right to subscribe to scrambled programming at "fair and reasonable" prices. Congress is not now inclined to pass such legislation, but Justice Department is investigating allegations that cable operators have conspired with programmers to monopolize C-band direct business, preventing it from becoming competitive medium.

□

Space WARC. U.S. feels it did "well" at first session of two-session conference that is to develop plan for use of space services. Developed and developing countries had difficulty reaching basic agreement throughout five-and-a-half-week session in Geneva. And there is no chance International Telecommunication Union will be able to fund all of considerable work that remains to be done before second session, to be held in 1988, and to implement principles established in one that ended Sept. 15, 1985.

Conference decided to focus on fixed satellite services. But principal issue was conflict between developing countries, which favored a *priori* approach to planning as means of guaranteeing all countries "equitable" access to geostationary orbit and associated frequencies, and developed countries, which argued such planning was wasteful and inefficient. Result was dual approach, with expansion bands associated with 6/4 ghz and 14/11-12 ghz bands—where no satellites now operate—to be set aside for arc allotment planning and multilateral planning method being devised for use in coordinating requirements in conventional portion of those frequencies. Ambassador Dean Burch, who headed U.S. delegation, said that since expansion bands are not operational in U.S., "there was nothing we had to give up." However, while U.S. accepted planning of expansion bands associated with 6/4 ghz, it reserved its position regarding planning of expansion bands associated with 14/11-12 ghz, on ground that planning those frequencies was unnecessary and wasteful (BROADCASTING, Sept. 26, 1985).

□

Takeovers and mergers. *Group W Cable*—Consortium of five MSO's signed agreement on Dec. 24, 1985, to jointly purchase third-largest MSO for roughly \$1.7 billion. Final participation by each company has not formally been decided but recent assessment by Tele-Communications Inc. shows following division of purchase price: American Television & Communications (26.4%); Tele-Communications Inc. (32.6%); Comcast Corp. (25.4%); Century Communications (12%); and Daniels & Associates (3.6%). Acquisition of systems serving 2,062,000 basic subscribers is currently being reviewed by Justice Department and FCC and is subject to transfer of Group W systems' franchises. One petition to deny has been filed with FCC by Satcom, Montana-based MSO ("Cablecastings," March 3). Both buyer and seller hope to close transaction by end of June. Still undecided is whether systems would continue to exist as one corporate entity or be split among five partners. Decision will depend on tax changes currently being contemplated by Congress ("Cablecastings," March 3). Regardless of legislation, 20% of systems could still be split off, allowing Century and/or Daniels to incorporate their share of systems.

■ **Metromedia Radio**—Largest sale ever of radio stations was announced two weeks ago (BROADCASTING, March 31). Investor group headed by Carl C. Brazell Jr., president of Metromedia Radio, and Morgan Stanley Inc. are purchas-

ing nine radio stations (three AM and six FM) and Texas State Networks from Metromedia for \$285 million. Remaining station in Metromedia group, WCBM(AM) Baltimore, is being sold to Resort Broadcasters for approximately \$2.4 million. Brazell and other members of Metromedia management participating in buyout are expected to own approximately 20% of new entity. Transaction, subject to FCC approval, is expected to be completed by Sept. 1.

■ **Outlet Communications**—Group of one AM, four FM's and five network affiliated TV's is being sold by The Rockefeller Group for total consideration of roughly \$625 million. All but three TV's are being purchased by 35-member management group led by Outlet chairman and chief executive officer, Bruce G. Sundlun, and financed through Wesray Capital Corp. Total price includes three stations being sold separately. KSAT-TV San Antonio, Tex., will be sold to H&C Communications for \$150 million. Kova(TV) Sacramento, Calif., will be sold to Narragansett Capital Corp. for \$104 million. Wcpv-TV Orlando, Fla., will be sold to First Media Corp. for \$200 million. All sales are subject to FCC approval and management group expects to close on its transaction in late July or early August.

■ **RCA**—Company will be bought out by General Electric under proposed merger of two companies that has closing-date value of \$6.3 billion, or \$66.50 per RCA common share. GE, Fairfield, Conn.-based manufacturer and services company, said it intends to keep RCA subsidiary, National Broadcasting Co., after merger and that its own station, KCNC-TV Denver, would become sixth NBC-owned television station, giving NBC reach covering 20.94% of U.S. television households. Two companies have asked FCC for 18 months in which to dispose of NBC's radio stations in New York, Chicago and Washington since radio-TV combinations—NBC also owns TV stations in those cities—will lose their grandfathered status if RCA purchase is completed. GE, in FCC filing, said it intends to have head of NBC report directly to GE president and GE board, with no other oversight of subsidiary. Three members of current RCA board will join GE board. Future responsibilities of current RCA executives, once company is sold, have yet to be determined, although GE Chairman John Welch Jr. said top management at GE will be unchanged. NBC Chairman Grant Tinker has indicated he intends to resign current post soon after merger. RCA chairman, Thornton Bradshaw, will also retire once merger is completed and will sign three-year consultancy agreement with merged company. Welch said merger—which is still subject to antitrust review and FCC approval—is expected to close in fourth quarter of 1986. Deadline for comments at FCC expired on March 24.

□

Teletext. Mixing some good news for broadcasters with some bad, FCC authorized television stations to offer teletext (BROADCASTING, April 4, 1983). It refused, however, to select technical standard. In teletext order, FCC defined teletext as "ancillary" service—thereby exempting it from fairness doctrine and equal-time obligations. Broadcasters offering teletext as broadcast offering—that is, by offering mass media services—can launch or drop it without notifying FCC. Those whose offerings resemble private or common carrier offerings will have to notify commission first, however. Also under rules, noncommercial broadcasters may offer teletext for profit.

In 1983, FCC also proposed to permit TV sta-

tions to transmit nonteletext services on vertical blanking interval (BROADCASTING, March 12, 1983). Proposed change would permit VBI to be used for paging, utility load management purposes, or any other communication in digital or analog mode. FCC said it was proposing same technical rules it has adopted for teletext.

By deciding not to set standard, FCC touched off marketplace battle between incompatible World System Teletext, developed by British broadcasters and electronics manufacturers, and North American Broadcast Teletext Specification, developed through compromise of Canadian, French and U.S. teletext and videotext interests.

WST proponents are now led by Taft Broadcasting, which is broadcasting WST-based service, Electra, in Cincinnati over WKRC-TV. Under agreement with Taft, Zenith is selling \$300 decoders compatible with its late-model sets in Cincinnati. On its own, Zenith is expected to introduce this year new line of digital television sets with built-in WST decoders. Tempo Enterprises, formerly Southern Satellite Systems, Tulsa, Okla.-based satellite common carrier, is now distributing Electra service nationwide on vertical blanking interval of superstation WTBS-TV Atlanta. Service can be seen (with decoder) in cable homes that receive superstation. Broadcasters are invited to downlink superstation, strip off Electra and broadcast it locally over their own VBIs.

NABTS proponents are led by CBS, which has been offering national service (supplemented by local service at two affiliates) since spring of 1983. One of affiliates supplementing national feed, WBTW-TV Charlotte, N.C., is also exploring ancillary teletext business, data broadcasting.

□

TV allocations. FCC is considering proposed reallocation of 28 UHF TV channels in eight top-10 markets to land-mobile radio services, as well as dropping co-channel protection ratios at UHF TV station's predicted grade B service contour from 50 dB to 40 dB. In notice last May (BROADCASTING, June 3), FCC also established industry advisory committee to investigate technical issues of spectrum sharing. Committee first met in September (BROADCASTING, Sept. 16) and is expected to report to FCC by early May on findings, including results of just-completed subjective tests on interference to UHF TV picture from mobile radio signals.

Frequency sharing on 2 ghz and 7 ghz microwave bands, now widely used by television

broadcasters for electronic newsgathering and fixed studio-transmitter links, was proposed by FCC in November (BROADCASTING, Dec. 9). Proposal would allow cable system operators and cable networks to use bands for mobile remote applications. Commission is also considering elimination of mixed allocations in frequencies, setting aside 7 ghz band for fixed links only and 2 ghz band for mobile links. Minimum path lengths for fixed links and restrictions to limit terrestrial microwave interference to satellite services are also being reviewed. Comments filed in March on proposals indicated widespread opposition by broadcast interests, with cable industry supportive of prospective ENG frequency sharing.

□

TV stereo. Number of stereo television stations on air has increased to more than 220, nearly 20% of all TV's, since first broadcaster began service in summer 1984. As many as 100 more are believed to be completing conversions to multichannel sound. Although it's anticipated that majority will switch to stereo, it will not happen overnight. Great deal of money is often needed to convert studios and transmitters, and what's more, many broadcasters don't see any way to recoup investment. Competition from other media and other stereo TV outlets is expected to drive broadcasters to offer service.

Majority of stereo conversions in 1985 were in major markets, with vast majority of top 40 ADI's having at least one stereo station and many having two or more. Stereo signals now reach potential audience of well over than 55 million homes.

At networks, NBC has moved most quickly to embrace stereo sound. More than 20 prime time and late-night shows in stereo are carried each week by network owned-and-operated stations and 65 affiliates reaching 61% of U.S. TV households. ABC, with approximately thirty stereo affiliates, has experimented with service, airing weekly series and specials including 1985 World Series. CBS, meanwhile, has quickened pace on stereo considerably, speeding up planned 1988 service to introduce "pass-through" stereo beginning last February with Grammy Awards, carried in stereo by four O&Os (three for one-time broadcast only) and 26 affiliates. PBS, with at least 27 member stations in stereo, is also increasing its supply of stereo material to more than 30 hours a month.

Estimated 55 to 75 independent stations are believed in to be in stereo as well.

TV receiver manufacturers are eager to see advent of new service. It means they will be able to sell sets with stereo capability as well as set-top adapters to upgrade existing sets for stereo reception. First figures on 1985 stereo set sale announced at January Winter Consumer Electronics Show in Las Vegas, showed sales of stereo-ready sets reached 1.7 million between first of 1984 and end of 1985, with another 2.8 million in projected sales for 1986.

FCC authorized TV stereo broadcasting March 1984. At same time, it protected industry recommended Zenith/dbx system from interfering signals, making it, in effect, national standard. On Aug. 7, 1984, noncommercial WTTW-TV Chicago became first television station in nation to regularly broadcast programming with stereo sound. NBC's *Tonight* was first regularly broadcast stereo program, starting in July 1985.

Technology that makes stereo possible also makes possible simultaneous broadcast of ancillary broadcast services. Number of stations are offering second audio program (SAP) services, including reading-for-the-blind, Spanish language soundtracks for syndicated and new programming and audio program guides.

□

UHF-VHF swaps. FCC has approved concept of permitting noncommercial and commercial TV operators in same band to swap channels without having to expose themselves to competing applications (BROADCASTING, March 17). Consideration will permit trades of noncommercial U's for commercial U's and noncommercial V's for commercial V's. FCC officials said they had no plan any time soon to address related proposal to permit noncommercial broadcasters swap the V's for commercial U's. But FCC has declined to close out docket because it wants to keep option of approving V-U swaps open in case federal budgetary cutbacks should make them more attractive to public broadcasters ("Closed Circuit," March 17). V-U proposal received sharp criticism in comments at FCC (BROADCASTING, June 24, 1985).

□

VHF drop-ins. Two years ago, FCC Chairman Mark Fowler directed commission staff to issue further notice of proposed rulemaking on VHF drop-ins looking toward additional protection of existing television service ("Closed Circuit," June 18, 1984). Under original proposal, show spaced station would have been authorized as long as it provided same protection to existing stations that normally spaced station would provide. Service gains would outweigh losses. Since then, staff, at Fowler's direction, was looking toward establishing criteria that would protect much established service as possible. FCC official had once said further notice should be ready by end of 1985. But work on item was dropped early this year at direction of Fowler's office. Now, Mass Media Bureau, responding to another directive from Fowler, is said to be working on item again, but no target date has been set for work to be completed.

Staff had finished work in 1983 on original proposal, which was introduced more than five years ago (BROADCASTING, Sept. 22, 1980). FCC has approved four drop-ins: Salt Lake City (ch. 13); Charleston, W. Va. (ch. 11); Knoxville, Tenn. (ch. 8), and Johnstown, Pa. (ch. 8). Nine applications were filed for Charleston drop-in, eight for Salt Lake City, 13 for Knoxville and four for Johnstown. In Johnstown, construction permit has been issued. Other cases are still in hearing.

**NAB
1986**



**EDWIN TORNERG
& COMPANY, INC.**

Hospitality Suite
**THE MANSION
ON TURTLE CREEK**

s compiled by BROADCASTING, March 27 through April 2, and based on filings, authorizations and other FCC actions.

abbreviations: AFC—Antenna For Communications. L.J.—Administrative Law Judge. alt.—alternate. ann.—announced. ant.—antenna. aur.—aural. aux.—auxiliary. H—critical hours. CP—construction permit. D—day. A—directional antenna. Doc—Docket. ERP—effective radiated power. HAAT—height above average terrain. kHz—kilohertz. kw—kilowatts. m—meters. MEOC—maximum expected operation value. mhz—megahertz. mod.—modification. N—night. PSA—presunrise service authority. RCL—remote control location. S-A—Scientific Atlanta. SH—specified hours. SL—studio location. TL—transmitter location. trans.—transmitter. TPO—transmitter power output. U—unlimited hours. vis.—visual. w—watts. —noncommercial.

Ownership Changes

Applications

KHOG(AM) Farmington and **KFAY(AM)** Fayetteville, Ark. (KFAY: 1030 kHz; 10 kw-D; 1 kw-N; KFAY: 1250 kHz; 1 w-D)—Seeks assignment of license from Bowman & Castman Enterprises Inc. to Demaree Media Inc. for assumption of liabilities. Seller is owned by Roy Bowman and his wife, Maxine, and Randall Castleman and his wife, Georgia. has no other broadcast interests. Buyer is Fayetteville, Ark.-based group of three AM's and four FM's, owned by evoy P. Demaree. Filed March 26.

KLZE(FM) Los Altos, Calif. (99.7 mhz; 3 kw; HAAT: 400 ft.)—Seeks assignment of license from Dowe Communications Co. to Mountain Communications Inc. for \$4.3 million, comprising \$2,850,000 cash, assumption of \$1.3 million note and remainder note. Seller is owned by Kenneth J. Dowe, who has no other broadcast interests. Buyer is owned by John Parker and his wife, Kathleen. It owns KIKI (AM)-KMAI(FM) Honolulu. KTCJ(AM)-KTCZ-FM Minneapolis and KXTZ(FM) Henderson, Nev. Filed March 18.

KEZW(FM) Aurora, Colo. (1430 kHz; 5 kw-U)—Seeks assignment of license from Republic Media Inc. to Group W Radio for \$1.3 million. Seller is owned by Sen. William L. Armstrong (R-Colo.). It has no other broadcast interests. Buyer is division of Westinghouse Broadcasting & Cable Inc., subsidiary of Western Electric. Group W Radio is headed by Richard Harris. Filed March 26.

WOCL(FM) Deland, Fla. (CP)—Seeks transfer of control of Mid-Florida Radio Inc. from Gary M. Epstein (51% before; none after) to Arthur H. Kern (none before; 51% after) for trust agreement. Seller has no other broadcast interests. Buyer is owned by Kern and Alan Beck. It owns /ALK-AM-FM Patchogue, N.Y., WLIF-FM Baltimore and SMG(FM) Seguin, Tex. Filed March 18.

WNKS(FM) Columbus, Ga. (102.9 mhz; 100 kw; AAT: 1,521 ft.)—Seeks assignment of license from Aylett J. Coleman to M&M Partners for \$3,250,000 cash. Seller so owns WXLK(FM) Roanoke, Va. Buyer is owned by J.T. Lilligan (75%) and James R. Martin (25%). It also owns /PNX(AM) Phenix City, Ala. Filed March 27.

WYLZ(FM) Nashville, Ga. (95.3 mhz; 1.8 kw; HAAT: 12 ft.)—Seeks assignment of construction permit from Country Communications Inc. to Tift Area Radio Inc. for \$4,971.95 cash. Seller is principally owned by Marlin Danforth and Duane Tucker. It also owns WNGA(AM) Nashville, Ga. Buyer is owned by William G. Brown, Clifton G. Ibor, Albert Cohen and Allen L. Tibbets. It also owns WTIF (AM) Tifton, Ga. Filed March 19.

KLDH-TV Topeka, Kan. (ch. 49; ABC; ERP vis. 3,475 w; aur. 347.5 kw. HAAT: 1,507 ft.; ant. height above ground: 1,439 ft.)—Seeks assignment of license from LDH-TV Inc. to Joseph L. Brechner for \$6.5 million. Seller is owned by Larry D. Hudson, who also has interest in new TV in Omaha, Neb., and cable systems in St. Louis. Buyer is owned by Joseph L. Brechner, who has interest in /MDT(TV) Salisbury, Md., and WKFI(AM)-WSWO(FM)ilmington, Ohio. Filed March 21.

■ **WMPA(AM)-WHAY(FM)** Aberdeen, Miss. (AM: 1240 kHz; 1 kw-U; FM: 105.5 mhz; 3 kw; HAAT: 341 ft.)—Seeks transfer of control of Tenn-Tom Broadcasting Corp. from J.D. Buffington (100% before; 40% after) to Michael D. Jonas and Donny Warnick for \$100,000. Seller and buyer have no other broadcast interests. Filed March 19.

■ **KSLE(FM)** Seminole, Okla. (105.5 mhz; 3 kw; HAAT: 300 ft.)—Seeks assignment of license from Prima Media Group to One Ten Broadcast Group for \$375,000 cash. Seller is principally owned by Charles Morris, who has no other broadcast interests. Buyer is owned by Eileen C. Howard and two others. Her husband, Tom, is radio sales consultant based in Massapequa, N.Y. Filed March 24.

■ **WBRQ(FM)** Cidra, P.R. (1450 kHz; 97.7 mhz; 2.7 kw; HAAT: 866 ft.)—Seeks transfer of control of Radio Musical Inc. from George Arroyo to Thomas Carrasquillo and two others for \$615,000. Seller also owns WONQ(AM) Orlando, Fla. Buyer is station's general manager. It has no other broadcast interests. Filed March 24.

■ **KALY(AM)** El Paso, Tex. (1340 kHz; 1 kw-U)—Seeks assignment of license from Continental Broadcasting Corp. of Texas Inc. to Dunn Broadcasting Corp. for \$134,726 and assumption of liabilities. Seller is owned by Jose Molina, who also owns KPHX(AM) Phoenix and KXKS(AM) Albuquerque, N.M. Buyer is owned John M. Dunn. It also has interest in KSET(FM) El Paso, Tex. Filed March 21.

■ **KRIO(AM)** McAllen, Tex. (910 kHz; 5 kw-U)—Seeks transfer of control of Tippie Communications of Texas Inc. from Henry B. Tippie to Rio Grande Bible Institute Inc. for no consideration. Seller also owns KLVY(FM) Edinburg and KNCN(FM) Sinton, both Texas. He also has interest in Rollins Communications, Atlanta-based owner of five AM's, one FM and four TV's. Filed March 25.

■ **KJJT(AM)** Odessa, Tex. (1000 kHz; 250 w-D)—Seeks

transfer of control of L&T Enterprises from Alfredo Levario (41.67% before; none after) and O.L.A. Inc. (33.33% before; none after) to Ruben Velasquez for assumption of liabilities. Sellers and buyer have no other broadcast interests. Remaining stock is owned by Adam Levario. Filed March 20.

■ **WLKV(AM)-WBBC(FM)** Blackstone, Va. (AM: 1440 kHz; 5 kw-D; FM: 93.5 mhz; 1.8 kw; HAAT: 370 ft.)—Seeks assignment of license from Blackstone Communications Inc. to Nottoway Radio Inc. for \$450,000. Seller is owned by Michael Rau, who has no other broadcast interests. Buyer is owned by Plato Eliades, attorney from Hopewell, Va., with no other broadcast interests. Filed March 27.

■ **WSSV(AM)-WPLZ(FM)** Petersburg, Va. (1240 kHz; 1 kw-U; FM: 99.3 mhz; 3 kw; HAAT: 400 ft.)—Seeks assignment of license from Eure Communications Inc. to Paco-Jon Broadcasting Corp. for \$6.5 million. Seller is owned by William D. Eure, who also has interest in WDDY(AM) Gloucester, Va. Buyer is owned by Glenn R. Mahone, former president of Sheridan Broadcasting Network, Pittsburgh-based radio network. Filed March 20.

■ **WKIE(AM)** Richmond, Va. (1540 kHz; 10 kw-D)—Seeks transfer of control of Fifteen Forty Broadcasting Corp. from stockholders to Walton M. Belle and Charles E. Cummings for assumption of liabilities. Sellers are Lillie Bennett, John L. Howlette, Valvin E. Sutton, William S. Thornton, E. Michael Howlette and Andrew Lewis, who have no other broadcast interests. Buyers owns WKIE-FM Richmond. Filed March 24.

■ **WTOY(AM)** Roanoke, Va. (910 kHz; 1 kw-D)—Seeks assignment of license from Roanoke Valley Broadcasting Inc. to Southwest Virginia Broadcasting for \$200,000, comprising \$50,000 cash and remainder note at 10% over one year. Seller is principally owned by Thomas Finnegan, who has no other broadcast interests. Buyer is owned by James R.



Marc O. Hand

WE TAKE GREAT PLEASURE IN ANNOUNCING THAT MARC O. HAND HAS JOINED GAMMON & NINOWSKI MEDIA INVESTMENTS, INC. AS AN ASSOCIATE BROKER OPERATING OUT OF DENVER, COLORADO.

Mr. Hand is a graduate of the University of California at Santa Cruz with a Bachelor of Arts in Politics. His twelve years of experience in the broadcast industry include the development of new radio stations in California, Colorado and Texas, station management, and management consulting.

Before joining Gammon & Ninowski, Mr. Hand served as a consultant to radio stations, national and regional associations (including the Corporation for Public Broadcasting), and other media groups in the areas of station management, financial planning and marketing.

Mr. Hand has participated in the development of limited partnerships for radio stations and a successful cable system franchise bid. Mr. Hand brings an extensive knowledge of radio station operations and an understanding of the specific needs of both buyers and sellers in the acquisition and financing of broadcast properties.



Gammon & Ninowski

Media Investments, Inc.

Washington, D.C.	Los Angeles, CA.	Philadelphia, PA.	Denver, CO.	Kansas City, MO.
(202) 862-2020	(714) 837-9800	(215) 525-8767	(303) 534-3513	(316) 442-9370

Lindsey and Michael M. Waldvogel. It has no other broadcast interests. Filed March 21.

■ WXXX(FM) South Burlington, Vt. (93.5 mhz; 3 kw; HAAT: 225 ft.)—Seeks transfer of control of Champlain Valley Broadcasting Corp. from stockholders to Lewis Lloyd and Richard Borel for \$3,250,000. Seller is owned by John Hughes and his wife, Eve; Howard Ginsberg, Martin Chester, John C. Nichols and H. Lawrence McCrorey. Hughes' own WVNH(AM) Salem, N.H. Buyers have no other broadcast interests. Filed March 27.

■ WKRW-TV Kenosha, Wis. (ch. 55; independent; ERP vis. 1884 kw; aur. 188.4 kw; HAAT: 448 ft.; ant. height above ground: 412 ft.)—Seeks assignment of construction permit from Midwest Broadcast Associates Inc. to Le Sea Broadcasting Corp. for \$100,000. Seller is owned by Frank Kavenik, who also owns WLMV(AM) Vernon Hills, Ill. Buyer is owned by Lester Sumrall and family. It owns WHMB-TV Indianapolis and WHME-FM-TV South Bend, Ind. It also owns international broadcast station WHRI Noblesville, Ind., and recently purchased WULT-TV New Orleans, pending FCC approval. Filed March 24.

New Stations

AM's

■ Canyon Country, Calif.—Canyon Broadcasters Inc. seeks 1220 khz; 1 kw-D; 500 w-N. Address: 15500 Sierra Highway, 91351. Principal is owned by Lawrence B. Bloomfield, Howard S. Howard and two others. It has no other broadcast interests. Filed March 25.

■ St. Maries, Idaho—Terry C. McDuffy seeks 1240 khz; 1 kw-U. Address: 1525 Main, 83861. Principal owns colocated KOFE(AM) and intends to move station to this frequency. Filed March 3.

■ Avon, N.Y.—Radio Livingston Ltd. seeks 1030 khz; 500 w-D. Address: 15 East Ave., Livonia, N.Y. 14487. Principal is principally owned by Thomas G. Presutti. It has no other broadcast interests. Filed March 13.

FM's

■ Century Village, Fla.—Team Broadcasting Co. seeks

105.1 mhz; 3 kw; HAAT: 328 ft. Address: 661 Golden A Mobile, Ala. 36612. Principal is owned by Ruben Hughes and his wife, Maxine. It has no other broadcast interests. Filed March 12.

■ Century, Fla.—Gulf Communications of Alabama Inc. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 106 N. Main Ave., Pensacola, Fla. 32507. Principal is owned by Jerry W. Spencer and Jackie F. Boudreaux. It also owns WRBK(AM) Flomaton, Ala. Filed March 10.

■ Casey, Ill.—Ford FM Inc. seeks 104.3 mhz; 11.5 kw; 3 kw; HAAT: 220.4 ft. Address: Rural Route 12, Box 379, V. Terre Haute, Ind. 47885. Principal is owned by Paul D. F. who owns colocated WKZI(AM). Filed March 13.

■ Sac City, Iowa—Dad's Clipping Service seeks 10 mhz; 3 kw; HAAT: 220.4 ft. Address: 285 Burr Rd., Northport, N.Y. 11731. Principal is owned by Robert Re who has no other broadcast interests. Filed March 13.

■ Sac City, Iowa—Iowa Radio Associates seeks 10 mhz; 3 kw; HAAT: 291 ft. Address: 800 Main St., 505 Principal is owned by Mariann Alcott and Ronald L. Wils It has no other broadcast interests. Filed March 17.

■ Harlan, Ky.—Eastern Broadcasting Co. seeks 10 mhz; 3 kw; HAAT: minus 250 ft. Address: 102 S. Cumberland Ave., 40831. Principal is owned by brothers, Har and Donald Parsons. It also owns WFSR(AM) Harlan, Filed March 17.

■ Harlan, Ky.—James W. Yoder seeks 105.1 mhz; 3 kw; HAAT: minus 250 ft. Address: 1320 Seminole Dr., Johns City, Tenn. 37601. Principal has no other broadcast interest. Filed March 17.

■ Harlan, Ky.—Charles W. Berger seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: U.S. Highway 119, Rossp. 40831. Principal has no other broadcast interests. Filed March 17.

■ Lancaster, Ky.—Lancaster Broadcasters Inc. seeks 105.1 mhz; 3 kw; HAAT: 300 ft. Address: N. Buckeye R Lancaster, Ky. 40444. Principal is owned by Carl Renfro; his wife, Lejeune. It owns colocated WKYY(AM). Filed March 3.

■ Lancaster, Ky.—Hometown Broadcasting of Lancaster Inc. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: St. Route 39, 40444. Principal is owned by Robert L. Schei and three others. It has interest in WLGC-AM-FM Greer Ky. Filed March 14.

■ Shepardsville, Ky.—Julie N. Frew seeks 105.1 mhz; 1.55 kw; HAAT: 443 ft. Address: Route 4, Cartersville, Ga. 30120. Principal has interest in WYXC(AM) Cartersville, Ga., and WXYI(AM) Athens, Tenn. Filed March 17.

■ Shepardsville, Ky.—John D. Harper seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 1103 Buckman St., 401 Principal has no other broadcast interests. Filed March 17.

■ Shepardsville, Ky.—Bullitt Broadcasting Inc. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: Route 1, Bar town Rd., Mt. Washington, Ky. 40047. Principal is owned by Sandra Everist and Anna Ruth Clark and her husband Murray. It has no other broadcast interests. Filed March 17.

■ Shepardsville, Ky.—Don H. Barden seeks 105.1 mhz; 2.95 kw; HAAT: 331 ft. Address: 1249 Washington Blv 21st Floor, Detroit 48226. Principal has interest in four ca systems in Michigan. Filed March 17.

■ Shepardsville, Ky.—Claire Tow seeks 105.1 mhz; 3 kw; HAAT: 551 ft. Address: E. Locust Ave., New Cana Ct., 06840. Tow and her husband, Leonard, are principal owners of Century Communications, New Canaan, Conn based cable MSO. Filed March 17.

■ Shepardsville, Ky.—Gene R. Osselmier seeks 10 mhz; 3 kw; HAAT: 328 ft. Address: 204 Walnut St., 401 Principal owns colocated WBUL(AM). Filed March 17.

■ Shepardsville, Ky.—Eivaz Communications Inc. seeks 105.1 mhz; 2.2 kw; HAAT: 383 ft. Address: 19245 Wood Ave., Lansing, Ill. 60438. Principal is owned by N. lie Gaines, who also has interest in WMJ(AM) South Bei Ind. Filed March 14.

■ Shepardsville, Ky.—James W. Yoder seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 1320 Seminole Dr., Johns City, Tenn. 37601. Principal has no other broadcast interest. Filed March 17.

■ Shepardsville, Ky.—Douglas G. Harding seeks 10 mhz; 3 kw; HAAT: 328 ft. Address: 1712 Clayton R Louisville, Ky. 40205. Principal has no other broadcast interests. Filed March 11.

■ Great Barrington, Mass.—Berkshire Broadcasting South Inc. seeks 105.1 mhz; 1.1 kw; HAAT: 520.7 ft. Address: Route 7, 01230. Principal is owned by Donald Thurston, who owns WMNB-AM-FM North Adams & WSBS(AM) Great Barrington, both Massachusetts. Filed March 13.

■ Great Barrington, Mass.—Empire Communicatio seeks 105.1 mhz; 1.1 kw; HAAT: 520.7 ft. Address:

Services

AERONAUTICAL CONSULTANTS
TOWER LOCATION/HEIGHT STUDIES
FAA NEGOTIATIONS
JOHN CHEVALIER, JR.
AVIATION SYSTEMS, INC.
28441 HIGHRIDGE RD. STE 201
ROLLING HILLS ESTATES, CA 90274
(213) 377-3449

301-731-5677 Complete
Broadcast Facility
Design & Installation
Harrison
systems Ltd.
7515 Annapolis Road Suite 411
Hyattsville, Maryland 20784

BROADCAST DATA SERVICES
Computerized Broadcast Service
Including
Data Base/Allocation Studies
Terrain Profiles
A Div. of Moffet, Larson & Johnson, Inc.
(703) 841-0282

RAMTRONIX, INC.
Connector Supplier
to the Broadcast Industry
Kings/ITT Cannon
67 Jeffry Blvd. E.
Deer Park, N.Y. 11729
(516) 242-4700

THE M STREET JOURNAL
An authoritative weekly newsletter
for radio. Format News/FCC/CRTC
Files *CP Activity. Free sample:
Box 540381 Houston, TX 77254
(713) 726-8055

Community TV Journal
LPTV News, Views & Hard Data
every other Wednesday \$175/yr
PO Box 33964
Washington, DC 20033-0964
202-234-8694

FCC ON-LINE DATABASE
dataworld
Allocation/Terrain Studies
AM • FM • TV • LPTV • ITFS
4827 Rugby Ave., Suite 200
Bethesda, MD 20814
(301) 652-8822 1-800-368-5754

Complete Listing Of:
UNUSED CALL LETTERS
Call Letter Systems
P. O. Box 13789
Jackson, MS 39236-3789
(601) 981-3222

Completely Current - No Maritime Calls
AVAILABLE CALL LETTERS
WITH FULL APPLICATION KIT
RADIO INFORMATION CENTER
575 Lexington Avenue New York, NY 10022
(212) 371-4828

Corwall Associates Inc.
Professional Services to the
Broadcasting & Production Industries
in
Architecture
Interior Design
Technical Design
Construction Mgt.
(818) 351-5521

Stephen Raleigh Broadcast Services
Full Service Technical Consulting
Specialists in Audio & RF Systems
Facility Design & Installation
P.O. Box 3403, Princeton, N.J. 08540
(609) 799-4357

Professional Cards

D. RING & ASSOCIATES, P.C.
CONSULTING RADIO ENGINEERS
 Suite 500
 1140 Nineteenth St., N.W.
 Washington, D.C. 20036
 (202) 223-6700
 Member AFCCE

SAIC Carl T. Jones
 Corporation
 A Subsidiary of Science Applications International Corporation
CONSULTING ENGINEERS
 7901 YARNWOOD COURT
 SPRINGFIELD, VA. 22153
 (703) 569-7704
 MEMBER AFCCE

LOHNES & CULVER
 Consulting Engineers
 1156 15th St. N.W., Suite 606
 Washington, D.C. 20005
 (202) 296-2722
 Member AFCCE

COHEN and DIPPELL, P.C.
CONSULTING ENGINEERS
 1015 15th St., N.W., Suite 703
 (202) 783-0111
 Washington, D.C. 20005
 Member AFCCE

SILLIMAN AND SILLIMAN
 8701 Georgia Ave., #805
 Silver Spring, MD 20910
ROBERT M. SILLIMAN, P.E.
 (301) 589-8288
THOMAS B. SILLIMAN, P.E.
 (812) 853-9754
 Member AFCCE

Moffet, Larson & Johnson, Inc.
Consulting Telecommunications Engineers
 1925 North Lynn Street
 Arlington, VA 22209
 (703) 841-0500
 Member AFCCE

**DAVID STEEL
& ASSOCIATES, INC.**
 P O Box 230
 Main St. & Malvin Ave
 Queenstown, MD 21658
 (301) 827-8725
 Member AFCCE

ANDRUS AND ASSOCIATES, INC.
ALVIN H. ANDRUS, P.E.
 351 SCOTT DRIVE
 SILVER SPRING, MD. 20904
 301 384-5374
 Member AFCCE

HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
 Box 68, International Airport
 San Francisco, California 94128
 (415) 342-5208
 Member AFCCE

JOHN B. HEFFELFINGER
 9233 Ward Parkway, Suite 285
 816-444-7010
 Kansas City, Missouri 64114
 Member AFCCE

**JULES COHEN
& ASSOCIATES, P.C.**
 Suite 400
 1730 M St. N.W.
 Washington DC 20036
 (202) 659-3707
 Member AFCCE

**CARL E. SMITH
CONSULTING ENGINEERS**
 AM-FM-TV Engineering Consultants
 Complete Tower and Rigging Services
 "Serving the Broadcast Industry
 for over 50 Years"
 Box 2727 Bath, Ohio 44210
 (216) 659-4440

VIR JAMES
CONSULTING ENGINEERS
 Applications and Field Engineering
 Computerized Frequency Surveys
 3137 W. Kentucky Ave.—80219
 (303) 937-1900
DENVER, COLORADO
 Member AFCCE & NAB

**E. Harold Munn, Jr.,
& Associates, Inc.**
 Broadcast Engineering Consultants
 Box 220
 Coldwater, Michigan 49036
 Phone: 517-278-7339

**ROSNER TELEVISION
SYSTEMS**
CONSULTING & ENGINEERING
 250 West 57 Street
 New York, N.Y. 10107
 (212) 246-2850

Mullaney Engineering, Inc.
 Consulting Telecommunications Engineers
 9049 Shady Grove Court
 Gaithersburg, MD 20877
 301-921-0115
 Member AFCCE

HATFIELD & DAWSON
 Consulting Engineers
 Broadcast and Communications
 4226 6th Ave., N.W.,
 Seattle, Washington, 98107
 (206) 783-9151
 Member AFCCE

ENTERPRISE ENGINEERING P.C.
 Consulting Engineers
 FW HANDEL, PE.
 P.O. Box 9001 Peoria, IL 61614
 (309) 691-4155
 Member AFCCE

**STRUCTURAL SYSTEMS
TECHNOLOGY, INC.**
 MATTHEW J. VLISSIDES, P.E.
 PRESIDENT
 TOWERS, ANTENNAS, STRUCTURES
 New Tall Towers, Existing Towers
 Studies, Analysis, Design Modifications,
 Inspections, Erection, Etc.
 6867 Elm St., McLean, VA 22101-7033 356-9765
 Member AFCCE

C. P. CROSSNO & ASSOCIATES
 Consulting Engineers
 P.O. Box 18312
 Dallas, Texas 75218
 (214) 669-0294
 Member AFCCE

**JOHN F.X. BROWNE
& ASSOCIATES, P.C.**
 525 Woodward Ave.
 Bloomfield Hills, MI 48013
 (313) 642-6226
 Washington Office
 (202) 293-2020
 Member AFCCE

**D.C. WILLIAMS
& ASSOCIATES, INC.**
 Consulting Engineers
 AM-FM TV-LPTV CATV
 POST OFFICE BOX 700
 FOLSOM, CALIFORNIA 95630
 (916) 933-5000

R.L. HOOVER
 Consulting Telecommunications Engineer
 11704 Seven Locks Road
 Potomac, Maryland 20854
 301-983-0054
 Member AFCCE

**SHERMAN & BEVERAGE
ASSOCIATES INCORPORATED**
**CONSULTING &
FIELD SERVICES**
 P.O. Box 770
 WILLIAMSTOWN, NEW JERSEY
 (609) 728-2300 08094

CLARENCE M. BEVERAGE
COMMUNICATIONS TECHNOLOGIES, INC.
 BROADCAST ENGINEERING CONSULTANTS
 SUITE #5 123 CREEK ROAD
 MOUNT HOLLY NJ 08060
 (609) 722-0007

**LAWRENCE L. MORTON
ASSOCIATES**
 21671 SUPERIOR LANE
 LAKE FOREST CALIFORNIA 92630
LAWRENCE L. MORTON, E.E.
 AM • FM • TV
 APPLICATIONS • FIELD ENGINEERING
 ANTENNA BROADCASTING FOR AM STEREO
 (714) 859-6015

SELLMEYER & KRAMER, INC.
CONSULTING ENGINEERS
 J.S. Sellmeyer, P.E., S.M. Kramer, P.E.
 APPLICATIONS • FIELD ENGINEERING
 P.O. Box 841 McKinney, TX 75069
 214-542-2056 214-548-8244
 Member AFCCE

COMSEARCH™
 11503 Sunrise Valley Dr./Reston, Virginia 22091
 1701 North Greenville Avenue, Suite 814
 Richardson, Texas 75081
 Communications Engineering Services
 Harry L. Stemple, Virginia 703/420-6300
 G. Pat Mart, Texas 214/236-3156

PAUL DEAN FORD
 BROADCAST ENGINEERING CONSULTANT
 R.R. 12, Box 379
 WEST TERRE HAUTE, INDIANA 47885
 812-535-3831

Teletech, Inc.
TELECOMMUNICATIONS ENGINEERS
 FM-TV-MDS-LPTV-Land Mobile
 Applications-Frequency Searches
 P.O. Box 924
 Dearborn, MI 48121
 (313) 562-6873

D.B. COMMUNICATIONS, INC.
 Broadcast/RCC/cellular/satellite
 Telecommunications Consultants
 4401 East West Highway, Suite 404
 Bethesda, Maryland 20814
 (Located in Washington, D.C. Area)
 (301) 654-0777
 contact: Darrell E. Bauguess

**JOHN J. DAVIS
& ASSOCIATES**
CONSULTING ENGINEERS
 P.O. BOX 128
 SIERRA MADRE, CA 91024-0128
 (818) 355-6909
 Member AFCCE

EDM & ASSOCIATES, INC.
 B/cast-AM-FM-TV-LPTV-ITFS-Translator
 Frequency Searches & Rule Making
 C/Carrier-Cellular, Satellites
 MDS, P/P Microwave
 FCC 1st Class & PE licensed staff
 1234 Mass. Ave., N.W., Suite 1006
 Washington, D.C. 20005 Phone (202) 639-8826
 Member AFCCE

RICHARD L. BIBY, P.E.
**COMMUNICATIONS ENGINEERING
SERVICES, P.C.**
CONSULTING ENGINEERS
 1600 Wilson Blvd., Suite 1003
 Arlington, Virginia 22209
 (703) 522-5722
 Member AFCCE

R.J. GRANDMAISON, P.E.
**ENGINEERING CONSULTANT
BROADCAST AND COMMUNICATIONS**
 10224 WENDOVER DRIVE
 VIENNA, VIRGINIA 22180
 (703) 281-1081
 Member AFCCE

LECHMAN & JOHNSON
 Telecommunications Consultants
 Applications - Field Engineering
 2033 M Street N.W. Suite 702
 Washington D.C. 20036
 (202) 775-0057

Bound Brook Rd., Newton, Mass. 02161. Principal is owned by Charles N. Shapiro and Girish M. Bhatt. It has no other broadcast interests. Filed March 17.

■ Great Barrington, Mass.—Ronald L. Wilson seeks 105.1 mhz; 3 kw; HAAT: 186 ft. Address: 425 Stuart Ct., Ojai, Calif. 93203. Principal has no other broadcast interests. Filed March 17.

■ Great Barrington, Mass.—Daniel F. Viles seeks 105.1 mhz; 1.2 kw; HAAT: 522 ft. Address: 9 Bard Ave., Red Hook, N.Y. 12571. Principal has no other broadcast interests. Filed March 17.

■ Great Barrington, Mass.—J.W. McWhirk Publishers Inc. seeks 105.1 mhz; 1.1 kw; HAAT: 520.7 ft. Address: P.O. Box 300, 14 Park Pl., Lee, Mass. 01238. Principal is owned by Dani J. Holmes and his wife, Susan. It has no other broadcast interests. Filed March 17.

■ Great Barrington, Mass.—Mai Cramer seeks 105.1 mhz; 1.43 kw; HAAT: 461.3 ft. Address: 11 Grace St., Malden, Mass. 02148. Principal has no other broadcast interests. Filed March 17.

■ Balaton, Minn.—Karon Lundeen seeks 105.1 mhz; 3 kw; HAAT: 328 feet. Address: 431 Central Ave., 56115. Principal has no other broadcast interests. Filed March 17.

■ Lakeville, Minn.—Kingsley H. Murphy seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 207 Textile Bldg., 119 N. 4th St., Minneapolis, Minn. 55401. Principal owns WISS-AM-FM Berlin, Wis., and KCHK(AM) New Prague, Minn. Filed March 11.

■ Lakeville, Minn.—Gayle M. Gjovik seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 1817 Cinnabar Ct., Eagan, Minn. 55122. Principal has no other broadcast interests. Filed March 17.

■ Lakeville, Minn.—Lakeville Broadcasting Foundation seeks 105.1 mhz; 3 kw; HAAT: 324.5 ft. Address: 16725 Langley Ave., 55044. Principal is equally owned by Effie Clemmons, Henry Fournier, Michael Miller, Sheryl Ponder and Virginia Mooney. It has no other broadcast interests. Filed March 17.

■ Lakeville, Minn.—Old Eureka Broadcasting Inc. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 16995 Biscayne Ave. W, Farmington, Minn. 55024. Principal is equally owned by Albert Sayers and his wife, Cleone; Linda Schultz, Gerald Pelletier and David Gross. It has no other broadcast interests. Filed March 14.

■ Lakeville, Minn.—Family Stations seeks 105.1 mhz; 3 kw; HAAT: 292.48 ft. Address: 3108 Fulton Ave., Sacramento, Calif. 95821. Principal is Oakland, Calif.-based nonprofit station group of one AM, 17 FM's, one short wave and one TV. It is headed by Harold Camping. Filed March 17.

■ Lakeville, Minn.—Southern Twin Cities Area Radio Inc. seeks 105.1 mhz; 1.1 kw; HAAT: 536 ft. Address: 1556 Gervais Ave., North St. Paul, Minn. 55109. Principal is equally owned by Thomas J. Lijewski, Elzena Wiley, Lucille M. Bryant and Helen D. Reed. It has no other broadcast interests. Filed March 17.

■ Lakeville, Minn.—Lakeville Broadcasting Inc. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 212 Marcin St., Burnsville, Minn. 55337. Principal is owned by Pamela R. White and her husband, John. It has no other broadcast interests. Filed March 17.

■ Lindsay, Okla.—Helen E. Wafford seeks 105.1 mhz; 2 kw; HAAT: 395 ft. Address: 209 E. Commanche, Box 481, 73052. Principal has no other broadcast interests. Filed March 17.

■ Lindsay, Okla.—Fox Communications seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 2919 Woodview, Norman, Okla. 73071. Principal is equally owned by John Fox and Kenneth Eklund. It is also app. for new AM. Filed March 17.

■ Lindsay, Okla.—Lillian Fowler and Charles Jones seek 105.1 mhz; 850 w; HAAT: 565 ft. Address: Box 121, Route 3, 73052. Jones is general manager of KWCO(AM)-KXXX-FM Chickasha, Okla. Filed March 11.

■ Reedsport, Ore.—Nanette Markunas seeks 92.1 mhz; 3 kw; HAAT: 257 ft. Address: P.O. Box 2576, Montauk, N.Y. 11954. Principal has no other broadcast interests. Filed March 13.

■ Johnsonville, S.C.—Franklin Broadcasting seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 237 Western Blvd., Jacksonville, N.C. 28540. Principal owns WBQZ(AM) Camp Lejeune, N.C., and WETC(AM) Wendell-Zebulon, N.C. Filed March 6.

■ Johnsonville, S.C.—Hemingway Broadcasting Co. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: Poplar Hill Rd., Hemingway, S.C. 29554. Principal is owned by estate of Jerome P. Askins, estate of W.T. Nesmith, and five others. It also owns WKYB(AM) Hemingway, S.C. Filed March 17.

■ Palacios, Tex.—Joseph L. Sandlin seeks 100.7 mhz; 3 kw; HAAT: 328 ft. Address: P.O. Box 789, Bay City, Tex. 77414. Principal owns KMKS-FM Bay City, Tex. Filed March 13.

■ Palacios, Tex.—Bay Broadcasting Ltd. seeks 100.7 mhz; 3 kw; HAAT: 100 ft. Address: Highway 35 East, Bay City, Tex. 77414. Principal is principally owned by Brenda Clark Rosenberg. It also owns KIOX(AM) Bay City, Tex. Filed March 3.

■ Robstown, Tex.—Melanie Ann Rubinsky seeks 105.1 mhz; 3 kw; HAAT: 300 ft. Address: 4021 Steck Ave., Austin, Tex. 78759. Principal has no other broadcast interests. Filed March 14.

■ Robstown, Tex.—Lopez family seeks 105.1 mhz; 3 kw; HAAT: 91.44 m. Address: 115 West Ave., 78380. Principal is owned by Humberto Lopez, his wife, Minerva, and his son, Carlos. They also have interest in KXTO(FM) Odem, Tex. Filed March 17.

■ Robstown, Tex.—Gilbert Davila seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: P.O. Box 5050, Corpus Christi, Tex. 78405. Principal has no other broadcast interests. Filed March 14.

■ Bridgewater, Va.—M Corps Inc. seeks 105.1 mhz; 885 w; HAAT: 591.2 ft. Address: 951 Atlanta Circle, Seaford, Del. 19973. Principal is owned by Keith A. Mayo and his wife, Chih Ping Mayo. It has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—Kirkley Paige Beal seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 1829 Chantilly Court, Virginia Beach, Va. 23451. Principal has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—John D. Craver seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 4318 Pineyville Lane, Spring, Tex. 77388. Principal has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—Robert A. Jones seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 61 Garbers Church Rd., Harrisonburg, Va. 22801. Principal has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—Genesis Communications Inc. seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: P.O. Box 926, Charlottesville, Va. 22902. Principal is owned by Judith L. Randolph, Jonathan G. Hall and Wilbur M. Vitols. It has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—College Town Radio Ltd. Partnership seeks 105.1 mhz; 3 kw; HAAT: 328 ft. Address: 61 Court Sq., Harrisonburg, Va. 22801. Principal is owned by Terry Lynn Denton, her father, Warren, and John Dettra. Dettra has interest in WQRA(FM) Warrenton, Va. Filed March 17.

■ Bridgewater, Va.—Bridgewater Broadcasters seeks 105.1 mhz; 3 kw; HAAT: 300 ft. Address: 6321 St. James, West Bloomfield, Mich. 48033. Principal is owned by Emmett M. Capper, who has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—Ronald L. Wilson seeks 105.1 mhz; 3 kw; HAAT: 326 ft. Address: 425 Stuart Ct., Ojai, Calif. 93023. Principal has no other broadcast interests. Filed March 17.

■ Bridgewater, Va.—Robert Lee Dean seeks 105.1 mhz; 3 kw; HAAT: 309 ft. Address: 379 Cedar St., Harrisonburg, Va. 22801. Principal is general manager and 50% owner of WHBG(AM) Harrisonburg. Filed March 12.

■ Bridgewater, Va.—Mountain Tower seeks 105.1 mhz; 3 kw; HAAT: 270 ft. Address: 2199-5 Stoll Rd., Sauberties, N.Y. 12477. Principal is owned by Molly Waltman-Moncure and her husband, Peter Moncure. It has interest in WDST(FM) Woodstock, N.Y. Filed March 20.

TV's

■ Morehead City, N.C.—Wander Broadcasting of Morehead City seeks ch. 8; 316 kw; aur. 31.6 kw; HAAT: 1,965 ft.; ant. height above ground: 1,960 ft. Address: 332 F St., NE, Washington, D.C. 20002. Seller is owned by Elyse G. Wander, who has no other broadcast interests. Filed March 28.

■ Morehead City, N.C.—James E. McManus and his wife, Rachel, seek ch. 8; vis. 316 kw; aur. 31.6 kw; HAAT: 468 ft.; ant. height above ground: 468 ft. Address: 306 W. Second St., Ayden, N.C. 28513. Principal is general manager of WBZQ(AM) Greenville, N.C. Filed March 28.

■ Morehead City, N.C.—Morehead City TV Ltd. seeks ch. 8; 316 kw; aur. 31.6 kw; HAAT: 1,932.8 ft.; ant. height above ground: 603 m. Address: 414 Briarwood Lane, Charlotte, N.C. 28215. Principal is owned by State W. Alexander, general partner, and limited partners, William Rollins, Robert Hilker, Harvey Gantt, William G. Brown and Clifton G. Moor. Rollins and Hilker own Suburban Radio Group, Belmont, N.C.-based group of seven AM's and five FM's. Alexander and Gantt also have interest in WMHU(TV) Bel-

mont, N.C. Brown and Moor have interest in WTIF(A Tifton), and are purchasing WLYZ(FM) Nashville, b Georgia (see "For the Record," page 169). Filed March 17.

■ *Knoxville, Tenn.—Lincoln Memorial University se ch. 15, ERP vis. 5,000 kw; aur. 500 kw; HAAT: 1,690 ant. height above ground: 1,360 ft. Address: Highway Harrogate, Tenn. 37752. Principal is educational institut headed by Gary J. Burchett, president. Filed March 19

Facilities Changes

Applications

AM's

Tendered

■ WPSL (1590 khz) Port St. Lucie, Fla.—Seeks CP to crease power to 5 kw. App. March 28.

■ WAOC (1420 khz) St. Augustine, Fla.—Seeks CP to crease power to 5 kw. App. March 25.

■ WROL (950 khz) Boston—Seeks CP to add night ser with 1 kw and make changes in ant. sys. App. March 28.

■ WLIM (1580 khz) Patchogue, N.Y.—Seeks CP to night service with 500 w and make changes in ant. sys. A March 28.

■ WHWB (1000 khz) Rutland, Vt.—Seeks CP to cha freq. to 970 khz. App. March 25.

■ KNTR (1550 khz) Ferndale, Wash.—Seeks CP to incre power to 50 kw. App. March 28.

Accepted

■ WSDL (1560 khz) Slidell, La.—Seeks MP to chang DA-N. App. March 31.

■ WPCN (960 khz) Mount Pocono, Pa.—Seeks CP to r changes in ant. sys. App. March 27.

FM's

Accepted

■ WDJC (93.7 mhz) Birmingham, Ala.—Seeks CF change HAAT to 1,006 ft. App. March 26.

■ KKXX (107.9 mhz) Bakersfield, Calif.—Seeks CF change ERP to 7.6 kw and change HAAT to 1,364.8 ft. A March 26.

■ WDUV (103.3 mhz) Bradenton, Fla.—Seeks CF change TL and change HAAT to 1,075.18 ft. App. M: 25.

■ KIZN (93.1 mhz) New Plymouth, Idaho—Seeks C change ERP to 55 kw and change HAAT to 2,580 ft. A March 26.

■ KLSS-FM (106.1 mhz) Mason City, Iowa—Seeks C change ERP to 100 kw. App. March 25.

■ KRZZ-FM (95.9 mhz) Derby, Kan.—Seeks mod. of li move SL to 2402 East 37th St., North Wichita, Kan. A March 25.

■ WWKZ (103.5 mhz) New Albany, Miss.—Seeks C change HAAT to 1,002.5 ft. App. March 26.

■ KEFM (96.1 mhz) Omaha—Seeks mod. of CP to ch: TL and change HAAT to 1,439.92 ft. App. March 26

■ WERZ (107.1 mhz) Exeter, N.H.—Seeks CP to ch: ERP to 2.5 kw. App. March 31.

■ WCTO (94.3 mhz) Smithtown, N.Y.—Seeks mod. o to change TL; change ERP to 1.68 kw; change HAA 445.42 ft., and replace DA. App. March 25.

■ WFLY (92.3 mhz) Troy, N.Y.—Seeks mod. of lic. to stall new transmission sys. App. March 31.

■ WSOC-FM (103.7 mhz) Charlotte, N.C.—Seeks C change HAAT to 1,059.44 ft. and make changes in ant. App. March 26.

■ *WHVT (90.5 mhz) Clyde, Ohio—Seeks mod. of C change HAAT to 1,439.92 ft. App. March 31.

■ WSAN (98.9 mhz) Vieques, P.R.—Seeks CP to ch ERP to 6.24 kw and change HAAT to 988 ft. App. M 25.

■ WJMX-FM (106.3 mhz) Florence, S.C.—Seeks C change TL; change ERP to 1.1 kw, and change HAA 524.8 ft. App. March 26.

■ KELG-FM (107.1 mhz) Bastrop, Tex.—Seeks mod. c to change TL. App. March 26.

■ KDXR (104.3 mhz) Borger, Tex.—Seeks CP to ch

; change ERP to 100 kw, and change HAAT to 1,095.52 ft. App. March 26.

WMEV-FM (93.9 mhz) Marion, Va.—Seeks CP to change ERP to 100 kw; change HAAT to 1,459 ft., and make changes in ant. sys. App. March 26.

WXLK (92.3 mhz) Roanoke, Va.—Seeks CP to make changes in ant. sys. App. March 26.

F's

cepted

WZZV (ch. 34) Magee, Miss.—Seeks MP to change HAAT to 1,585 ft.; replace ant., and change TL. App. March 25.

KCKU (ch. 14) Tyler, Tex.—Seeks MP to change ERP to 4,594 kw, aur. 459 kw, and change HAAT to 986 ft. App. March 27.

tions

W's

CHTX (1400 khz) Truckee, Calif.—Dismissed app. to change TL and make changes in ant. sys. Action March 19.

KSSS (740 khz) Colorado Springs, Colo.—Returned app. increase day power to 3 kw; increase night power to 1.5 kw; change TL, and make changes in ant. sys. Action March 19.

WOI (640 khz) Ames, Iowa—Granted app. to operate transmitter by remote control. Action March 19.

CRNT (1350 khz) Des Moines, Iowa—Granted app. to make changes in ant. sys. Action March 21.

WSGH (1040 khz) Lewisville, N.C.—Granted app. to make changes in ant. sys. Action March 24.

CRDR (1230 khz) Gresham, Ore.—Granted app. to make changes in ant. sys. Action March 24.

CRGL (1360 khz) Myrtle Creek, Ore.—Granted app. to change TL. Action March 20.

NIVV (1370 khz) Vieques, P.R.—Granted app. to make changes in ant. sys. Action March 24.

WNBG (1480 khz) Waynesboro, Tenn.—Granted app. to change freq. to 930 khz and change power to 470 w. Action March 14.

WSWV (1570 khz) Pennington Gap, Va.—Granted app. change TL. Action March 21.

WLEE (1480 khz) Richmond, Va.—Granted app. to operate transmitter by remote control. Action March 19.

IXI (880 khz) Mercer Island, Wash.—Granted app. to raise night power to 10 kw and change city of lic. to Mercer Island/Seattle, Wash. Action March 14.

A's

*WGIB (91.9 mhz) Birmingham, Ala.—Dismissed app. change freq. to 89.5 mhz; change ERP to 22.67 kw, and tall DA. Action March 19.

CDUC (94.3 mhz) Barstow, Calif.—Granted app. to change TL; change ERP to .35 kw, and change HAAT to 5.22 ft. Action March 25.

CDUTE (101.9 mhz) Glendale, Calif.—Returned app. to change ERP to 2.36 kw. Action March 17.

WVFM (94.1 mhz) Lakeland, Fla.—Dismissed app. to change TL; change HAAT to 1,601 ft., and make changes in ant. sys. Action March 19.

WYMG (100.5 mhz) Jacksonville, Ill.—Dismissed app. change TL; change ERP to 50 kw, and change HAAT to 2 ft. Action March 19.

WZDM (92.1 mhz) Vincennes, Ind.—Dismissed app. to change TL; change ERP to 2.029 kw, and change HAAT to 3 ft. Action March 19.

*WIQH (88.3 mhz) Concord, Mass.—Returned app. to change ERP to .1 kw and change HAAT to 24.27 ft. Action March 24.

CMGW (107.9 mhz) Anoka, Minn.—Granted app. to change ERP to 100 kw; change HAAT to 1,088.96 ft.; change TL, and make changes in ant. sys. Action March 25.

CTCZ-FM (97.1 mhz) Minneapolis—Granted app. to change TL; change ERP to 100 kw, and change HAAT to 1.16 ft. Action March 25.

KVSC (88.1 mhz) St. Cloud, Minn.—Returned app. to change TL. Action March 19.

KEZS-FM (102.9 mhz) Cape Girardeau, Mo.—Granted app. to change TL and change HAAT to 982 ft. Action March 19.

WUNY (89.5 mhz) Utica, N.Y.—Dismissed app. to

change ERP to 6.26 kw; change HAAT to 777.36 ft., and make changes in ant. sys. Action March 19.

WPCM (101.1 mhz) Burlington-Graham, N.C.—Dismissed app. to change TL and change HAAT to 1,348.08 ft. Action March 19.

WKOY-FM (96.7 mhz) Wellston, Ohio—Granted app. to change TL; change ERP to 1.75 kw, and change HAAT to 430 ft. Action March 19.

WFBG-FM (94.7 mhz) Altoona, Pa.—Dismissed app. to install new ant. sys. Action March 19.

*KRSB (88.1 mhz) Sioux Falls, S.D.—Dismissed app. to change ERP to 2 kw. Action March 19.

*KASB (89.3 mhz) Bellevue, Wash.—Returned app. to change freq. to 90.3 mhz; change TL; change ERP to .1 kw; change HAAT to 182 ft., and make changes in ant. sys. Action March 19.

WEKZ-FM (93.7 mhz) Monroe, Wis.—Dismissed app. to change ERP to 38.3 kw and change HAAT to 581.4 ft. Action March 19.

TV

WSMV-TV (ch. 4) Nashville—Granted app. to install new ant. and change HAAT to 1,423.52 ft. Action March 24.

Call Letters

Applications

Call	Sought by
	New FM
WVBM	VBM Enterprises Inc., Springfield, Fla.
	New TV
KWNN-TV	KOAT Television Inc., Silver City, N.M.

Summary of broadcasting as of February 25, 1986

Service	On Air	CP's	Total *
Commercial AM	4,718	170	4,888
Commercial FM	3,875	418	4,293
Educational FM	1,231	173	1,404
Total Radio	9,824	761	10,585
FM translators	789	444	1,233
Commercial VHF TV	540	23	563
Commercial UHF TV	401	222	623
Educational VHF TV	114	3	117
Educational UHF TV	186	25	211
Total TV	1,241	273	1,514
VHF LPTV	242	74	316
UHF LPTV	141	136	277
Total LPTV	383	210	593
VHF translators	2,869	186	3,055
UHF translators	1,921	295	2,216
ITFS	250	114	364
Low-power auxiliary	824	0	824
TV auxiliaries	7,430	205	7,635
UHF translator/boosters	6	0	6
Experimental TV	3	5	8
Remote pickup	12,338	53	12,391
Aural STL & intercity relay	2,836	166	3,002

* Includes off-air licenses.

* Note: Due to computer problems, FCC has not and will not release broadcast station totals for November, December or January.

Existing AM's

WYFX	WKAQ Beach Broadcasting Co., Boynton Beach, Fla.
WNNZ	WLRQ REBS Inc., Madison, Tenn.
WCPT	WCXR Metcom Virginia Associates, Alexandria, Va.

Existing FM's

WMGF	WXIK Voyager Communications V Inc., Shelby, N.C.
WTNZ	WNNX REBS Inc., Clinton, Tenn.
KLEF	KYND Roy E. Henderson, Seabrook, Tex.

Grants

Call	Assigned to
	New AM
KPSL	Vista Communications Corp., Thousand Palms, Calif.
	New FM's
KRYT	MarTec Broadcasting Corp., Pueblo, Colo.
*WCAG	Georgia Public Telecommunications Commission, Athens, Ga.
*WPLH	Georgia Public Telecommunications Commission, Tifton, Ga.
WCXU	Dennis H. Curley, Caribou, Me.
WNQV	Charles J. Saltzman, Caldwell, Ohio
KZBX	Megacom Broadcasting Inc., McAlester, Okla.
WBRR	Donald J. Fredeen, Bradford, Pa.
*KYWB	Nathan Educational Broadcasting Foundation, Yakima, Wash.

New TV

WZZW	Southwest Virginia Television, Roanoke, Va.
------	---

Existing AM's

KZZE	KYYN Audiophase Communications Inc., Fort Smith, Ark.
WLWF	WTHN George Corbett, Haines City, Fla.
WELE	WDAI Hale Communications, Ormond Beach, Fla.
KVEG	KBKK Juarez Communications Corp., North Las Vegas, Nev.
WKLR	WNOR Tidewater Communications Inc., Norfolk, Va.

Existing FM's

KAMJ	KONC Affiliated Broadcasting Inc., Phoenix
KZZE-FM	KZZE Audiophase Communications Inc., Fort Smith, Ark.
WJVO	WYOB Morgan County Broadcasting Co., Jacksonville, Ill.
WEAG	WNAI Blair Broadcasting of Indiana Inc., Indianapolis
KHKS	KLFQ David Waters, Lyons, Kan.
WMFT	WESK Argonaut Broadcasting Corp., Camden, Me.
WUSJ-FM	WUSJ Eaton P. Govan III and Berton B. Cagle Jr., Elizabethton, Tenn.
KELI	KGLB Earshot Broadcasting Inc., San Angelo, Tex.
WBGK	WZUU-FM Amos Communications Inc., Milwaukee

Existing TV

WMPE	WART Art Broadcasting Corp., Naranjito, P.R.
------	--

Classified Advertising

See last page of Classified Section for rates, closing dates, box numbers and other details.

RADIO

HELP WANTED MANAGEMENT

Religious format general manager: 1kw fulltime west Texas. New owner switching to religious format. General manager must be experienced in religious broadcasting and must be able to put in place proper staff and programming. Earned ownership position part of the package. Reply to Box C-38. EOE.

Live and work in paradise! New Colorado mountain AM covers several ski resorts, year-round recreation areas. Needs sales oriented manager, prefer husband-wife team. Proven track records only. No ski bums. Call Jim Slaughter. 404-324-1271.

Energetic general manager needed for southern New Hampshire AM/FM on the move - current sales managers encouraged to apply. All inquiries will receive prompt confidential response. Resume and track record. Box B-139.

Midwest group operation reopening search for experienced general manager or sales manager for the flagship stations in Richmond, Indiana. Strong sales background mandatory. Send resumes to: William Quigg, President, Central Broadcasting Corporation, P.O. Box 1646, Richmond, IN 47375.

Group V.P. sales in medium and small markets in northwest. Top dollars with benefits including stock option Box C-19.

Now that you've checked the copy on your ad, turn to the display section and read about Dennis Ryan.

West Coast, Midwest and Southern regional sales managers wanted. Broadcasting's oldest, internationally known, 32-year old radio/TV/cable sales promotion company, Community Club awards (CCA), looking for West Coast, Midwest, Southern, regional managers to call on station presidents, managers and GSM's in five state area. Media sales experience required. Fulltime, Monday/Friday, planned travel. Expense advance against substantial commission. Send resume, including references, recent picture. Complete confidentiality assured. Include prior earnings. Personal interview arranged. Immediate openings. John C. Gilmore, President, CCA, Inc., P.O. Box 151, Westport, CT 06881. 203-226-3377.

Marketing research director for major market radio group to assist in format selection, market positioning and audience and sales promotion. Requires experience in perceptual research, music testing and vulnerability analysis. Experience with broadcast marketing and research firm preferred. Send resume with salary history and requirements to Entercom, Two Bala Plaza, Bala Cynwyd, PA 19004. EOE.

HELP WANTED SALES

Minneapolis-St. Paul's "Adult Gold" WTCN AM seeks an experienced radio professional well-versed in retail and co-op. Outstanding chance to move up to major market selling atmosphere for a street-fighter with at least a year's experience. Sales management potential, too. M/F. EOE. Call Doug McLeod, GM, between 10 a.m. and noon only: 612-439-1220.

KATZ Broadcasting is looking for an account executive who makes things happen. Is the customer number one with you? Do you strive to be the best? Do you enjoy taking challenges? Are you able to set priorities and develop strategies for your activities? If so, radio station WFTQ can offer you an exciting opportunity. We are a rapidly growing Worcester, Massachusetts radio station, offering the newest and most comprehensive sales training and technology. We offer unlimited income potential, an innovative environment focused on excellence, incentives and recognition based upon your individual success, and a chance to join America's only employee-owned broadcast company - a company with a record of success and a sense of purpose. If you feel you have the talent...act now! Call Richard Muzzy at 617-755-1444. KATZ Broadcasting is an equal opportunity employer.

Sales pro wanted for leading East Texas high power FM. Excellent situation for former announcer who sells, writes, and produces way to the top. Phone Joe McNamara, 214-586-2527. EOE.

Here's your opportunity to move up to a top rated mid-market CHR FM in a prime midwestern location. Only ambitious, success-oriented salespeople need apply. For the dedicated self-starter, this is a "can't miss" opportunity. Call Roanna Petrie, WZOK Rockford, IL. 815-399-2233. EOE.

General sales manager for Key Largo, Florida FM station. Must have experiences. All new operation. Automated. Send resume to David W. Freeman, Sr., 513 Southard St, Key West, FL 33040. Phone 305-294-2542

Radio syndication: Expanding sales dep. looking for experienced radio syndication reps with strong agency contacts. Powerful 12-34 network. NATIONAL LAMPOON's "True Facts". Contact Steve Lehman 213-467-2346.

#1 AC FM in medium market seeks aggressive salesperson who loves radio! 1-3 years' experience. Exceptionally beautiful lakeside community with all season recreation. P.O. Box 1195, Fond du Lac, WI 54935. 414-921-1071.

Wanted: Advertising consultant. Minimum 1 year experience. Must be able to write proposals, present and close. Good guarantee for right person. Gas, bonus program. Call or send resume to Sales Manager, WOKZ Radio, 1100 Martin Luther King Jr., Blvd., Suite #2, Muncie, IN 47304. 317-288-1303.

\$73,133.60, \$66,262.69, \$52, 247.94. These amounts were earned in 1985 by some of our salespeople. We are located between Chicago and Milwaukee in the 6th richest market in the U.S. We're very successful and have an ongoing recruitment program for sales professionals to grow with us. Send resume to Roger E. Kaplan, President, WXLG/WKRS Radio, 3250 Belvidere Rd., Waukegan, IL 60085. Equal opportunity employer.

Professional salesperson for new FM in growing Sunbelt market of 100,000. Send resume to Megacom Inc., P.O. Box 1477, McAlester, OK 74502. EOE.

General sales manager, Southwest medium market. Highly rated station, dominant in format offers excellent opportunity to experienced, motivated, people oriented leader. Reply Box C-23.

HELP WANTED ANNOUNCERS

P.D./morning personality. No beginners. Med market FM. West Coast. T&R to: General Manager, P.O. Box 21117, Reno, NV 89510.

Morning air personality for: adult contemporary station. Must be fast moving, able to do production. Send tape & resume to PO Box 278, Fort Myers, FL 33902. EEO.

Announcer/newsperson. Small market. Afternoon news. Weekend airshift. Congenial working conditions. One year air experience. Send tape and resume to: WTTF, P.O. Box 338, Tiffin, OH 44883.

Top NE market: seeks morning DJ for "lite" AC. No comics. Ability to communicate and relate in world economy a must. No calls. Rush tape and resume to: Roslin Radio Productions, Inc., 509 Madison Ave., New York, NY 10022 ATT: Mr. Marvin Roslin. EOE. M/F.

Experienced announcers needed for new CHR FM in growing Sunbelt market. Send tape and resume to Megacom, Inc., P.O. Box 1477, McAlester, OK 74502. EOE.

Chief announcer for 50kw public radio station at major university 65 miles west of Chicago, serving Rockford market. Announces classical music programs, schedules and supervises part time staff, produces recorded features. Requires strong classical music background, professional air presence, good production skills. Jazz knowledge helpful. \$14-16K, excellent benefits. Resume, references, audition tape postmarked by April 21 to Michael Lazar, General Manager, WNIU-FM, Northern Illinois University, DeKalb, IL 60115.

East Coast MOYL station seeks experienced announcer w/good production for resort area AM. Contact Jim McHugh 302-856-2567. EOE. Benefits.

HELP WANTED TECHNICAL

Chief engineer for WIQB/ WNRS. Ann Arbor, Michigan. Must have strong engineering background. Send resume and salary requirements to Ernie Winn, WIC Radio, P.O. Box 8605, Ann Arbor, MI 48107. 313-66-2881. EOE.

Director of engineering, WMUB, Miami University, Oxford, Ohio. New position. Responsibilities: Oversee and direct all engineering functions of this 30 kw full time public radio station; recommend and monitor engineering budget and purchases. Design and install components for replacement, expansion, improvement of station. WMUB will move to new facility within two years. Excellent opportunity for solid, thorough experienced engineer. Degree preferred. Oral and written communication skills essential. Salary is competitive. Mail application, resume, salary history, names three personal/professional references to: Search Committee, Director of Engineering, WMUB, Miami University, Oxford, OH 45056. AA/EOE.

Radio engineer, minimum two years' radio maintenance experience, FCC General and SBE certification preferred. EOE. WHBC, Box 9917, Canton, OH 44711

HELP WANTED NEWS

Do you thrive on gathering and reporting news? If you are aggressive and motivated from within to be the best? If so, WDIF Marion, Ohio has an opportunity for you to be part of our award winning radio news organization, while gaining valuable print media experience with our twice weekly newspaper. It's an excellent growth position that'll take you as far as you want to! Call Ray Reynolds, Operations Manager today 617-387-9343.

News director minimum of 3 years experience, in west university market, salary to \$18,000. Resume Box C-9.

Newscaster wanted: WZFM, NYC suburbs, PM drive. Good delivery, crisp writing for A/C audience. Knowledge of area helpful. Call 9-10 A.M. 914-747-10 EEO, M-F.

Wanted: news anchor. Suburban Boston AM-FM duo combo seeks full-time news anchor. Good pay good skills. Advancement opportunities. WATD, F Box 487, Marshfield, MA 02050. 617-837-1166.

Assistant news director for 50kw public radio station at major university 65 miles west of Chicago, serving Rockford market. UPI national winner with strong news commitment. Anchors news magazine 5-8 AM, produces in-depth reports/features. Requires BA or equivalent, demonstrated journalism, announcing, production skills. \$14-16K, excellent benefits. Resumes, references, audition tape postmarked by April 21 to Michael Lazar, General Manager, WNIU-FM, Northern Illinois University, DeKalb, IL 60115.

Talk show anchor/news for news/talk station located between Chicago and Milwaukee. Tape and resume to: WKRS Radio, 3250 Belvidere Rd., Waukegan, IL 60085. EOE.

HELP WANTED PROGRAMING PRODUCTION & OTHERS

Production manager: Quality Christian radio group has immediate opening for a production manager. Responsibilities include assigning, scheduling, and producing creative commercials and promotional material, monitoring air sound for quality control and directing on-air staff. Individual must possess creative voice ability, previous production experience, plus an interest in news and issues of importance to the Christian audience. Please send tape, resume and reference to: Rich Bott, Bott Broadcasting Company, 10841 E. St., Independence, MO 64052.

roduction manager. Creative. Must be experienced copy writing, co-op, etc. Good company, excellent benefits, growing chain on gulf coast of Florida. Send resume to Bowman, WPAP Caller Box 2288, Panama City, FL 32402.

rogram director: America's most desirable medium market CHR seeks leader to complete turnaround, major programming, promotional and people skills are all prerequisites. Philosophy and past achievements first letter. Box B-152.

good PD is hard to find. Educated, aware of the world, personality sign-on, good jock leader, management-oriented. Arizona. Is that you? EOE. Box C-1.

UAT radio is looking for a bi-lingual Producer/Writer for our Spanish Language programming service. This division will be responsible for producing news and public affairs segments and programs in Spanish or English. Degree in Radio/TV plus 2 years news and public affairs experience required. Salary range \$8,836 - \$20,720. Send letter of interest and resume University of Arizona, 1717 E. Speedway, Tucson, AZ 85721 by April 25, 1986. EEO/AA.

Classical and jazz associate producers, (WFPK-FM/WFPL-FM) Radio Broadcasting Division of the Louisville Free Public Library. B.A. in related field. Demonstrated announcing, production, editing and equipment operating and maintenance skills; professional experience with similar radio production duties; thorough knowledge of classical music (jazz music recommended); familiarity with foreign languages associated with classical music. Audition tape (cassette only) and company resume. Deadline: April 30, 1986. Salary: \$12,481.56. Respond to: City of Louisville, Dept. of Employee Relations, 609 West Jefferson, Louisville, KY 40202. EOE.

Program manager. Needed, an inexhaustible program department manager who realizes the PD does more than pick music and schedule jocks and who is so a top PM air personality. 100,000 watt #1 A/C coastal Florida station. Good pay and benefits. Experienced pros only. Resume and letter tells all. Box C-37.

SITUATIONS WANTED MANAGEMENT

wardly mobile manager/NAB panelist April 1986 Las NAB, seeks to compare notes privately with broadcasters who have opportunities. Send business card! Box B-108.

In top 100 market seeking general manager position. 12 years' radio experience. Decisive, mature leadership specializing in sales management and training, promotion, format and bottom line. Increased top 100 market's sales 71% in 1 1/2 years. Decreased expenses 25%. Creative streetfighter willing to provide hard work and energy to create a winning environment. 100% relocatable. All inquiries answered promptly. Box 18.

ition manager. Successful medium market experience in programming, sales, and engineering. Major market engineering and on-air experience. Looking for advancement opportunity. Peter G. Hamlett, P.O. Box 12573, Columbia, SC 29211.

ed a new GM? Successful pro looking for medium-sized market challenge. Excellent references available. Box B-150.

perienced, goal oriented broadcaster seeks position in management/equity opportunity in small to medium market radio station. Personal response upon request. Box C-4.

perienced, mature broadcaster seeks general manager job of small town AM or AM-FM station. Unquestionably responsible, understanding, strong on the job. The tougher the job, the greater the challenge. Reply me hard facts about station. I will send you a mented resume. An unusual applicant. Box C-2.

ginal! 20 years in general and sales management, programming and sales means growth for your station. If citizen seeks permanent association with solid radio/facility. Box C-6.

NNIS RYAN is on the beach, read all about it in the play section.

General manager. In radio & television over 30 years. Transitioner to ownership. Formally with Metromedia. As only, Excel in sales and Play-By-Play. Phone 408-592-7068.

GSM seeks winning company! Creative leader speaking at NAB. Call Mr. Money, 214-960-5694.

Strong profits for owners: Proven history. Full gamut background in television station management, programming, and sales. GM position sought in West coast/Sunbelt market. Credentials and references backed by 25 yrs experience. Box C-20.

General manager/sales manager team: Husband and wife with 22 years of combined experience in all phases of radio seeking growing, professional operation. Enthusiastic, dedicated, and honest. Box C-34.

Sales oriented GM: Programming, engineering, and sales management experience. Excellent references, stable family man. Seeking growth opportunity with dynamic organization. Box C-35.

Strong aggressive general manager, no-nonsense, hands on professional with 20 years experience managing AM-FM. Heavy sales and organizational skills. A quality leader that produces results you can bank on. Box C-26.

SITUATIONS WANTED SALES

Sales manager: Sales teacher and motivator. Street seller. 15 years' experience. Box 341, Ash Fork, AZ 86320.

SITUATIONS WANTED ANNOUNCERS

A winner. Sophisticated, exciting PBP all sports plus solid anchoring skills. 3 yrs. experience, 20 yrs. spots knowledge. Bob 219-534-2834.

Play-by-play, that's what I do. Something I can do for you. If needing college PBP, write for tape and resume. Box B-148.

Big Band communicator. Know the era. Have 2000 Records, 30s - 50s. Give staff holidays off, I work then all. Speciality - Late night. Bob Robbins 313-885-3185.

18 year pro announcer both radio and television/audio production specialist. Not a floater! Cliff, 309-692-0680 after 4 c.s.t.

Morning personality with 2 years experience seeks move to larger market. Contact Drew at 601-445-5260 after 2 PM central.

Restless "retiree!" Unique big band/nostalgia background, seeks summer/ temporary spot (East). Available now. 301-876-6270 after 8PM, EST.

SITUATIONS WANTED TECHNICAL

Experienced engineer desires maintenance with an AM/FM combo. Solid background with transmitter and studio. H. Roedell, 8163 Avery, Indianapolis, IN 46268.

SITUATIONS WANTED NEWS

A winner. Sophisticated, exciting PBP all sports plus solid anchoring skills. 3 yrs experience, 20 yrs. sports knowledge. Bob, 219-534-2834.

Hungry 29-year-old news and sports reporter/anchor ready to move up. Four years print, three years radio news and sports experience. Network correspondent, excellent PBP. Top priority on offers in Indiana, Kentucky and Ohio. Personality and drive are a plus. Phone 1-317-535-8436 mornings or evenings.

Hungry 29-year-old male ready to move up. Four years print and three years broadcast news and sports background. Also, network experience. Have covered local and national stories, excellent PBP. Personality and aggressiveness a plus. Prefer a medium to large market radio station in a news or sports position. High priority on Indiana, Kentucky or Ohio career opportunities. Call 317-535-8436, early mornings, evenings.

Bright, young journalism graduate (University of Wisconsin-Madison) seeks entry-level news work. Would prefer upper Midwest (Wisconsin, Illinois, Minnesota, Michigan, Iowa.) George, 608-249-9037.

Anchor/reporter with 10 years medium and major market experience seeks news director or anchor position. Lifestyle, creative reporting a specialty. All markets considered. Box C-15.

News veteran with 16 years experience on the move. Seeks position with medium market station in the south or midwest. Impressive news background. Well qualified, self motivator and totally dedicated. Excellent voice with smooth authoritative news delivery. Let's talk. Write Box C-14.

Ambitious: Sportscaster, newscaster (Can do it all!) seeking a position in radio or TV in the Northeast. Have experience doing PBP, reporting. Call 518-564-6664.

PBP sportscaster for major college statewide network with national network experience, seeks professional or college PBP. Box C-3.

Experienced sportscaster, who also has solid news background, willing to relocate anywhere in the country. 201-543-2035.

Sports director, with PBP. Minor league baseball, junior college basketball, network experience. Wants to move up. David 314-756-7097.

SITUATIONS WANTED PROGRAMING, PRODUCTION & OTHERS

Seeking stations to run sports on 50-50 commission basis. Play-um Box 315055, Detroit, MI 48231.

Conscientious motivated professional programmer looking for new challenges. Small medium markets. Promotionally minded. Community involved. Box B-132.

PD/music director: 6 years' announcing. Ready to advance. Trained in management. Light rock, AC preferred. Small/medium market. Jim 615-896-4271.

MISCELLANEOUS

If you need a job, you need MediaLine, the industry's daily updated job listing service. One phone call will put you in touch with the freshest job leads daily. 312-855-6779.

TELEVISION

HELP WANTED MANAGEMENT

Assistant controller: Position available with broadcasting division of rapidly growing, publicly held communications corporation headquartered in the heart of the beautiful Finger Lakes region of upstate New York. Responsibilities will include supervision of accounting systems and staff, consolidating and consolidated financial statements, operating budget review and analysis and special projects. Some travel to company's 7 television and 16 radio stations. Candidates should possess 4 year accounting degree and minimum of 5 years accounting experience, preferably with the broadcasting industry. Send resume with salary history in complete confidence to: VP-Controller, Park Communications, Inc., P.O. Box 550, Ithaca, N.Y. 14851.

General sales manager: NBC affiliate in small mid-Atlantic market seeks achievement motivated general sales manager. Excellent opportunity for medium market local sales manager. Please send resume and cover letter outlining sales philosophy. EOE. Box B-101.

General sales manager. CBS affiliate in St. Thomas, United States Virgin Islands, seeks professional manager to oversee and develop sales staffs including rep office in San Juan, Puerto Rico. Spanish/English bilingual ability preferred. Experienced professionals with proven track record only. Resume to Dennis West, Worrell Broadcasting, Inc., P.O. Box 123, Rockford, IL 61105. 815-987-5300. EOE.

Business manager: Affiliate in major Southeast market seeks a hands on individual experienced in all phases of television accounting and computer systems. Needs to have accounting degree and strong supervisory and communications skills. Send resume to Box B-126. An EEO M/F employer.

General sales manager for fast growing independent in Mpls/St. Paul. Applicants must have 4-5 years sales and management experience, with emphasis on independent television. Both local and national experience are prerequisites. Experience in other phases of TV broadcasting is a plus. Excellent salary and benefits. No phone calls. Send resume to Bob Fransen, GM, KITN-TV, Nationwide Communications Inc., 7325 Aspen Lane N., Minneapolis, MN 55428. EOE.

General sales manager for top 75 affiliate in attractive midwest city. Solid TV sales experience and strong leadership abilities required. A superb position for the right person. Send detailed resume to Box B-144. EOE.

Business manager. Southern California major market independent TV station needs a management oriented business manager. Must have five years accounting and management experience in a television station. Send resume with salary requirements to Box B-153. E.O.E.

Local sales manager: Top-5 market network affiliate is looking for a highly motivated individual with a successful track record in sales management, knowledgeable in all aspects of sales management including retail, national and local sales. EOE. Send resume to Box C-21.

TV services department administrator to manage university TV unit; supervise the design, development and production of television programs; assign and supervise personnel; plan and account for budgets. Requires B.A., five years experience, three as supervisor. Approximate starting salary \$28,000 - \$31,000. Send letter and detailed resume postmarked by April 30, 1986 to Television Services, Attn: Dolores Baran/1442, University of Wisconsin-Milwaukee, P.O. 413, Milwaukee, Wisconsin 53201. Women and minorities are urged to apply. An equal opportunity (M/F) affirmative action employer.

Station manager: W small market seeks high-yield individual to manage station and sales. Great opportunity for a GSM with proven track record to move up. EEO employer. Box C-38.

HELP WANTED SALES

Top 25 affiliate seeking self-starter, good communicator with a minimum of 2 years broadcast sales experience handling agency and direct accounts. Emphasis on new business and vendor development. Opportunity for a hard worker to become part of a positive, aggressive sales organization. Send resume to: Box B-146.

Local sales manager: Top rated Southeastern CBS affiliate looking for a strong, aggressive local sales manager. Must have previous sales and training experience. Send resume and salary requirements to Box B-77.

National sales manager. Medium size market in Southeast. Dominant NBC affiliate. Immediate opening. Resume to Box B-133.

Account executive position is available for top 50 very competitive independent. Solid list available for strong aggressive self starter who knows what it takes to sell direct. Excellent company benefit package. Send resume to Sales, WVAH-TV, 23 Broadcast Plaza, Charleston, WV 25526.

Medium market CBS affiliate seeks local account executives. TV sales experience required in local direct agency accounts. Resumes to Kevin Gardner, Local Sales Mgr., KOAM-TV, P.O. Box 659, Pittsburg, KS 66762. E.O.E.

Regional account person needed to handle exceptional list for group owned affiliate. Management and growth oriented, tough, street-smart, upwardly mobile persons with television experience are the only ones who need apply. All others, don't waste your time. E.O.E. Brad Worthen, WVNY-TV, Box 22, Burlington, VT 05402.

Account executive: WJKS-TV NBC, Jacksonville, Florida needs a marketing oriented salesperson with a minimum of three years of electronic media sales. Must have a proven record of excellence and possess a thorough knowledge of all aspects pertaining to television spot sales. Send resume to Ernest E. Rhine, Local Sales Manager, PO Box 17000, Jacksonville, Florida 32216. A Media General station, equal opportunity employer.

Marketing manager. Wanted: take charge professional television person to market local news for independent company in Miami area. Call Tina Nobili, 305-279-0414.

HELP WANTED TECHNICAL

ENG technician. New Orleans NBC affiliate seeking experienced technician to perform maintenance and repair work on 3/4" ENG equipment and operate live remote van. Sony School training helpful. Salary based on IBEW Union scale. Excellent benefits. Send resume to Floyd Agnelly, WDSU-TV, 520 Royal St., New Orleans, LA 70130. An equal opportunity employer. M/F.

WCBD-TV, Charleston, SC is seeking a TV operations maintenance engineer capable of maintaining TV transmitter, studio and news electronic equipment. General Class FCC license and TV broadcast experience desirable. Send resume to General Manager, WCBD-TV, P.O. Box 879, Charleston, SC 29402. EOE M/F.

Chief engineer: Start up VHF independent. Must have broad experience. Will be responsible for construction of studio and transmitters. Send resume and salary requirements to Sandra Rahimi, V.P. General Manager Evergreen Broadcasting Corp. 244 Walnut Street, Johnstown, PA 15901, Suite 102.

Chief engineer for Midwestern network affiliate. Must have strong supervisory and maintenance experience in studio, transmitter, microwave, and ENG operations. Send resume and salary requirements to: Box B-142.

Chief engineer: For small market ABC affiliate in resort area. UHF transmitter and microwave experience along with supervisory and maintenance experience. Studio upgrading in progress. Send resume and salary requirements to Michael Khouri, WGTU/WGTQ, 201 East Front Street, Traverse City, MI 49684.

Engineer in charge for state-of-the-art mobile unit. Experience on TK-47's, BVH-2000's, Abekas digital systems, Chyron 4100 necessary. Competitive salary/benefits. Mobile unit supported by large established production facilities. Contact Eric Address, E.J. Stewart, Inc. 215-626-6500. EOE/MF.

KDAF-TV 33 has an opening for a maintenance engineer. 3-5 years experience in all phases of broadcast television maintenance. FCC General Class or SBE certification. Applicant must possess knowledge and ability to maintain and repair 3/4", 1" and 2" video tape equipment and peripheral broadcast television equipment. Send resume to Joseph A. Maggio, Asst. Chief Engineer, KDAF-TV, Fox Television Stations, Inc. 8001 Carpenter Freeway, Dallas, TX 75247. EOE M/F.

Maintenance engineer for expanding educational television station. Two year degree in electronics and at least two years experience in trouble shooting and repair of 2", 1" and 3/4" tape machines, TBCs, switchers, microwave and transmitting equipment. Must have the ability to work independently. Send resume to Dave Burgess, DOE, WVPT, Port Republic Road, Harrisonburg, VA 22801. Equal opportunity employer.

TV maintenance technician. Immediate opening for experienced individual in repair of Sony 3/4" VCR's and editing equipment. Min. requirements: H.S. degree, formal training in maintenance of electronic equipment, 2 years exp. in electronic maintenance. Send resume to: Engineering Manager, WJWJ-TV, P.O. Box 1165, Beaufort, SC 29901-1165, or call 803-524-0808, 11AM-6PM. Salary \$17,641. WJWJ-TV is part of the SC ETV Network. EEO employer.

Maintenance engineer: Telemation productions/Chicago has two immediate openings due to retirement and advancement. Applicants should possess a minimum of 5 years maintenance experience with all types of studio equipment. Equipment includes: CMX 3400 editors, Ampex ADO, Ikegami cameras, Utah-scientific routing, Aurora computer graphics, 4 camera/3 VTR remote truck. Interested persons should contact: John W. Gebhard, Chief Engineer, Telemation Productions, Glenview, IL 60025, 1-800-323-1256.

Maintenance engineer: Experience in television broadcast electronics a must. Performs maintenance on all electronic equipment. H.S. diploma, 2 years specialized training, General Class license and 2 years related experience required. Competitive salary and excellent benefits. Send resumes to Trudy Wick, KWTV, 7401 N. Kelley, Oklahoma City, OK 73113.

Northern California VHF television station seeking switcher. Duties include master control operations and assisting with the technical production of the markets top rated newscasts. Please send resume to Box C-7. EOE.

Chief engineer sought for full-time, full-power religious UHF. All new state-of-the-art equipment. Technical support provided by group. Salary commensurate with experience. Send resume to Director of Engineering, P.O. Box 26, Dayton, OH 45401. EOE M/F/H.

KTNV-TV, the ABC affiliate in Las Vegas is seeking a chief engineer to manage our engineering staff of 14. Practical maintenance experience plus a familiarity with capital & operating budgets necessary. Leadership and administrative skills a must. EOE. Send resume to: General Manager, KTNV-TV, 3355 S. Valley View Blvd., Las Vegas, NV 89102.

HELP WANTED NEWS

Anchor/producer: complement male anchor, early-/late news, weekdays. 2 years commercial TV experience, preferably reporting in midwestern middle-market VHF affiliate. KEVN, Box 677, Rapid City, SD 57709.

Director: We're expanding and looking for the right person to join our team of number one news director. Ability to switch a must. Post production editing skill desirable. If you're good and want to join an aggressive NBC affiliate with state-of-the-art facilities in a very competitive market, send your resume to: WSVN P. O. Box 1118, Miami, FL 33138. EOE.

News producer. Immediate opening for experience producer. Send resume, tape & salary requirements. News Director, PO Box 4009, Salisbury, MD 2180. EOE.

News director. Mid-Atlantic affiliate needs leader who can manage group of talented individuals to give the best. Strong writing, organizations skills and community involvement required. Send resume & salary needs to Box B-147.

KDAF-TV 33 has an opening for a news artist. Responsibilities include design and illustration of news graphics and operations of graphics computer. One year experience as a news artist in a TV station is a prerequisite. Send resume and sample/tape to Art Director, KDAF-TV 33, 8001 Carpenter Freeway, Dallas, TX 75247. No phone calls please. EOE M/F.

Immediate opening, experienced anchor/reporter. Pacific NW ABC affiliate, send tapes/resumes to Marc Wood, Station Manager, KVEW-TV, 601 N. Edisc Kennewick, WA 99336. No phone calls please.

TV news co-anchor. Experienced, mature person co-anchor for 6 & 11 news at CBS sunbelt station. F. Summe-tape to Mr. Roy Hardee, News Director, WNCN-TV, Box 898, Greenville, NC 27834. All application confidential. EOE.

News producer: Immediate opening for qualified news producer. Must have minimum 2-years experience. Emphasis on live elements and conversational writing. Good news judgement a must. Must be aggressive self starter. Salary depends on experience. Send resume to: Ed Scripps, KJRH-TV, P.O. Box Tulsa, OK 74101. No phone calls please.

News director/anchor: Are you ready to move from anchor to manager, or have you already proven yourself as a manager and you're ready to assume the top spot? Sunbelt, group owned, network affiliate seeks strong anchor with leadership potential or person with management experience to head entire news operation. If you've ever considered management don't miss this opportunity pass by. EOE, M/F. Resume and salary requirement to Box B-156.

Weekend anchor-producer: NBC affiliate looking experienced anchor-producer. No beginners. Run weekend newscast. Reports during the week. Tape and resume to: News Director, WICD-TV, 250 Country Fair Drive, Champaign, IL 61821. EOE.

Chief photographer: Looking for experienced photojournalist with strong people skills to direct, train, motivate staff of six at NBC affiliate. Shooting-editing required. Tape and resume to: News Director, WICD-TV, 250 Country Fair Drive, Champaign, IL 61821. EOE.

Aggressive CBS affiliate in Wyoming needs a strong journalist to complement our male anchor. Experience must, degree a benefit. If interested in helping a strong number two become number one, send tapes and resumes to Tom York, KCWY-TV, P.O. Box 170, Casper, WY 82601.

Weatherpeople: Full and part-time positions for experienced and entry-level talent. Resume & tape to: Wimmer, P.O. Box 1122, Flushing, NY 11354.

WPXI-TV Pittsburgh needs a director of news programs. Very good director needed for fast paced graphic intensive ENG news. Ability, leadership & references important. For more information call 412-237-4980. EEO/AA.

News director/assignment editor responsible news department functions. Send resume and tape to Tom McGill, KREX-TV, PO Box 789, Grand Junction, 81502.

General assignment news reporter for top 50 E. Coast market. Minimum 18 months television news experience and college degree required. Send tape resume, references and salary requirements to Box 12. We are an affirmative action, equal opportunity employer.

News anchor/reporter. News anchor/reporter for 6 and 10PM newscasts. Great opportunity, good salary excellent benefits. Send resume to KNOP-TV, Box North Platte, NE 69101.

Producers/reporters/anchors: English-language news service in Hong Kong seeks news and sports professionals with minimum of bachelor's degree and three years' experience in small to medium markets. Short-listed applicants will be interviewed in Honolulu, HI, SF, Salt Lake and NY in late August. Airmail resume, references, salary expected and airchecks to: Raymond R. Wong, TVB News, 77 Broadcast Drive, Kowloon, Hong Kong. No phone calls, please.

Washington DC independent television bureau seeks aggressive reporters who work fast, and produce tight packages. 400 North Capitol Street, #164, Washington, DC 20016.

Reporter for outstanding midwest 50's-market leader. Must be aggressive, creative, excellent writer and storyteller, college graduate, have minimum one-year fulltime TV news reporting experience, strong people skills. Anchor skills helpful. Resume and references to Box C-36. EOE.

Anchor needed for Spanish language daily news program in Los Angeles. Need native speaker who has five years experience. Send demo tape with resume CO-ANCHOR, 1139 Grand Central Ave., Glendale, CA 91201. EOE.

Second weatherperson/reporter needed for number one network affiliate in top 60 market. We have state-of-the-art equipment, including a newsroom computer and computerized weather graphics. We are looking for someone who can tell the weather in simple, nontechnical terms and who can aggressively report five days a week. Minimum one year experience in a commercial TV newsroom required. Send resume and salary requirements to Box C-22. MF/EOE.

Sports. Dominant small market network affiliate looking for person who makes sports fun to watch, especially local sports. Knowledge of ENG shooting helpful. Send resume to: Box C-24. EOE/MF.

Anchor/producer. Number one network affiliate in the east small market looking for personable anchor who is also a take charge producer. Send resume, salary history to Box C-25. EOE/MF.

HELP WANTED PROGRAMING PRODUCTION & OTHERS

Eastern network affiliate station is seeking qualified production manager. Must have minimum 5 years experience. Important to be experienced in all types of electronic production equipment. Must be a leader & manager. Salary based on experience and knowledge. EOE. J. Jerzig, Box 10,000, Reno, NV 89510.

FX editor. One of the nation's leading television production centers seeks videotape editor with CMX experience. Thorough knowledge of television tape, editing, digital effects and audio systems. Secure job with tremendous growth potential for right candidate. Send resume to: Scene Three, Inc., 1813 Eighth Avenue South, Nashville, TN 37203 ATNN: Mike Arnold.

30 network affiliate looking for a promotion director with a minimum of 3-5 yrs. experience. Individual must have full creative and administrative control over all phases of promotion reporting directly to the general manager--news experience a must! EOE. Reply to Box 141.

Editor. Full service Rochester, NY, production/post production facility seeks creative individual for 1" editing. Could be experienced with Grass Valley switching, or CMX editor, ADO and Chyron IV. Forward resume to: CGI, Box 604, Ontario, NY 14519. Attention: J. Dawson.

Production manager. Manager with ideas, experienced with 1" editing, ADO, ESS and 3/4". All new equipment. Pros only. Resume, tape and salary to: nk Pilgrim, P.O. Box 4009, Salisbury, MD 21801. E.

Motion director. Immediate opening for person to direct multi-media PR effort. Must be able to write on-air mos. NP & radio. Strong editing/producing skills a must. Want a pro--no beginners. If you are a take-charge person who gets the job done send resume and salary requirements to: Production Manager, PO Box 19, Salisbury, MD 21801. EOE.

Commercial director position for strong award winning indie. This is a new position for station with good production facility. If you can write, shot, edit & direct, at least two years commercial TV experience, resume to Production Manager, WVAH-TV, 23 Adcast Plaza, Charleston, WV 25526.

On-air promotion producer. NBC affiliate in 21st market is looking for an energetic, innovative person to join our promotion team. Responsibilities include promotion for local, syndicated and baseball programming. 2 years hands-on experience in television promotion required. Strong writing, editing and producing skills a must. Should be familiar with print and radio production. Send tape, resume and writing samples to Human Resources Manager, WMAR-TV2, 6400 York Road, Baltimore, MD 21212. No phone inquiries please, EOE.

Production professional: EFP 3/4" editing. We're looking for creative type with announcing skills. EOE. Call Mickey - 601-844-6700.

Network photographer. Experienced shooter/editor, must relocate to Miami area willing to travel. If qualified call Tina Nobili, 305-279-0414.

Director: 100 plus market affiliate is looking for a versatile, take-charge individual capable of switching fast-paced 6 and 10 newscasts. Responsibilities also include commercial production. Facility is state of the art. Send resume to Box C-30. EOE/MF.

Program producer. KMBC-TV, Kansas City, Missouri, has an opening for a program producer in the programming department. Candidate will be responsible for writing and producing on-going and special programs. These will include both studio and remote productions. Candidate should possess excellent writing and organizational skills and knowledge of formatting and timing programs. Experience in producing telethons and event-type programs necessary. Candidate should have minimum three years experience producing news or news-related programs. Send resume to Program Director, KMBC-TV, 1049 Central, Kansas City, MO 64105. No phone calls, please. Qualified applicants will be contacted for a personal interview. EOE.

SITUATIONS WANTED MANAGEMENT

Promotion/production manager. I'll deliver timely, creative promotions or commercial productions. Progressive management experience. Award-winning spots, programming reflects creative abilities. Excellent team attitude, people skills, references. 617-879-4908.

Profit minded production manager ready to turn you production department into money maker. 10 years experience, 6 in management. If you're searching for a creative, hands on manager who's good with clients and keen on promotion, let's get started! Box B-159.

News director: If you want the best, are willing to pay and make a long term commitment, here's your chance. Have been a news director at a Net O and O, major market Indies, and an affiliate-handled staffs and budgets from the smallest to the largest--won all of the awards--experience with start-ups, revamps, and on-going operations--am currently involved at top level with other aspects of broadcasting, but want to return to the news arena under the right conditions. Box C-5.

SITUATIONS WANTED SALES

News director/manager who can anchor, lead "first place" team and produce results for your station. Looking for long-term commitment in large to medium market, hopefully on the water. Have excellent background in broadcasting and still young enough to be real asset to future growth of strong news station or group. Would like opportunity to sit down and discuss prospects of future "together". Will be at N.A.B. and available there or for travel to talk. Box B-155.

SITUATIONS WANTED ANNOUNCERS

Need TV host/announcer? Handsome, 35 year old, degreed, 7 year radio vet with good pipes and talk show hosting, producing, writing and interpersonal skills would like to make transition to television. 703-237-0355.

Attractive, creative, personable, & down-to-earth woman, interested in TV talkshow host position. Light & entertaining format. Experienced in TV & radio. Eager to relocate. Debbie Kwei, 412-378-3520.

SITUATIONS WANTED TECHNICAL

Engineering department seeks to relocate. Average experience 8 years. All licensed. Experience in construction, maintenance, and operation of a 9 transmitter UHF-VHF-FM network. Prefer sunbelt. Box C-28.

SITUATIONS WANTED NEWS

Reporter/assignments editor. Experienced, articulate, good writer. Seeks position top-100 market. RW, 501-452-5585.

News anchor/reporter available now. 17 years broadcast experience, last five as co-anchor in top-60 market. seeking larger market, but will consider all offers. Call 602-946-6253.

Weather communicator, clever personality in 40's #1 station wants to relocate to East or Gulf. 4 years experience. John, 512-490-3194.

Meteorologist: Over three years prime-time experience in medium market. Looking to settle. Any market. Box C-18.

Meteorologist 5+ years experience, AMS. Looking for chief position and to set up a profit center. Plenty of pluses for both of us. Box C-11.

Weathercaster: Energetic, 2 years mid-market, number 2 looking for number 1. Box C-31.

News director: Major credentials, outstanding reputation, proven leadership, seeks news operation in search of success. Box C-29.

It's time to move up: Hard working, aggressive sports anchor looking to move to larger market either as reporter or anchor. A team player who produces! 713-484-3977.

Looking for a sportscaster who does things a bit differently? I am fun to watch, able to attract non-sports fans. Currently noon anchor, looking to move up. 918-473-2602.

SITUATIONS WANTED PROGRAMING PRODUCTION & OTHERS

Great television production assistant/photographer seeking entry level position. B.S. degree in Mass Communications. Will relocate. Contact Denise Hager, 309-266-9650 or RR #1, Morton, IL 61550.

Recent graduate with B.S. in Marketing, Broadcasting minor seeking challenging entry level TV promotion position. Creative, organized, motivated. Promotion internship with Minneapolis network station - WCCO-TV. Will relocate. Greg, 612-546-4053.

What's this? A promotion producer who's an award winning videographer? Call Steve Allen! This could be the start of something big! Box C-32.

Are your promotions dull and lifeless? Let an award winning videographer-producer spicen up your on-air look. Image & news promotions my specialty. Box C-33.

MISCELLANEOUS

Primo People now seeking authoritative, accurate, personable anchors from all markets. Send tape and resume to Steve Porricelli or Jackie Roe, Box 116, Old Greenwich, CT 06870-0116. 203-637-3653.

Attention career-minded professionals! Opportunities are now available in greater numbers in television and radio nationwide. Confidential and personalized services. No placement fees. Media Marketing, P.O. Box 1476, Palm Harbor, FL 34273-1476. 813-786-3603.

ALLIED FIELDS

HELP WANTED INSTRUCTION

Communication and Theatre Department - Millersville University has a full-time tenure track position available, subject to administrative approval, to teach communications within an undergraduate liberal arts curriculum beginning Fall, 1986. All department members teach beginning Public Address. Preference will be given to applicants with specialties in: public relations, radio and television. Ph.D. preferred and required for Assistant Professor rank. Individual with Ph.D. and substantial teaching and/or practical experience may be considered for appointment at the Associate rank. Screening will begin May 1, 1986. Applications will be accepted until the position is filled. Millersville, a Lancaster County community, is easily accessible to Philadelphia, Washington, D.C., and New York. Applicants must submit resume, official copies of all academic transcripts and three current letters of reference to Mr. Robert Fogg, Chairperson, Communication and Theatre Department, Millersville University, Millersville, PA 17551. Millersville University is an equal opportunity/affirmative action employer encouraging women and minorities to apply.

Instructor: telecommunications. TV professional with at least 5 years experience to teach TV production, videotape editing, ENG/EFP. Professional background necessary. Educational background helpful. PCC has active SMPTE and CSB chapters. Starting salary \$25,000 - \$30,000. District application form is required and must be received in Personnel by April 25, 1986. To obtain District application form call or write: Personnel Services, Pasadena City College, 1570 East Colorado Blvd., Pasadena, CA 91106. 818-578-7388.

Broadcast journalism. Asst./Assoc. Professor. Tenure track, teach TV broadcast journalism, scriptwriting, F.C.C. policies and regs. and video production in a B.S. program with concentrations in Video Production. Opportunity to participate in a daily broadcast schedule over local cable from a quality production studio staffed by professional management and student interns. M.S., M.A. or M.F.A. and creative production experience required. Previous college teaching a plus. College located in Vermont's beautiful Northeast Kingdom. Competitive salary, excellent fringes. By May 1, 1986, send application letter, resume, resume tape, and three references to Perry Viles, Dean, Lyndon State College, Lyndonville, VT 05851. AA/EEO.

EMPLOYMENT SERVICES

Tired of form letters of rejection? We spend extra time with our people and get results! No placement fees. Media Marketing, P.O. Box 1476, Palm Harbor, FL 34273-1476. 813-786-3603.

HELP WANTED MANAGEMENT

Student affairs: Director of Student Media. Department of Student Life, University of South Carolina. The director of student media is responsible to the Dean of Student Life for overall administration of the services and programs offered by the Office of Student Media. The Director is responsible for the supervision of the Assistant Director, clerical, graduate assistant and student staff assigned to that office, as well as budgetary and fiscal management. Responsibilities include advisement of the 305 students involved with tri-weekly student newspaper, radio station, literary magazine, yearbook and cable television video group. Supervision of full-time staff of seven, two graduate assistants and 75 student employees. Coordination of annual budgets of \$539,000 with \$390,000 in revenues. Preparation of policy and program objectives for all student media organizations. Supervision of production, advertising and facility management of student media. Preparation and monitoring of all printing contracts, coordinates procurement and purchasing of all electronic and photocomposition equipment. Maintenance of business operations for billing and revenues. Coordination of all leadership development programs for student media. Production of university telephone directory. Qualifications: Master's degree in student personnel services, journalism, business, or related fields and one to three years' experience. Specialized knowledge, training, or experience in print media and radio as well as experience in student development theory application are highly desirable. Position available June 2, 1986. Send letter of application, resume and three letters of reference by April 11, 1986 to Melody Hokanson, Screening Committee Chair, Department of Student Life, University of South Carolina, USC Box 85128, Columbia, SC 29208. An EO/AA employer.

HELP WANTED TECHNICAL

Videotape editor. Aggressive Philadelphia area programming/production company seeking experienced video editor to work on our syndicated programming, plus ads, industrials, etc. Expertise with CMX and ADO or equivalents a must. Excellent salary and benefits available for right person. Send resume and reel to: Edit Masters, 1000 Laurel Oak Corp. Center, Suite 108, Voorhees, NJ 08043.

HELP WANTED SALES

Jingle sales. Industry leader seeks experienced sales pro interested in high commissions. PMW, Box 947, Bryn Mawr, PA. 19010. 215-825-5656.

HELP WANTED PROGRAMING, PRODUCTION AND OTHERS

San Diego AFTRA/SAG/SEG seeking executive secretary: negotiate, enforce contracts, run local office. Resume and letter: Why should we hire you? Executive Search Committee, 3045 Rosecrans St., #308, San Diego, CA 92110.

Director, Department of Information, Oregon State University. Seeking experienced person with proven capabilities. Director heads a department of six information/communication professionals responsible for developing and maintaining programs of information dissemination to news media and to selected other internal and external audiences. Master's degree and eight years' professional/administrative experience required. Position available July 1, 1986. To apply, call Tammy Barr at 503-754-3311 and request a copy of position announcement (#017-110) and application form. Deadline for completed applications is May 5, 1986. Oregon State University is an affirmative action/equal opportunity employer and complies with Section 504 of the Rehabilitation Act of 1973.

SITUATIONS WANTED INSTRUCTION

Major network news and Production executive, presently employed, seeks career change. Interested in position with a top communications school. Box B-161.

INSTRUCTIONAL SERVICES

Seminars for managers. "How to Negotiate more effectively." (17 years experience in the industry, 8 years Dow Jones management committees) Gilbert Faulk, Faulk International, 2 Wall Street, New York, NY 10005, 212-619-5666.

Intensive seminar: Professional training on broadcast/production operations and equipment. Offered in Los Angeles, San Diego, Washington, DC, Chicago, San Jose, and Seattle. Get the insiders edge. For information call 818-280-2807.

RADIO AND TV PROGRAMING

Radio & TV Bingo. Oldest promotion in the industry. Copyright 1962. World Wide Bingo, P.O. Box 2311, Littleton, CO 80122. 303-795-3288.

For sale: MDS transmission time. Single channel MDS stations in San Antonio, Killeen, Victoria, Texas. Any time slot available for video and/or data programs. For info call Judi at 512-223-6383.

25 hot radio contests and promotions. (Series A) Spring and Summer Ideas your listeners will love! Fun and unique. Rush \$10.95 Check or Money Order to: JMJ COMMUNICATIONS, Dept. R, P.O. Box 1243, New York, NY 10008.

MISCELLANEOUS

For sale: MDS transmission time. Single channel MDS stations in San Antonio, Killeen, Victoria, Texas. Any time slot available for video and/or data programs. For info call Judi at 512-223-6383.

WANTED TO BUY EQUIPMENT

Wanting 250, 500, 1,000 and 5,000 watt AM-FM transmitters. Guarantee Radio Supply Corp., 1314 Iturbide Street, Laredo, TX 78040. Manuel Flores 512-723-3331.

Instant cash-highest prices. We buy TV transmitters and studio equipment. \$1,000 reward for information leading to our purchase of a good UHF transmitter. Quality Media, 404-324-1271.

Wanted: used VHS 3/4", 1 and 2" videotapes. Cash paid for all lengths. No defectives. Call Andy Carpel, 301-845-8888.

Wanted: Clean, used, 110KW UHF transmitter complete. Prefer high band. Call Watt Hairston, 615-748-8150.

FOR SALE EQUIPMENT

AM and FM transmitters—used, excellent condition. Guaranteed. Financing available. Transcom, 215-884-0888.

Complete FM station, all equipment 1 year old. Harris 2.5K w/ MS-15, Optimod, monitors, 3-bay ERI, Cable, 2 studios, EBS, Call M. Cooper/ Transcom 215-884-0888.

1kw FM Collins 830D1 w/exciter also Gates FM-1C with Harris TE-3 exciter, on air both in excellent condition. Call M. Cooper, Transcom, 215-379-6585.

5KW & 3.5KW FM: Elcom 605B w/690 (8000 Hrs.) on air mint. McMartin 3.5K w/ exciter (1982) and spares. Call M. Cooper/ Transcom 215-884-0888.

AM-5KW ITA on air w/ proof: Collins 820D1, 1KW--RCA 1N1, 1KW RCA 1L, Harris SX-1, Call M. Cooper/ Transcom 215-884-0888.

New TV startups. Quality Media can save you money! Top quality equipment at lowest prices. Business Plans, financing available. Quality Media 404-324-1271.

RCA 30kw UHF transmitter. Immediate delivery, good condition. Quality Media 404-324-1271.

New RCA TTG-30H HI-band VHF transmitter. RC closeout. Fast delivery. Price: \$250,000. Bill Kitcher Quality Media, 404-324-1271.

Videomedia 1" VTR editor model Z-6000. New! Price. Bill Kitchen, Quality Media, 404-324-1271.

Silverline UHF transmitters new, best price, latest technology, totally redundant. Bill Kitchen, Quality Media, 404-324-1271.

Quality broadcast equipment. AM-FM-TV, new & used, buy and sell. Antennas, transmitters, VTR switchers, film chains, audio, etc. Trade with honest reliable people; Call Ray LaRue, Custom Electron Corp. 813-685-2938.

Betacam BVW-3 complete field package. Well maintained. \$35K or best offer. 415-386-1100.

60kw UHF RCA TTU-50C transmitter on channel 19 sale. Removed from service 10/85. Call R.T. Lauridge, 803-776-3600.

Ikegami (HL 83) camera with Fugi/extender lens & (BVU 110) with TC in excellent condition. Sold together or separately. Call 212-267-8221.

Fernseh cameras and RCA TR50: 3 Cameras w/ Lenses and Auto Setup. TR50 (Quad) had CAC & VEC. For information call Bob Ross. 603-862-3285

RCA TCR-100 quad cartridge systems. 2 systems including all associated parts. \$10,000.00 for both. C Jim Biggers, 904-393-9871.

Harris MW1 Transmitter: excellent condition - 4786-1430.

4 Ampex AVR-2 quad VTR's, 2 with editors. B&W Monitor and TEK 528 WFM. \$15K each or \$50K for all 4. A Bosch Mach I computer editor and CDL 1200 Switcher all for \$60K. Free tape included, contact Jim Till WCFC-TV, Chicago, 312-977-3838.

Textronix 529 Waveform \$600. Wanted: Ampex 1 and 2's or parts & boards. Video-It, Inc. 213-84055.

Used Truscon 4-leg angle, self-supported tower. 1 excellent condition. Clearwater, FL. Can erect on your site. \$15,000.00. 813-461-1341.

Need: Sony 5800/5850/440 systems. Need TK-28 cameras. For sale - RCA TK-27s, TP-7s, TK-76s, 79A. Sony BVH-1100As in the low 30s. Betacam Quad machines available. Call Media Concepts, 919-777-3600.

Used broadcast TV equipment. Hundreds of pieces wanted and for sale. Please call Systems Associate receive our free flyer of equipment listings. 213-62042.

3/4" evaluate videotape! Guaranteed to look and work as new. Prices Field mini KCS-20 minute cass \$6.99. 30 minutes \$9.49. 60 minutes \$12.49. ELC evaluated, shrink wrapped and delivered free! Make broadcast quality at half the price. Hundreds of thousands sold to professional users. To order call Ca Video, Inc., collect, 301-8458888 or toll free 800-238-4300.

Lease an automation system: Cut overhead with computerized used SMC automations. Low rates. Call 214-499-5221.

Copper! For all your broadcast needs. #10 gro radials, 2, 4, 6, 8" strap, fly screen, counter poise masts 317-962-8596. Ask for copper sales.

6 left! Sony 1100A 1" VTR, in console with full Tektronix monitor bridge, slo-motion, TBC-2000, 800 hrs or total-machine time! Call Video Brokers - 305-445-4595.

Studio cameras. New save 60%. 3-New TK46s left with new tubes, 15:1 200mm w/2X, Vinten pneumatic pedestal, full CCU and remote paint box. Call Video Brokers - 305-851-4595.

1" tape: All brands - 1 pass with new tape warranty shippers that look new - 3000 hrs on hand. Video Brokers - 305-851-4595.

ew bulk 3/4" video cassettes-TDK, Kodak-12.75 per 10.25 per 1/2 hr. In case quantities. Video Brokers - 15-851-4595.

ony BVH - 2000 1" VTR w-TBC-like new-2 available. Geo Brokers - 305-851-4595.

ony-5850/5800/RM-440 Edit package \$7,500.00 net. Geo Brokers - 305-851-4595.

agami HK-312 cameras with CCUK's. Ikegami HL-DAL, HL-77A cameras. Ikegami TA-79 triax base stations. CDL-480 production switcher. Vital double re-try switcher. Quantel 6030 frame store. Quantel 00SP. Sony BVH-1100 w/BVT-2000's. NEC LVP-15/E. Adda 200C. Sony BVU-800's, BVU-820's, BVT-0's. Contact: Eric Duke, 212-757-8919.

bay Phelps-Dodge antenna with heaters and base master for sale. Both in use less than one year. ill 501-425-5100.

wers: 240' self-supporting tower, \$45,000.00. Call quotes on your specific design requirements. Dale andrix - 215-866-2131. Holt Technical Services, a division of The Holt Corporation.

complete edit bays/transmission rack. 2 bays in intro-built consoles. Bays include Sony 1" BVH-00s, BVW-15s, BVW-40s, BVU-800s. Grass Valley ON switcher, Convergence editor. Transmission rack includes Sony BVW-40s, BVU-800s, Tektronix Vectorscope and Wavellorm monitor. 213-468-5443.

trodyne for 1" \$1,500.00, Grass Valley 3260 Sync Genlock \$1,900.00. Crosspoint Latch 6006C Sync \$1,150.00. 3/4" one pass 60 min. \$4.00. 213-6-4055.

1" & 1" one pass tape. 1" Scotch 480 \$40 @ QTY 10. 1" 60 min \$4.00. 213-876-4055.

2 AM-FM transmitters: AM 50kw, 10kw, 5kw, 2.5kw 1kw. FM 25kw, 15kw, 10kw, 5kw, 3kw, 1kw. All manufacturers. All spares. All inst. books. All our own inventory. See us at NAB. CESCO International, 5946 Club Oaks Dr., Dallas, TX 75248.

w RCA 110kw UHF transmitter. RCA closeout. Fast delivery. Price: \$550,000 - Includes tubes. Bill Kitchen, Quality Media, 404-324-1271.

RADIO Help Wanted Management

RELIGIOUS FORMAT GENERAL MANAGER

1KW fulltime west Texas. New owner switching to religious format. General Manager must be experienced in religious broadcasting and must be able to put in place proper staff and programing. Earned ownership position part of the package. Reply to Box C-38. EOE.

Help Wanted Announcers

RADIO PROS

Adult contemporary FM powerhouse in midwest medium market needs great voices. No beginners. Salary negotiable. EOE/MF. Box C-41.

Help Wanted Sales



DIR Broadcasting
The country's leader in radio syndication
SALES

If you're looking for an exciting job with:

- ☐ high level agency selling
- ☐ direct sales at client levels
- ☐ becoming involved with media marketing/planning

Send resume to: Tom Gatti, VP Director of Sales

DIR Broadcasting
32 E. 57th Street, New York, NY 10022

Help Wanted Sales Continued

REGIONAL AFFILIATE MANAGER

Due to rapid growth and expansion, Satellite Music Network is seeking additional sales personnel to call on America's top station owners and managers. If you have first hand experience at the station level, want to be a part of the exciting future of radio, and are willing to travel--this is an outstanding career opportunity for you. We pay a good draw against commission, giving you unlimited financial opportunities. Call 800-527-4892 for details from Charlie Strickland or Bob Bruton.

RADIO SALES

WDBN-FM Medina/Akron, Ohio and WKSX-FM Urbana/Springfield, Ohio are both seeking aggressive and talented Account Executives to accomodate rapidly increasing sales. This is a great opportunity for a bright, tough, winner looking to be with a company that is expansion oriented. Compensation open. Resume, income history and letter stating career objectives to: Director of Sales, United States Broadcasting Corp., 4966 Gateway Drive, Medina, Ohio 44256. No Phone Calls Please. We are an EEO employer.

Situations Wanted Management

Dennis Ryan is on the beach and looking for the next challenge.

Just completed 18 month General Manager assignment for Keymarket involving construction, start-up, and successful operation of Mobile/Pensacola Regional Class C FM.

- Great track record and references
- Strong sales and leadership
- CRMC #755
- People/goal oriented
- Honest and loyal
- All markets, all formats considered
- 32 years old, single, ready to go
- High risk situations okay

Call now (205) 626-0530, 24 hrs.



Represented Nationally by **Frank Boyle & Co.**

Situations Wanted Management

IN SEARCH OF RADIO EXCELLENCE!

Group or single owners truly searching for radio excellence for your radio division need the right individual who can develop that excellence in sales, programing, promotion and community involvement with people oriented management skills. That person will be available in the very near future. Let's talk! Write to Box B-167.

TELEVISION

Help Wanted Sales

INTERNATIONAL TV SALES ASSISTANT

Fast growing, Los Angeles based entertainment company seeks experienced person to assist Executive Vice President, Television Division, in foreign sales area. Responsibilities include organization and maintenance of sales reports, contract services, and client contacts worldwide. Opportunity for direct client sales. Some experience in international film or television sales (or comparable work) required. College degree; prefer Business major. Send resume to: Box C-17. An equal opportunity employer.

SATELLITE TELEVISION New York City

MAINTENANCE ENGINEERS: Significant experience in construction and maintenance of broadcast facilities, microwave, uplinks & downlinks, Sony BVU-800, GVG & Utah-Scientific switching, studio setup & alignment, repair to the component level. FCC General or SBE certification. Strong trouble shooting skills and ability to work independently. Moderate travel required to service sites across the U.S.

OPERATIONS TECHNICIAN: Significant experience in Common Carrier TOC or broadcast master control. Signal evaluation using waveform & vectorscope, signal switching, processing and routing. FCC General or SBE certification. Ability to process multiple tasks simultaneously in a high-activity environment. Satellite operations, video scrambling background a plus. Requires great attention to detail and ability to keep accurate records.

EXCELLENT COMPENSATION, WORKING ENVIRONMENT & FULL BENEFITS

Reply in confidence to Box C-13.

CHIEF ENGINEERS

Group owner has openings for Chief Engineers at Sunbelt VHF-TV CBS affiliate, and Midwest UHF-TV independent. Must have five years experience in all aspects of TV station studio and transmitter construction, maintenance, and operation, including microwave. Excellent pay and opportunity. Respond to Director of Engineering, Post Office Box 32488, Charlotte, North Carolina 28232. EOE.

Help Wanted Technical

THE AMERICAN UNIVERSITY IN CAIRO TECHNICAL SERVICES COORDINATOR

The American University in Cairo (AUC) is seeking to fill the position of technical services coordinator in the university's TV news training center. The technical services coordinator is responsible for all technical aspects: maintenance, repair, equipment inventory, professional video editing, studio management, and production.

In addition, the coordinator will be responsible for training AUC students enrolled in TV advertising or TV workshops on the technical use of Sony Betacam field and studio cameras.

A university degree in engineering is required. Minimum professional experience is five years with a recognized British or American TV network news division.

Contract and salary competitive. Those interested should send resumes and other pertinent career information by April 30, 1986 to Dr. Thomas A. Lamont at the following address:

The American University in Cairo
886 U.N. Plaza
New York, NY 10017
Tel. 212-421-6320

DIRECTOR OF ENGINEERING

WPXI-TV PITTSBURGH AMERICA'S MOST LIVABLE CITY NBC AFFILIATED STATION EXCELLENT FACILITY & BENEFITS

Ideal candidate should have a minimum of 5 years engineering management experience and also experience in dealing with Union personnel. The individual should have an in-depth knowledge of ENG, SNG and other microwave equipment, good knowledge of facility planning and budgeting also essential.

Super opportunity for a dynamic individual. If you are available at the NAB Convention for interview, call me for appointment in advance. Respond in strict confidence to Mr. John A. Howell, III, Vice President and General Manager, WPXI-TV, P.O. Box 1100, Pittsburgh, PA 15230. EEO/AA.

MAINTENANCE TECHNICIAN

WBAL-TV, CBS in Baltimore, has an opening for a MAINTENANCE TECHNICIAN. Familiarity with operation and maintenance of television broadcast equipment necessary. Must have hands-on experience trouble-shooting and maintaining audio, video equipment, tape machines, cameras and digital systems. FCC license and SBE certification desirable.

Qualified candidates are invited to submit a resume to:

3800 Hopper Avenue
Baltimore, Maryland 21211
Engineering Department
An Equal Opportunity Employer, M/F.

MAINTENANCE ENGINEERS

KCLS-TV Los Angeles — a PBS affiliate and award-winning producer of instructional programs — has outstanding opportunities for skilled Engineers who can maintain and repair electronic/mechanical broadcasting equipment. If selected, you will also supervise technical staff while serving as technical director and transmitter operator.

You'll need a minimum of 3 years recent experience in a TV broadcasting (or related) facility, including responsibility for the operation/maintenance of production and recording equipment. Background must also include at least one year in supervising/training technical personnel. Experience in transmission and the maintenance of FCC-required documents is desired. Annual salary: \$35,653-\$44,422. For consideration, call (213) 742-7761 or send resume before May 2, 1986.

Los Angeles Unified School District
Recruitment Dept.
P.O. Box 2298, Los Angeles, CA 90051
An Equal Opportunity Employer

The business of education.



Help Wanted News

WEEKEND SPORTS ANCHOR WEEKDAY SPORTS REPORTER

Top-rated news department looking for fulltime, personable individual with sports credibility. Attractive big ten market. Tape and resume to News Director, WMTV 615 Forward Drive, Madison, Wisc. 53711. Equal opportunity employer.

**FOR SIXTY
YEARS
FIRST
IN THE
BROADCASTING
INDUSTRY**

First to broadcast radio coast-to-coast, first to bring compatible color television to life, first to broadcast network television on Ku-band satellites, and first to bring stereo sound to network TV, the National Broadcasting Company is on the cutting edge of innovative broadcast technology.

As we enter into our seventh decade of radio and television broadcast operations we face the challenge of maintaining our current technological leadership. Meeting that challenge requires skilled professionals ready to assume increasingly responsible and creative assignments on state-of-the-art projects including a new broadcast headquarters, facilities for the '88 Olympics in Seoul, studio control rooms, audio/video editing facilities, mobile production units, and computer imaging systems.

Engineers and managers excited about joining us in this challenge should consider the range of opportunities now available.

Broadcast Engineering Managers

From concept to completion, strategic planning to project review, these senior level positions coordinate, manage and control multiple project areas with ultimate responsibility for client relationships, project definition, and budget control.

Design Engineers and Project Planners

Assigned to individual projects, these positions are responsible for project planning, cost analysis, manpower and activity scheduling, vendor coordination, scope/budget control, and system design, implementation and testing.

Development Engineers

Broadcast technology specialists direct the development of various state-of-the-art production systems including graphics and imaging systems, and camera and acquisition systems.

Candidates interested in these challenging opportunities should send a resume in confidence to: Administrator, Technical Recruitment, Suite 1631, NBC, 30 Rockefeller Plaza, New York, NY 10020. NBC is an equal opportunity employer.

Be sure to contact an NBC Representative at the NAB Convention in Dallas, April 12-16.



NATIONAL BROADCASTING COMPANY, INC.

Help Wanted News Continued

NEWS PROMOTION WRITER-PRODUCER

If you live and breathe news promotion, have lots of ideas and a reel to back it up, we want to hear from you!

You'll join Denver's most talented creative services team to help turn out solid and effective news advertising in on-air, radio, print and outdoor. Minimum 2 years TV experience in TV news promotion required.

Send tape and resume
(please let us call you) to:

Robert A. Chernet
Director, Advertising & Promotion
KMGH-TV
123 Speer Boulevard
Denver, Colorado 80217

KMGH 7

An Equal Opportunity /
Affirmative Action Employer

WPXI-TV PITTSBURGH

Needs a director of news programs.

Very good director needed for fast paced, graphic intensive ENG news. Ability, leadership and references important. For more information call 412-237-4980. EEO/AAP

Help Wanted Programing, Production, Others

PRODUCER

WRC-TV, Channel 4, Program Department, in Washington, D.C., has an excellent opportunity for a Producer who will be responsible for producing regularly scheduled programs and one-time "Specials", as well as assisting with other Programming Department productions. Responsibilities will also entail supervising show talent and keeping costs within budgetary limits.

Background should include extensive experience in writing and producing, and overseeing videotaping, editing and studio productions. Documentary experience is preferred.

For full information and prompt consideration, please direct your resume to: NBC, P.O. Box 1100, Columbia, Maryland 21044. NBC is an equal opportunity employer



Director of Creative Services

WSBK-TV is looking for an experienced Director of Creative Services with great marketing instincts, excellent people skills, excellent writing and editing skills, and a good sense of design.

Requirements:

Five years experience in advertising or promotion, including two years management experience.

Ability to supervise all aspects of audience and sales promotion including print, radio, on-air, budgets.

Please send letter, resume and reel to:

Program Manager
WSBK-TV
83 Birmingham Pkwy.
Brighton, MA 02135

No phone calls please.
An equal opportunity employer.

Situations Wanted News

GENERAL MANAGER

Turn around situation specialist. If your TV station is not all you want it to be please call, leave message: 918-745-1571 or write Box C-39.

ALLIED FIELDS

Help Wanted Technical

ELECTRONICS TECHNICIAN SUPERVISOR SAUDI ARABIA

U.S.-Saudi Arabian Joint Economic Commission seeks U.S. citizen for 2 year (with possible renewal) technical equipment specialist job in Riyadh, starting in early 1987.

Applicants must: be highly qualified electronic technician & have minimum 5 years fulltime, hands-on maintenance experience with state of the art teleproduction equipment Sony BVU VTRs, BVE-800 editing system, Betacam, GVG switchers, HL-79 cameras, Yamaha RM-1608 mixer, Otari MX-5050 MKIII-8 audio recorder, Chyron character generator). Engineer will be responsible for actual maintenance as well as supervision of purchase & maintenance of electronic equipment. SBE certification preferred; Arabic knowledge desirable, not required.

Benefits include: salary (GS-12 or 13; range: \$31,619-\$48,876) plus 25%; free housing, car; dependents to accompany.

Send ad/resume by May 16 to J.M. Ansheles, #910, 1730 Rhode Island Ave., Washington, DC 20036. EOE.

Employment Services



If you need a job, you need MediaLine. MediaLine is the broadcast industry's daily updated job listing service. We scout out the new job openings coast-to-coast and report them daily to our clients. For job leads to advance your career, call MediaLine 312-855-6779.

WE NEED PERSONALITY DJs

Do you do voices? Can you handle the phones? How about drop-ins?—In other words—are you a Pro—or a Time & Tern Jock? More and more of the stations with whom we deal are looking, and willing to pay for that something extra. If you are ready for a move let **NATIONAL** help. For complete confidential details and registration form, enclose \$1 postage and handling to:
NATIONAL BROADCAST TALENT COORDINATOR
DEPT B., PO BOX 20551, BIRMINGHAM, AL 35216,
205-822-9144-ACT NOW!

Situations Wanted News

NEWS DIRECTOR/ MANAGER

who can anchor, lead "first place" team and produce results for your station. Looking for long-term commitment in large to medium market, hopefully on the water. Have excellent background in broadcasting and still young enough to be real asset to future growth of strong news station or group. Would like opportunity to sit down and discuss prospects of future "together". Will be at NAB and available there or for travel to talk. Box B-155.

EXPERIENCED HISPANIC SPORTSCASTER

Report, anchor, shoot. Bilingual. Looking to relocate. Good references. Call Mike, 805-833-6947.

**Employment Service
Continued**

**WE PLACE
TV and Video Engineers
COAST TO COAST**

[All Levels, But Not Operators]
ALL FEES PAID BY EMPLOYERS
Phone/Resume

KEY SYSTEMS

479 Northampton Street
Kingston, PA 18704

Phone Alan Kornish at
(717) 283-1041

Radio Programing

**Lum and Abner
Are Back**

...piling up profits
for sponsors and stations.
15-minute programs from
the golden age of radio.

PROGRAM DISTRIBUTORS ■ P.O. Drawer 1737
Jonesboro, Arkansas 72403 ■ 501/972-5884

Consultants

At last! An attorney who's been there!
Over 15 years' small and major market
radio programing, sales and manage-
ment experience.

**BARRY SKIDELSKY
Attorney/Consultant**

At NAB/Dallas speaking on acquisitions.
Staying at the Loews Anatole. Contact
there or call 212-370-0130 for advance
appointment.

Wanted to Buy Stations

SEEK TO PURCHASE LPTV

CP or operating Facility

Cash for Midwestern station
Ohio, Penn., Illin., Ind., Mich.
Brokers or Direct.
Box C-10

For Sale Stations

**Television Station
For Sale.**

Network Affiliate
Top 100 market.

Write Box B-135

For Sale Stations Continued



R.A. Marshall & Co.

Media Investment Analysts & Brokers
Bob Marshall, President

This AM/FM combination is located in an exceptional South-
eastern radio market and owns valuable real estate. May be
acquired with real estate for \$1.1 million or owner will retain
real estate and lower price substantially.

508A Pineland Mall Office Center, Hilton Head Island, South Carolina 29928 803-681-5252

The Holt Corporation

NEW LISTINGS

15 new listings since April 1st. Class C's, B's and A's, some with
AM. Come early for the best selection. We'd rather sell 'em than
count 'em! Appointment necessary. G. Arthur Holt, Bernie Fuhr-
mann, Gary Kirtley, Mark O'Brien — NAB Convention, Suite 653,
Atrium—Loews Anatole.

Suite 205
The Westgate Mall
Bethlehem, PA 18017

Suite 800
2033 M Street, N.W.
Washington, DC 20036

Box 2869
One Tower Park
Winchester, VA 22601



SUNBELT

- **Class C FM**
Underdeveloped 1.1 million
- **AM/FM**
High growth area 3.5 million
- **Class C FM/AM**
Needs upgrade 2.1 million

Donald K. Clark, Inc.
Media Broker

305-453-3311

P. O. Box 1065, Merritt Island, FL 32952

**BUYERS
SELLERS of
MEDIA
PROPERTIES**

"I will be available for confiden-
tial consultation during the NAB
Convention in Dallas. I invite
you to call on me in Suite 1765-
Tower in the Loews Anatole."

Milton Q. Ford

**MILTON Q. FORD
& ASSOCIATES
MEDIA BROKERS**

White Station Tower • 5050 Poplar Ave.
Memphis, TN 38157 • 901/767-7980

**BOB KIMEL'S
NEW ENGLAND MEDIA, INC.**

AM/FM

in fast growing section of New England
\$800,000

8 Driscoll Dr., St. Albans, VT 05478

802-524-5963

GEORGE WILDEY 207-947-6083 (ME)

OWN YOUR OWN STATION

Major Michigan Market

Great turnkey operation, priced right. Limited invest-
ment required, excellent terms. Current daytime AM
with authorization for fulltime. Unique format. Perfect
owner/operator situation. Respond with financial quali-
fications and background information. All replies strict-
ly confidential. Box C-40.

For the first time in our history,
We can't be at the N.A.B.
 (That's how busy we are — selling stations.)
 Much as we'll miss the chance to socialize, we know you'll excuse us for
 "tending to our knitting" — helping buyers and sellers to meet for business.
 We owe you one!

Dick Kozacko • Keith Horton • Mel Stone

KOZACKO • HORTON COMPANY

Brokers & consultants to the communications industry

P.O. Box 948 • 350 W. Church St. • Elmira, New York 14902 • (607) 733-7138

CALIFORNIA GOLD FOR SALE!!!

- So. Calif. FM—strong ratings, excellent coverage exploding market. \$1,600,000 cash.
- No. Calif. FM—low overhead, limited coverage, great staff. \$1,850,000 cash.
- Central Calif.—Metro market, unmeasured duopoly situation, strong retail, \$1,300,000 terms.
- Many more AM & FM stations in the west. All subject to prior sale.

NAB Address: Loews Anatole, Tower Suite 5182
 Chester Coleman G. Warren Earl

NAB '86 Dallas—By appointment only.
American Radio Brokers, Inc.

1255 Post St., #625, San Francisco, CA 94109, 415—441-3377

Sunbelt Major Market AM For Sale

Large Hispanic population makes this a great opportunity for a Spanish format. Write Box B-134

NAB - DALLAS LOEWS ANATOLE 214—748-1200

JACK FELDMAN - ART HOGAN

Hogan - Feldmann, Inc.

MEDIA BROKERS • CONSULTANTS
 P.O. Box 146
 Encino, California 91426
 Area Code (818) 988-3201

LOEWS ANATOLE HOTEL

Tower Suite 8189

Ralph E. Meador
 MEDIA BROKER

Ralph E. Meador, 816—259-2544.
P.O. Box 36, Lexington, MO 64067,
Randy Meador, 816—455-0001

- UHF TV Large Eastern city. \$8.5 million.
- Class C plus super powerful AM. Large Central US city. \$13 million.
- FM near Champaign—Urbana, IL \$240,000.
- Powerful daytimer covering Washington, DC. \$1.2 million.
- More than 80 radio and 20 TV and TV CPs from Puerto Rico to Guam including several combos and Class C stations. Call to get on our mailing list.
- Buying or selling, see us at NAB in Dallas. By appointment only.

BUSINESS BROKERS ASSOCIATES
615—756-7635, 24 hours

Bottom Line Consultants

More than 25 years experience owning and operating small and medium-market, high quality radio stations—*always* with strong cash flows. Let us share our secrets with *you*—we know how to turn **your** station into a successful bottom line producer!

GRANDY & COWLE

90 Magdalena Drive
 Rancho Mirage, CA 92270
(619) 324-8451

CONTACT: Dale Cowle

SEE YOU AT THE NAB

REGGIE MARTIN ASSOCIATES

Reggie Martin Ron Jones

Specializing in Florida &
 the Southeast
 Anatole Suite 710 Atrium

WASHINGTON STATE

Single market AM. Only daily medium. 90,000 population NBC affiliated. Growth market. 50 miles from Seattle. \$295,000, terms. Reply Box C-27.

FOR SALE

Fulltime AM, Medium market. Good billings and ratings. Also 2 AM/FM single combos. Mike McKee 918—682-1331.

2 AM's - \$1,050,000
 Assumptions - \$500,000

5KW Jacksonville, Florida
 1KW Louisville, Kentucky

Contact: RFB
 5455 New Wellington Close
 Atlanta, Georgia 30327

"TWENTY YEARS EXPERIENCE GOES INTO EVERY SALE"

H.B. La Rue, Media Broker

Radio TV CATV Appraisals

At the NAB, Loews Anatole, Tower Suite 1489

West Coast

44 Montgomery St. #500
San Francisco, CA 94104
415 434-1750

East Coast

500 East 77th St. #1909
New York, N.Y. 10021
212 288-0737

Atlanta

6201 Powers Ferry Rd., #455
Atlanta, GA 30339
404 956-0673 Hal Gore, V.P.

Location	Size	Type	Price	Terms	Contact	Phone
Rky.Mtn.	Maj	AM/FM	\$2000K	\$500K	Greg Merrill	(801) 753-8090
CO	Med	FM	\$1900K	Cash	Elliot Evers	(415) 495-3516
AZ	Sm	AM/FM	\$1850K	Terms	David LaFrance	(303) 234-0405
NB	Med	AM/FM	\$1100K	\$300K	Bill Lytle	(816) 941-3733
OK	Sm	2 FMs	\$750K	\$125K	Bill Whitley	(214) 680-2807
AZ	Med	AM/FM	\$700K	\$300K	Peter Stromquist	(818) 366-2554
VI	Met	FM	\$675K	\$75K	Randy Jeffery	(305) 295-2572
NY	Sm	AM/FM	\$500K	Cash	Randy Jeffery	(305) 295-2572
AZ	Sm	FM	\$450K	\$135K	Jim Mergen	(818) 366-2554
ME	Sm	AM/FM	\$450K	Terms	Ron Hickman	(401) 423-1271

For information on these properties, please contact the Associate shown. For information on other availabilities, or to discuss selling your property, contact Janice Blake, Marketing Director, Chapman Associates Inc., 8425 Dunwoody Place, Atlanta, GA 30338. 404-998-1100.



CHAPMAN ASSOCIATES
nationwide media brokers

TV NETWORK AFFILIATE

Top 100 market
under \$10 million

W. John Grandy

BROADCASTING BROKER
1029 PACIFIC STREET

SAN LUIS OBISPO, CALIFORNIA 93401

805-541-1900 • RESIDENCE 805-544-4502

KZTR (FM)
CAMARILLO/ENTURA, CA
SOLD TO
GOLD COAST COMMUNICATIONS
CORPORATION
PRICE: \$1,400,000
JACK AND ART AT
LOEWS ANATOLE

Hogan - Feldmann, Inc.

MEDIA BROKERS • CONSULTANTS

P.O. Box 146

Encino, California 91426

Area Code (818) 986-3201

NORTHWEST METRO AM/FM COMBO

Class C FM/solid AM, good cash flow, lots of room for growth and appreciation in value. Asking \$3.5 million cash. Box B-128.

BILL EXLINE
ANDY McCLURE

NAB ADDRESS:
Loews Anatole Hotel
Suite 710 Atrium
214-748-1200

BILL EXLINE

ANDY McCLURE

William A. Exline, Inc.

4340 Redwood Hwy., Suite F-121
SAN RAFAEL, CALIFORNIA 94903
(415) 479-3484

MEDIA BROKERS - CONSULTANTS

OKLAHOMA CITY
FULL-POWER
UHF TV

LOW PRICE
EXCELLENT TERMS

FT. WORTH TEXAS
LPTV
EXCELLENT COVERAGE
GOOD TERMS

Bill Kitchen
(404)324-1271



Quality Media
Corporation

TOP SMALL MARKET SUNBELT FM

Based in the hub of flourishing, idyllic northwest Arkansas. 1985 revenues \$800,000; positive NOI. One of only two class C's in market; top contemporary station for 6 consecutive years. For sale by owners - price: \$2,000,000 cash for all assets except "quick". No terms, except qualified buyers may negotiate to assume a \$350,000 long term liability (7 years; \$50K/year payments) and/or to purchase a minimum of 65% of station. Veteran station manager/35%-owner willing to stay under an acceptable arrangement. Principals only, reply to Box C-16.

DeHart
Broadcast Brokers

NEW YORK
AM/FM COMBO
5KW AM

Telephone 315-287-0061

RD #1, Box 44 Richville, New York 13681

CLASS A FM

Deep South—Gulf Coast
2 1/2 X Gross
Incl. Property—Terms
Box C-8.

THIS PUBLICATION IS AVAILABLE IN MICROFORM

University Microfilms International
300 Zeeb Road, Dept. P.R., Ann Arbor, MI 48106

TEXAS UHF TV CP
FULL POWER
ONLY INDEPENDENT
IN GROWING MARKET
MERGER OR CO-VENTURE
213-858-1573

Need an Appraisal?

512/327-9570

JAMAR RICE CO.

Media Brokerage & Appraisals

110 Wild Basin Rd. # 245 • Austin, TX 78746

NEW CLASS A FM

Small fast growing market, Texas Panhandle. \$25,000 down. 817-937-6305.

WASHINGTON STATE POWERHOUSE AM

Most powerful signal in excellent market.
Total price is \$325,000 with terms to the
right buyer. Write Box C-42.

NORTH ARKANSAS

For sale 1KW daytime, owner must sell.
Real estate included, terms. Rothfus Re-
alty, P.O. Box 401, Hardy, AR 72542.
501-856-2212.

AM/FM COMBOS IN WASHINGTON STATE

One at \$900,000 with \$200,000 down
and other at \$625,000 with \$100,000
down. Excellent terms. Write Box C-43.

For Fast Action Use BROADCASTING'S Classified Advertising

BROADCASTING'S CLASSIFIED RATES

All orders to place classified ads & all correspondence pertaining to this section should be sent to: BROADCASTING, Classified Department, 1735 DeSales St., N.W., Washington, DC 20036.

Payable in advance. Cash, check, or money order. Full & correct payment **MUST** accompany **ALL** orders.

When placing an ad, indicate the **EXACT** category desired: Television, Radio, Cable or Allied Fields; Help Wanted or Situations Wanted; Management, Sales, News, etc. If this information is omitted, we will determine the appropriate category according to the copy. **NO** make goods will be run if all information is not included.

The publisher is not responsible for errors in printing due to illegible copy—all copy must be clearly typed or printed. Any and all errors must be reported to the classified advertising department within 7 days of publication date. No credits or make goods will be made on errors which do not materially affect the advertisement.

Deadline is Monday at noon Eastern Time for the following Monday's issue. Earlier deadlines apply for issues published during a week containing a legal holiday, & a special notice announcing the earlier deadline will be published above this ratecard. Orders, changes, and/or cancellations must be submitted in writing. (**NO** telephone orders, changes, and/or cancellations will be accepted.)

Replies to ads with Blind Box numbers should be ad-

dressed to: (Box number), c/o BROADCASTING, 1735 DeSales St., N.W., Washington, DC 20036.

Advertisers using Blind Box numbers cannot request audio tapes, video tapes, transcriptions, films, or VTR's to be forwarded to BROADCASTING Blind Box numbers. Audio tapes, video tapes, transcriptions, films & VTR's are not forwardable, & are returned to the sender.

Publisher reserves the right to alter classified copy to conform with the provisions of Title VII of the Civil Rights Act of 1964, as amended. Publisher reserves the right to abbreviate, alter, or reject any copy.

Rates: Classified listings (non-display). Per issue: Help Wanted: \$1.00 per word, \$18.00 weekly minimum. Situations Wanted (personal ads): 60¢ per word, \$9.00 weekly minimum. All other classifications: \$1.10 per word, \$18.00 weekly minimum. Blind Box numbers: \$4.00 per issue.

Rates: Classified display (minimum 1 inch, upward in half inch increments), per issue: Help Wanted: \$80.00 per inch. Situations Wanted (personal ads): \$50.00 per inch. All other classifications: \$100.00 per inch. For Sale Stations, Wanted To Buy Stations, Public Notice & Business Opportunities advertising require display space. Agency commission only on display space.

Word count: Count each abbreviation, initial, single figure or group of figures or letters as one word each. Symbols such as 35mm, COD, PD, etc., count as one word each. Phone number with area code or zip code counts as one word each.

Fates & Fortunes

Media

ave Kersey, director of public relations, Christine Wyrzten Ministry, Cincinnati, joins Family Life Broadcasting, Tucson, Ariz., as director of broadcasting. Family Life comprises KFLR-AM-FM Phoenix and KFLT(AM) Tucson, both Arizona; WUFN(FM) Albion, WUNN(AM) Mason and WUGN(FM) Midland, Ill. Michigan, and KFLQ(FM) Albuquerque, N.M.

on Townsend, station manager, WDVM-TV Washington, named VP and general manager, succeeding **Edwin Pfeiffer**, 60, who is retiring to become part owner and manager of OVR(TV) Sacramento, Calif., station recently



Townsend



Pfeiffer

sold by Outlet to Narragansett Capital Corp., Providence, R.I.-based venture capital firm, for \$104 million (BROADCASTING, March 17). Pfeiffer will be taking over management of station from **Charles Kennedy**, resident and general manager, who will leave upon transfer of control, which according to Kennedy, is expected about Sept. 1. Kennedy said he will not be remaining with outlet.

Townsend has fared well in management stints at WDVM-TV—station was among evening News Association stations that went

Gannett in that company's \$717 million purchase of ENA. And in 1978, Townsend as director of business affairs for WDVM-TV, then Post-Newsweek-owned WTOP-TV, when station was swapped to ENA for its WWJ-TV (now WDIV-TV) Detroit. Townsend remained with new management, being added to station manager.

General managers, radio division, Booth American Broadcasting, named VP's: **Vince Ford**, WZZP(FM) South Bend, Ind.; **Roger Irner**, WRMR(AM)-WLTF(FM) Cleveland; **Verli Green**, WJLB(FM) Detroit; **Clyde Roberts**, WOD(AM)-WKKO(FM) Toledo, Ohio, and **Jim Hood**, WWNK-AM-FM Cincinnati.

John Bermingham, VP, deputy general counsel, RCA Corp., New York, named general counsel, succeeding **Samuel Murphy Jr.**, who joins New York law firm of Davis, Markel & Edwards as counsel.

ster Orne, president and general manager, FNH-TV New Haven, Conn., resigns.

William Dunaway, general manager, WTHR-TV Indianapolis, joins WPTF-TV Raleigh-Dur-

ham, N.C., as VP, general manager.

John Chapple, VP, Florida operations (Pompano Beach, Fla.), American Cablesystems Corp., Beverly, Mass., named senior VP, East Coast.

Tom Ramey, general manager, Buford Television's KTRE-TV Lufkin, Tex., joins co-owned KLT(TV) Tyler, Tex., as general manager.

John DeRoche, VP, general manager, WTVH-TV Syracuse, N.Y., joins WZZM-TV Grand Rapids, Mich., as VP and general manager.

Carol Reilly, general sales manager, WTRY(AM) Troy, N.Y.-WPYX(FM) Albany, N.Y., named station manager.

Deborah McDermott, program director, KMBC-TV Kansas City, Mo., named station manager.

Karen Campbell, promotion director, KRBE(AM) Houston, named director of operations.

Kathryn Hale, director, tax accounting and compliance, Rifkin & Associates, Denver, named controller.

Mario Dieckmann, district manager, Group W Cable, Los Angeles, joins United Cable Television Corp. as district manager of its San Francisco Bay area cable properties.

Rebecca House Dewan, senior financial analyst, Harte-Hanks, San Antonio, Tex., named director of finance, broadcasting and entertainment operations.

William (Buzz) Mathesius, associate director, station relations, ABC-TV, New York, named VP and director, affiliate operations.

Arnold Agree, VP, taxes, ABC, New York, named VP, taxes, Capital Cities/ABC.

Jerald Olson, partner, accounting firm of Ernst & Whinney, New York, joins Time Inc. there as VP and director of internal audit.

Marketing

Robert Wadsworth, executive VP, account

service, SSC&B:Lintas USA, New York, named to board of directors.

Named senior VP's, D'Arcy Masius Benton & Bowles, New York: **Steve Gramps**, management supervisor, and **Sallie Lee**, personnel manager. Named VP's, DMB&B, New York: **Gaile Gibbs**, creative supervisor; **Tom Faxon**, senior producer; **Algernon Greenlee**, account supervisor; **Karen Ramsey**, creative supervisor; **Steve Fenton**, copywriter; **Jerry Saggotsky**, associate research director, and **Kathryn Kehoe**, account supervisor. **Sherree O'Connell**, account executive, DMB&B, St. Louis, named account-supervisor.

Robert W.C. Lilley, senior VP, director of media and network programming, SSC&B: Lintas USA, New York, named executive VP, director of media and network programming.

Robert Mancini, senior VP, J. Walter Thompson, Detroit, joins Doyle Dane Bernbach there as senior VP and media director.

Al Hanft, senior VP, management representative, Needham Harper Worldwide, New York, named senior VP, group account director.

Named executive VP's, Dancer Fitzgerald Sample, New York: **Penelope Queen**, senior VP, research director; **Jean-Claude Kaufmann**, senior VP, head of TV production, and **Clifford Freeman**, senior VP, creative director.

Molly Hudson, senior VP, management supervisor, Campbell-Ewald, New York, named group senior VP.

Carole Black, VP, account supervisor, Needham Harper Worldwide, Chicago, named management representative.

Gary Kyle, account supervisor, Weightman Advertising, Philadelphia, named VP.

Chris Strange, associate creative director, Tatham-Laird & Kudner, Chicago, named creative director. **Roberta Borst**, account supervisor, T-L&K, named partner.

C. Patrick Mandarano, senior VP, account supervisor, Carafello Diehl & Associates, Irvington-on-Hudson, N.Y., named manager

the most experienced executive recruiting firm in broadcasting and cable

More than 16 years as specialists in the communications industry.
For a confidential discussion, call 312-991-6900.

Youngs, Walker & Company

1605 COLONIAL PARKWAY
INVERNESS, ILLINOIS 60067

of medical products.

Lori Adelsberg, director of research, and **Jean Gunning**, director of marketing information, Blair Radio, New York, named VP's, marketing information.

Deborah Diers, from Bernstein-Rein Advertising, Kansas City, Mo., joins W.B. Doner, Detroit, as senior media planner. **Diana Heindl**, assistant account executive, W.B. Doner, Washington, named senior account executive.

Appointments, Earl Palmer Brown Companies, Bethesda, Md.: **Louise Smoak**, assistant to president, Earl Palmer Brown Cos., Bethesda, Md., named VP, finance and administration; **Mari Tuma**, account supervisor, Brown Direct, to VP, account supervisor.

Paula Miller, media planner, J. Walter Thompson USA, joins Abramson Associates, Washington, as senior media planner.

Al Mazzoni, VP, advertising sales, MTV Networks, New York, and **Vic Weil**, from Raycom Sports Network, join TeleRep, New York, as account executives, lions team.

Colette Grayson, broadcast negotiator, Ketchum Communications, Pittsburgh, joins HBM/Creamer there as media buyer.

Appointments, Seltel: **Ted Rudolph**, account executive, TeleRep, New York, to sales manager there; **Milton Arthur Stumpus**, sales coordinator, Los Angeles, to account executive, Atlanta; **Howard Simon**, account executive, Katz Television, New York, to account executive, New York; **George Pafitis**, account executive, Katz, to account executive, New York.

Margaret Vale and **Bruce Bollinger**, assistant account executives, Foote, Cone & Belding, New York, named account managers.

Deborah Nichols, sales assistant, McGavren Guild Radio, Philadelphia, named sales coordinator.

Joan Homa, sales manager, WGMS-AM-FM Rockville, Md., named general sales manager.

Ken Beedle, from Blair Television, Minneapolis, joins KOKH-TV Oklahoma City as general sales manager.

Peter Magnusson, local sales manager, KSBY-TV San Luis Obispo, Calif., joins KSBW-TV Salinas, Calif., as general sales manager.

Stuart Stapp, sales manager, WKBC-FM North Wilkesboro, N.C., and **Chris Groce**, general manager, WDBL-AM-FM Springfield, Tenn., join WTMG(FM) Murfreesboro, Tenn., as marketing consultants. **Teresa Duke**, receptionist, WTMG, named traffic manager.

Stuart Fenston, national sales manager, WNBC(AM) New York, named sales manager.

Dalys Hylton, from Harrington Righter & Parsons, New York, joins WNBC as account executive. **Lee Davis**, producer, *Soupy Sales Show*, WNBC, named account executive.

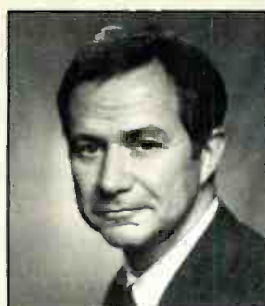
Steven Gregory, sales manager, TCI Office Supply and Printing, and former general sales manager, WHIS(AM)-WHAJ(FM) Bluefield, W. Va., joins WVVA(TV) there as local sales manager.

Al Hanft, senior VP, management representative, Needham Harper Worldwide, New York, named senior VP, group account direc-



Georgescu

Coming together. Young & Rubicam, top Fifth Estate advertising agency with over \$1.5 billion in broadcast-cable billings in 1985, has reorganized its general and direct marketing and promotion companies, phasing out separate international and U.S. divisions, bringing them all under Y&R Advertising, and under one executive. Peter Georgescu, president, international division, New York, has been named



McGarry

president of Y&R Advertising and related companies. Reporting to Georgescu will be Joseph De Deo, chairman, Y&R Europe; James McCoubrey, president, Old Commonwealth countries (Australia, South Africa and Canada) and Nelson De Mello, regional director of Latin American operations. Also reporting to Georgescu will be Y&R New York, Y&R USA specialty companies and Y&R USA National Group. Georgescu will, in turn, report to Young & Rubicam Inc. president and chief executive officer, Alex Kroll. John McGarry continues as president of Y&R New York, adding new responsibilities as chairman of client services worldwide. Arthur Klein continues as president and chief operating officer of Young & Rubicam Direct Marketing Group, and will become managing director of Y&R New York, overseeing operations of that office. Roby Harrington, executive VP, Y&R USA, will become executive VP, Y&R Inc.

tor.

Rick Weinstein, account executive, WNCN(FM) New York, named director of retail sales.

Pat Barth, account executive, WNDU-TV South Bend, Ind., named local sales manager.

Melissa Vermillion, account executive, WGGT(TV) Greensboro, N.C., named local sales manager.

Owen Fliehr, regional sales manager, WXON-TV La Crosse, Wis., joins WKBT-TV there as local sales manager.

Jim McGarity, account executive, WIYY-FM Baltimore, joins WKJL-TV there as national-regional sales manager.

Lew Krause, local sales manager, WTIC-TV Hartford, Conn., named Northeast regional sales manager.

Mickie Hall Mulvey, account executive, KGW(AM)-KINK(FM) Portland, Ore., named national sales manager.

John Roche, account executive, WESH-TV Daytona Beach, Fla., joins KVOA-TV Tucson, Ariz., as regional sales manager, Phoenix office.

Al Black, national sales manager, WXJY(FM) Nantucket, Mass., joins WCIB(FM) Falmouth, Mass., as account executive.

J. Peter Dougherty, account executive, WNEV-TV Boston, and **Richard Yetra**, from WLVI-TV Boston, join WCVB-TV there as account executives.

Sharon Sigler, account executive, Roslin Radio Sales, Atlanta, joins Weiss & Powell there as account executive.

Bryan Fraker, head of Fraker Communications Services, Houston, joins KRBE-AM-FM there as account executive.

Mark Benenson, senior broadcast buyer, Grey Advertising, Los Angeles, joins Seltel, Los Angeles, as account executive.

ment, Warner Brothers Television, Los Angeles, joins Viacom Productions there as director, dramatic development.

Barry Thurston, VP, domestic syndication Embassy Telecommunications, Los Angeles named senior VP, domestic syndication **Sherrie Quander**, manager, staff development, Embassy Television, Los Angeles named director, staff development.



Thurston



Simon

David Simon, director of programming KTLA(TV) Los Angeles, since 1981, and 1987 president of NATPE International, joins Fox Television Stations there as VP, programming.

Rod Cartier, VP, program director, WNOL New Orleans, joins Lorimar-Telepictures domestic distribution there as director, Southern sales, perennial syndication.

Susan Rynn, senior research analyst, US Network, New York, named manager, research. **Shane Ventura**, research analyst named senior research analyst.

Laura Marino, talent coordinator, prime time programs, CBS Entertainment, New York named director, casting, New York.

Richard Chavez, producer, KABC(AM) Los Angeles and ABC Talkradio Network, joins Westwood One there as producer and program coordinator.

Anthony Dwyer, East Coast-Midwest sales manager, Four Star International, Chicago joins Group W Productions there as central regional manager.

Rex Lardner Jr., director of TBS Sports, Turner Broadcasting System, Atlanta, named

Programing

Nancy Kendall, manager, program develop-

3S Sports.

it Freed, studio manager and editor, Green Mountain Video, Burlington, Vt., joins DM Video Productions, Jericho, N.Y., as m editor.

lois Strickland, assistant program director, WMY-TV Greensboro, N.C., named program rector.

evin Fennessy, program director and air rsonality, WKBO(AM) Harrisburg, Pa., joins WKB(AM) Buffalo, N.Y., as program direc- r.

ly Fisher, director of program services, WLA-TV Washington, retires after 35 years th station and formerly co-owned WMAL- M) there.

on Olson, reporter and investigator, WJW-TV veland, named producer.

role Gassaway, air personality, KIOA(AM) s Moines, Iowa, named production direc- ; KIOA-KMGK(FM) there.

m Richards, production director, WMGK-FM iladelphia, named assistant program direc- .

ews and Public Affairs

bert Reyes, director, on-air promotion, WBC Radio, New York, named producer, spe- l programs, news, ABC Radio.

ndy Thomas, producer-anchor, WBOY-TV arksburg, W. Va., named news director, cceeding **Bob Fulton**, resigned. **Pete Yanity**, istant sports director, weekend anchor, WTVW-TV Florence, S.C., joins WBOY-TV as rts director.

t Kent, VP, news operations, NBC News, ed national security correspondent, sed in Washington.

n Fennaughty, from ABC News, New rk, joins KGAN-TV Cedar Rapids, Iowa, as ignment editor and assistant news director. **ndy Giles**, sports director, KREX-TV Grand ction, Colo., joins KGAN-TV as sports an- or-reporter.

ss (Skip) Haley, executive news producer, WJZ-TV Baton Rouge, named assistant news ector, operations.

loria Foster, from WTLV(TV) Jacksonville, ., joins WJXT(TV) there as documentary re- arch coordinator.

bert McFarlane, former national security rizer to President Reagan, joins National ublic Radio there as commentator.

ine Ricketts, sports reporter and color mmentator, WDWS(AM) Champaign, Ill., ns Associated Press, Kansas City, Mo., as xecutive, Kansas and Missouri.

riekse, reporter and public affairs direc- , WZZM-TV Grand Rapids, Mich., named id of new investigative and documentary t.

an Martelli, assistant producer, KING-TV Se- e, joins KMTV(TV) Omaha as 10 p.m. pro- er.

nise D'Ascenzo, from WJW-TV Cleveland, ns WFSB-TV Hartford, Conn., as news an- or-reporter.

Gina Wood, from KFHI-FM Austin, Tex., joins KRBE-FM Houston as morning news anchor.

Michael Hagerty, from KTNV-TV Las Vegas, joins KTVK(TV) Phoenix as reporter. **David Miller**, from KTSP-TV Phoenix, joins KTVK as news production coordinator.

Beth Zurbuchen, news director-anchor, WAOW-TV Wausau, Wis., joins WISC-TV Madi- son, Wis., as anchor.

Sherre Whitney, news director and morning news anchor, WLUM-FM Milwaukee, joins WVVA-TV Bluefield, W. Va., as reporter-pho- tographer.

Dennis Charles, from KRBC-TV Abilene, Tex., joins WTVM-TV Columbus, Ohio, as reporter.

John Rehauer, community information spe- cialist, city of Saginaw, Mich., joins WJRT-TV Flint, Mich., as reporter.

Monica Hart, reporter, KHQ-TV Spokane, Wash., joins KIRO-TV Seattle in same capac- ity.

Greg Moody, reporter, WITI-TV Milwaukee, joins KUSA(TV) Denver as critic at large.

Appointments, WTVT(TV) Tampa, Fla.: **Kerry Sanders**, reporter, WINK-TV Fort Myers, Fla., to reporter; **Michael Shapiro**, weekend-night assignment editor, WPLG(TV) Miami, to week- end assignment editor, and **Kent Blackwelder**, interim assignment editor, to nightbeat as- signment editor.

Michael Crew, from WJLA-TV Washington, joins WJKS-TV Jacksonville, Fla., as news di- rector.

Maria Rodriguez, reporter, WTVT(TV) Tampa-

St. Petersburg, Fla., joins KUSA-TV Denver as reporter.

Nancy Marshall, anchor, WMGT-TV Macon, Ga., joins WVNy-TV Burlington, Vt., as re- porter.

Mike McCartney, weather reporter, Rapid City, S.D., joins KSBY-TV San Luis Obispo, Calif., in same capacity.

Mark Schwarz, sports director, KDYL(AM) Salt Lake City, joins KUTV(TV) there as sports re- porter.

Technology



Hartley

John Hartley, presi- dent and chief operat- ing officer, Harris Corp., Melbourne, Fla., named president and chief executive of- ficer. He succeeds **Jo- seph Boyd** as CEO. Boyd remains chair- man of board. **Gary Thursby**, director, do- mestic radio sales, Harris Corp., Quincy, Ill., named VP, domestic radio marketing.

Mark Williams, director, technical operations, CBS-owned WSUN(AM)-WYNN(FM) St. Peters- burg, Fla., named director, technical op- erations, CBS's Owned Stations, with direct responsibility for CBS's WBBM-AM-FM Chica- go.

George Sperry Jr., VP, general manager,

Broadcasting

The Newsweekly of the Fifth Estate

1735 DeSales Street, N.W., Washington, D.C. 20036-4480

Please send ... (Check appropriate box)

☐ **Broadcasting Magazine**

☐ 3 years \$175 ☐ 2 years \$125 ☐ 1 year \$65 ☐ 6 mos. \$32.50

(International subscribers add \$20 per year)

☐ **Broadcasting Cablecasting Yearbook 1986**

The complete guide to radio, TV, cable and satellite facts and figures—\$90 (if payment with order \$80) **Billable orders** must be accompanied by com- pany business card or company purchase order. Off press April 1986. Please give street address for UPS delivery.

To order by MASTERCARD, VISA or CHOICE credit cards, phone toll free 800-638-SUBS

Name _____ ☐ Payment enclosed
Company _____ ☐ Bill me
Address _____ Home? Yes ☐ No ☐
City _____ State _____ Zip _____
Type of Business _____ Title/Position _____
Signature _____ Are you in cable TV operations: ☐ Yes
(required) ☐ No

For renewal or address change
place most recent label here

Group W Productions' Television Videotape Satellite Syndication Center, Pittsburgh, joins TPC Communications, Sewickly, Pa.-based production and tape duplication facility, as president and chief executive officer.

Nick Hudak, director of domestic sales, RCA Broadcast Systems Division, joins Sony Magnetic Products Co., Park Ridge, N.J., as VP, professional tape.

Dave Neff, design engineer, Contravez Goerz Corp., Pittsburgh, joins ITS Corp., McMurray Pa., as product manager, television broadcast products.

Bob Bergfeld, senior district manager, Missouri, Illinois and Iowa, Sony Video Communications, joins Lenco, Jackson, Mo., as national sales manager, television-radio broadcast division.

Albert Stem, director of operations and engineering, Chicago Teleport, United Video, named director of operational services.

Frank Lopez, lead technician, Copley/Colony Cablevision of Cypress, Calif., named chief technician.

Steve Barbour, senior account executive, WTVF(TV) Nashville, joins Cascom, special effects producer there, as director of sales.

Promotion and PR

Rosemary Amendola, manager, West Coast public relations, Showtime/The Movie Channel, New York, named director, West Coast public relations. **Joshua Sapan**, VP, consumer marketing, Showtime/TMC, named senior VP, marketing and creative services.

Christina Haselfeld, publicist, Arts & Entertainment Network, New York, named manager, publicity.

Brenda Antin, story editor, Motown Productions, named to newly created post of director of creative affairs.

Lockwood R. (Dick) Doty, VP, Washington Broadcast News, Washington, joins Audio TV Features, New York-based radio producer of public relations programing, as VP and director of operations for company's new Washington office.

Ronald Pottle, creative director, to VP, creative director, Brown Design and Promotion, Earl Palmer Brown Companies., Bethesda, Md. **Donald Ratliff**, VP, account supervisor, named VP, management supervisor, Brown Design and Promotion.

Joe Negri, art director, KMGH-TV Denver, named assistant promotion manager. **Lori Pate**, senior designer, KMGH-TV, succeeds Negri.

Michael Watt, from WTXN-TV Waterbury, Conn., joins WTIC-TV Hartford, Conn., as promotion manager.

Sandra Hammond, production coordinator, Praxis Media, Norwalk, Conn., communications consulting and production firm, named associate producer.

Richard Vanderwoude, controller, Centel, Chicago, named government relations director.

Allied Fields

Norman Brokaw, executive VP and member of board of directors, William Morris Agency, Los Angeles, and **Lou Weiss**, executive VP, worldwide head of television, and member of board of directors, William Morris, Los Angeles, named co-chairmen. They succeeded **Sam Weisbord**, chairman, who becomes chairman emeritus.



Taylor

Sheril Taylor, former VP, CBS Radio, and recently retired consultant to Bonneville International Corp., has formed Taylor Co., New York-based media consulting firm. Among Taylor's other Fifth Estate posts: VP, radio, National Association of Broadcasters; VP, director of sales administration, Radio Advertising Bureau, and radio-television senior group head, J. Walter Thompson, Chicago.

Bob Doyle, broadcast consultant to American Enterprise Institute and Wagner & Baroody Inc., public relations firm, both Washington, and former chief of television, National Geographic Society, and producer-director for NBC-TV and ABC-TV, joins Executive Television Workshop, Washington, as associate. ETW, comprising veteran broadcast news executives (with offices in New York, Washington, Detroit, Los Angeles and Fort Lauderdale, Fla.), trains business executives for media appearances.

Former FCC Commissioner **Robert E. Lee** has joined board of directors of United Broadcasting, Bethesda, Md.

Steven Bookshester, assistant general counsel and First Amendment attorney, National Association of Broadcasters, Washington, named associate general counsel and First Amendment attorney.

Frances Preston, senior VP, performing rights, Broadcast Music Inc., Nashville, named to newly created post of executive VP, chief operating officer, remaining based in Nashville.

Appointments, Frazier, Gross & Kadlec, Washington: **Timothy Pecaro**, director of development, research and preparation of asset appraisal reports for radio, television and cable, to VP, asset appraisals; **John Sanders**, senior financial analyst, to manager, asset appraisal group; **Andrew Gefen**, financial analyst, to senior financial analyst, asset appraisal group; **Achmad Chardan**, **Carlyn Liberman** and **Susan Howard**, research assistants, to junior financial analysts; **Lauren Butler** and **Julia Greene**, members of valuations group, to junior financial analysts.

Gene Jankowski, president, CBS/Broadcast Group, New York, named to board of directors, Georgetown University, Washington.

Frank Nowaczek, senior VP, Warner Amex Cable Communications, joins Paul S. Bachow Co., Philadelphia investment banking firm, as chief operating officer, cable television group.

John Koskinen, president and chief executive

officer, Victor Palmieri & Co., Washington management firm, named chairman of board of directors, National Captioning Institute. **Myron Curzan**, partner, Arnold & Porter Washington law firm, named member board of directors.

Deaths



Andre

John Andre, 60, sales manager, equipment and engineering, BROADCASTING magazine, Washington, died of complications following heart bypass operation March 21. George Washington University hospital, Washington. He had been with company most 15 years, having joined as Southern sales manager in November 1971. Before that he was with Sp Electronic Corp. as Eastern marketing manager, with Gates Radio Co. as regional sales manager for Florida and general sales manager, based in Washington. He had owned and operated radio stations in Florida. Andre is survived by his wife, Eve, son and daughter.

Jerry Paris, 60, television director and actor died of complications from brain tumor April 1 at Cedars-Sinai Medical Center, Los Angeles. Among his credits: continuing role 1959-1961 on *The Untouchables* (ABC); of Jerry Helper, next-door neighbor in *I Van Dyke Show* (1961-1966, CBS), for which he also directed numerous episodes and received directorial Emmy in 1964; director *Happy Days*, (1974-1984). He is survived by two sons and daughter.

George Walsh, 56, general sales manager, WTAJ-TV Altoona, Pa., died of heart attack April 1 at his home in Hollidaysburg, Pa. Walsh had been with station since 1981. Before that, he had been national sales manager, WTVH-TV Syracuse, N.Y., and in 1972-1973 VP and assistant general manager, WTMR-TV Camden, N.J. Walsh began his broadcasting career in 1951 as camera operator at WFIL (now WPVI-TV) Philadelphia, and remained with station for 21 years in variety of positions.

John J. Dougherty, 78, Catholic auxiliary bishop, teacher and television/radio show host, died March 20 in Teaneck, N.J. hospital of complications resulting from stroke. In 1946 he began hosting *The Catholic Hour* radio program, sponsored by National Council of Catholic Men, later moving to syndicated series to television. He also directed 1958 television special, *Eternal Roman art treasures of Vatican City*.

John Ciardi, 69, author, poet, etymology translator, who had been language commentator, *Morning Edition*, National Public Radio, Washington, since that program's debut in 1979, died of heart attack March 30 at home in Metuchen, N.J. Ciardi had also produced and hosted weekly etymology series NPR, *A Word in Your Ear*, from 1977-1979. He is survived by his wife, Judith and two sons.

Editorials

Bird of a feather

It's strange to feel both disquieted and comforted at the same time. Yet that's exactly our reaction after reading the speech Leonard Goldenson gave last Thursday to a Pace University dinner in New York. The thrust of his remarks: to question the current wave of unfriendly corporate takeovers and whether they have brought more to the American economy—and spirit—than they have taken away.

"We seem to have forgotten that the future depends on creating new ventures and expanding successful ones—and not on refinancing or dismembering those that already exist," he said. "We seem to be forgetting that, if it's cheaper to buy a company than start a new one, we will invest only in the past and mortgage the future."

Chairman Goldenson, who now heads the executive committee of Capital Cities/ABC Inc., may be forgiven if he exempted the friendly takeover of his own company from the broad brush with which he painted so much of the communications industry. For our part it is enough to have such distinguished company for our own uneasiness over the rash of leveraged buyouts, junk bond financing and what they used to call trafficking in broadcast licenses.

We commend Leonard Goldenson's torment (reported on page 35) to all who worry beyond the day's market closing, as we commend the role of "broadcaster" to all who happen upon this industry in their pursuit of commerce at large. As we've noted before, there's room enough in the Fifth Estate for all who would enlarge their horizons to take in public interest along with private gain.

Nitpicking

For a moment, RKO General and sympathetic onlookers thought a sensible, if imaginative, plan had been devised to end RKO's 20-year defense of its license for KHJ-TV Los Angeles and deliver the station to Westinghouse Broadcasting, a licensee of unimpeachable credentials. That plan is now challenged by the FCC's Mass Media Bureau, which says the transfer would violate the Communications Act and FCC rules.

Westinghouse lawyers disagreed. They read the act and the rules to permit, indeed favor, the delivery of KHJ-TV to their employer.

When lawyers are at odds, this page is disinclined to volunteer its amateur reading of the law. But quite apart from whatever legal niceties may be at issue here, common equities and the public interest weigh in on the Westinghouse side.

Granted, it is an intricate process that the parties have crafted in their efforts to comply with provisions of the law and rules that are intended to discourage challengers from going after licensees in pursuit of big-money settlements and to prevent challenged licensees from selling out of their predicaments at large capital gains. The same law and rules state that settlements must also serve the public interest.

At the outset, it cannot be assumed that Fidelity has pursued its quest for channel 9 for 20 years in the expectation of any settlement. The \$95 million it is to get from Westinghouse no doubt exceeds its expenses, but the agreement will hardly induce others to initiate challenges on the slim chance of settlement 20 years hence.

The \$212 million RKO is to get from Westinghouse would have been an eye-catching price if paid, say, 10 years ago. The

last independent TV to be sold in Los Angeles, KTLA(TV) to Tribune Co. last year, went for \$510 million. Nor has RKO solved its problems at the FCC. It has 13 other broadcast licenses under attack by about a hundred challengers. Lawyers yet unborn will be put through school on the proceeds.

As for the public's interest, it is obvious: The Westinghouse Broadcasting record is among the best in the Fifth Estate. The Mass Media Bureau has read the law through a magnifying glass. The FCC ought to take a broader view.

Digits squared

The activity in engineering circles these days is dizzying to the eye. This issue alone exemplifies that truth, not only with the pages dedicated to anticipation of the National Association of Broadcasters convention but with the "At Large" with CBS's Joseph Flaherty on the subject of high-definition television and the "Top of the Week" story concerning the deal between Ampex and Sony on digital tape recorders and the Betacam half-inch camera.

Terribly technical, you say. Central to television's tomorrow, we respond. The high-definition developments, particularly, attract our attention, in that they deal with where the medium will be at the turn of the century and beyond. The grave possibility, if not probability, is that the effort to achieve a world standard in HDTV may founder in the face of European opposition to the further electronic advance of the Japanese. Our own vote is with the pioneers, who have devised a system that represents several quantum leaps beyond today's television, at their own formidable expense (and risk), while the rest of the world was content either to sit back or carp.

The Ampex-Sony developments are even more difficult to assess. First, remember that the world's engineering community succeeded after great effort in achieving four standards for digital television (an effort not yet duplicated in HDTV). Then consider that Ampex, a leader of the American industry that was instrumental in forging the digital standard, has now decided to abrogate it in favor of a composite system (the standard is component) that it feels has greater immediate market potential. To that add Sony, which initially stood on the side of the standard, now agreeing to market a nonstandard machine alongside Ampex while Ampex agrees to license Sony's Betacam technology, thus marshaling a formidable challenge to Matsushita's M-II.

We're losing you. Well, before you go, just remember that there's a lot going on in the world of broadcast technology, and that, as usual, the engineers are leading the way. For better or worse, they bear watching.



Drawn for BROADCASTING by Jack Schmidt
"The boss made it pretty clear, Tom. Get your ratings up or you're out."

CA's George Brown: Technology trailblazer

George Harold Brown is 77 years old and well into retirement, but his wit is as keen as his opinions as frank as they were during his preeminent career in broadcast engineering. Asked recently about his upcoming receipt of the National Association of Broadcasters' highest engineering honor, the Engineering Achievement Award, in Dallas next week, Brown said: "They must have a lot of eligible engineers."

Unlikely. And if Brown is just the slightest bit reticent about his accomplishments—including his pioneering work on AM and television transmission and standardization, not to mention 80 U.S. patents, in his long service at RCA—others are not.

According to NAB's senior vice president of science and technology, Tom Keller, who helped select Brown for the association's lifetime achievement award, Brown "wrote the book on AM antennas; we still use it today."

Brown, by his own account, displayed an early affinity for electronics. Born in 1908 in Portage, Wis., where his father was a train dispatcher, Brown tinkered with radios and experimented with installing radio receiving antennas. Later, at the University of Wisconsin in Madison at the end of the 1920's, Brown's youthful interests blossomed into a fledgling fascination with the new medium, and even before he earned his PhD in 1933, he had begun picking up part-time work on nearby radio station transmission facilities.

In 1933, just months out of school and a year into his half-century-long marriage, Brown took his first job with RCA as a research engineer. Within a year he was appointed research head of the group working on antennas and wave propagation. During the next five years Brown published his best-known work, a series of still-definitive treatises on AM directional antennas.

Although Brown left RCA in 1937 for a short-lived consulting practice, he was back within several months, bringing his expertise to the relatively new field of television. In the late 1930's, he was involved in RCA's earliest TV transmission projects, sharing a patent on a transmitter built by RCA for CBS, taking part in the design of the television transmitting antenna used for RCA's pioneering television service with NBC in 1939 and, during the latter effort, developing with his colleagues a new type of transmission filter (called vestigial sideband) that a basic design still used in all TV transmitters.

Delays in the advent of television turned Brown temporarily to other applications of radio frequency energy, such as processing penicillin and heating of rayon fibers, culminating in a book, with two colleagues, on heating.



GEORGE HAROLD BROWN—Retired research and engineering executive, RCA Corp.; b. Oct. 14, 1908, Portage, Wis.; BS, electrical engineering, 1930; MS, electrical engineering, 1931, and PhD, electrical engineering, 1933, all University of Wisconsin, Madison; research engineer, RCA Laboratories, Camden and Princeton, N.J., 1933-1952; director, Systems Research Laboratory, Princeton, 1952-1957; chief engineer, Commercial Electronic Products Division, Camden, 1957-1959; vice president, engineering, RCA Corp., Princeton, 1959-1961; vice president, research and engineering, RCA Corp., Princeton, 1961-1965; executive vice president, research and engineering, RCA Corp., Princeton, 1965-1968; executive vice president, patents and licensing, RCA Corp., Princeton, 1968-1972; member, board of directors, RCA Corp., Princeton, 1965-1972; retired, 1972; m. Elizabeth Ward, Dec. 26, 1932; children—James and George Jr., both 52.

But after World War II, television was at the fore again, and with it emerged the battle between RCA and CBS over the FCC's selection of a color television system. During the eight months of hearings in 1949-1950, RCA turned to Brown as a key technical witness, and it was Brown who led the effort to provide an NBC color showcase for the FCC by converting the network's Washington television station, WNBW(TV) (now WRC-TV), to color.

After the FCC selection of the now-defunct CBS color system and color TV's fall into temporary disuse, Brown took a major part in the mid-1950's effort to resuscitate the service through development of a color system that would be compatible with black-and-white. He was active on the industry's National Television Systems Committee (the NTSC after which the U.S.'s current television system is named and whose color system is based in large part on RCA developments). He also played an important role in the complex, but ultimately fruitless, efforts to standardize color television internationally in the 1960's.

Brown has spent much of his retirement traveling in Europe ("after 35 trips to London, you quit counting"), taking on speaking engagements and writing his 342-page autobiography, *And Part of Which I Was*. Published in 1982, the book chronicles the early days of radio and TV engineering, battles over color TV standards and what Brown views as the poor business decisions RCA made in the 1960's and 1970's.

He still has much to say about the industry, past and present. Despite Brown's lifelong involvement in television, he can "hardly stand looking at TV nowadays" and admits only to having a "tiny" AM radio in his kitchen. Describing his attitude toward the medium which he had a hand in making possible, Brown wrote in his autobiography of being "proud of the part that my colleagues and I have played in creating this giant industry," adding: "I am equally chagrined when I view the depths to which the average program has sunk. Most of the aberrations of good taste would be better viewed, not in color or in black and white, but just in plain black."

Brown is short on hero worship too. Recalling long-time RCA leader David Sarnoff, Brown said: "He was not involved in technical decisions. But he thought he was. Once you caught his attention, he got the [development] money for you. But with NTSC, for example, he said: 'Be sure we get a system that works.' Those were his only instructions to me."

Of RCA Broadcast's glory days, Brown comments, "We were leaders; there was no question we were innovators. There also weren't others as concentrated in that area." A key factor in that leadership, Brown remembered, was Irving Baker, then RCA Broadcast Equipment Division manager, who, he said, "created a team of sales engineers. He insisted every salesman had to be an engineer. They really knew the field."

Last year's demise of RCA's Broadcast Systems Division was clearly a disappointment to Brown. This year, when Brown is to accept his award from NAB, will be the first the company will have no major presence at the association's convention. "What at one time was the highest profit maker in the company was ruined by sheer stupidity," says Brown.

Reminded of growing Japanese predominance in electronics, Brown notes, "We lulled ourselves. For years it was fashionable to say they copied everything."

An RCA board member for seven years before his retirement in 1972, Brown also takes a dim view of RCA's recent merger with General Electric. "GE has had broadcast businesses in the past and never did well," he explained. "This is their second chance to fail." Brown added: "Welch [John Welch, GE chairman] is out to make money and does not have sentiments about it...RCA will disappear."

CBS will premiere *Bridge to Cross*, starring Suzanne Pleshette in preview episode on Thursday, April 24, 10-11. Pleshette plays Tracy Bridges, reporter for weekly newsmagazine, *World/Week*, in Washington. Series will join schedule on May 1, at 9-10 p.m., replacing *Simon & Simon*, which will move to 8-9 p.m. beginning that night. *Magnum P.I.* will move from 8-9 p.m. on Thursdays to 10-11 p.m. on Saturdays, beginning May 3. On Friday, April 25, 8:30-9 p.m., *Leo & Liz in Beverly Hills*, starring Harvey Korman and Valerie Perrine, will premiere. Produced by Steve Martin and Carl Gottlieb, series follows adventures of New Jersey couple new to Beverly Hills. CBS also said *Charlie & Company* will return to schedule in original episodes beginning Friday, April 25, 8-8:30 p.m.; *Mickey Spillane's Mike Hammer* on Tuesday 9-10 p.m. beginning April 22 in repeats through May 6, and *Airwolf* will air in repeats, beginning Saturday, May 3, 9-10 p.m.

NBC renewed total of seven series for 1986-87 season, including five sitcoms and two dramas. Shows renewed are *The Cosby Show*, *Golden Girls*, *Family Ties*, *Night Court*, *Cheers*, *Highway to Heaven* and *St. Elsewhere*. NBC also has second season to go on its two-season order of *Amazing Stories*.

CBS Continental Broadcasting Network Inc., has announced it is selling its three TV stations, WXNE-TV Boston, KXTX-TV Dallas and WYAH-TV Norfolk, Va. CBN engaged Communications Equity Associates to accept bids for stations and act as investment banker for sale. Notice will be sent to all major independent TV groups, said CEA VP, Kent Phillips, with bids for auction due by June 4. Brokers canvassed by BROADCASTING said stations should sell for **\$80 million-\$85 million**. Though two stations are in major markets, they felt they would not bring as much as other indies in those

market, because of their religious formats and relatively small advertiser base. Boston, in particular, was described as difficult indie market. WXNE-TV (ch. 25) was reported to have lost over a million last year. Brokers estimated its price to be between \$10 million and \$20 million, but said CBN was reportedly asking \$25 million. Dallas station, KXTX-TV (ch. 39), was estimated at \$10 million-\$50 million. WYAH-TV Norfolk (ch. 27), where CBN's headquarters are located, was put at between \$8 million and \$10 million. Announcement came amid published reports that CBN president, Pat Robertson, had announced lay-offs and cancellation of toll-free 700 Club phone lines due to declining contributions. However, CBN spokesman Benton Miller said that donations were down, but only up 7% instead of projected 22%. He said 41 employees were laid off, 14 who were already looking for new jobs. March 28 cancellation of *CBN News Tonight*, with remaining janitorial and grounds crew employees. "Less than one-half of the 2,777 employees were let go," said Miller.

Staff cuts at Capital Cities/ABC will extend to former ABC O&Es including WABC-TV New York, KABC-TV Los Angeles and WLS-TV Chicago. Stations are being asked to reduce staffing levels, bringing them more in line with those at stations held by Capcities before merger, such as WPVI-TV Philadelphia. WABC-TV, for example, currently has more than 300 employees. WPVI-TV, by comparison, has total of 190 staffers.

CBS has signed former NBC affiliate KMTV-TV (ch. 3) Omaha, Neb. (ch. 3), for its new affiliate, replacing WOWT-TV (ch. 6) which announced it was affiliating with NBC two weeks ago (BROADCASTING, March 17). Also, independent KSPR-TV (ch. 33) Springfield, Ill., will become ABC affiliate next fall, replacing KMTC-TV (ch. 27). It is owned by Lorimar-Telepictures; KMTC is principally owned by Charles Woods.

ABC Monday Night Football will begin 17th season on Monday, April 8, with game featuring New York Giants and Dallas Cowboys at Dallas. In addition to slate of 16 Monday games, network will have five other prime time football telecasts, including three Thursday night games, and one each on Friday and Sunday. Still no confirmation from network that plans are in works to ax two of last year's MNF commentators, Joe Namath and O.J. Simpson, and to let Al Michaels as play by play and switch Frank Gifford to analyst.

Scientific-Atlanta said earnings for fiscal quarter ending March 31 "will not maintain the positive year-to-year comparisons of last year." Therefore, full-year results will also be adversely affected. In response to statement, issued March 24, price of stock (NYSE: SFA) dropped from 13 3/4 close of previous day to \$11. Company attributed earnings difficulty to expenses incurred in anticipation of certain revenue that did not materialize: "Among other factors, a severe downturn in sales of home satellite terminals in the quarter has resulted from the current confusion on the issue of scrambling." Another company involved in home earth station marketing also indicated problems with business. M/A-COM Inc. reported anticipated loss of \$45 million to \$55 million in second quarter. Among reasons company indicated for losses were other marketers' price reductions for earth stations as well as entry of foreign producers into market. Company also acknowledged some confusion caused by scrambling. M/A-COM has hired Salomon Brothers to help in corporate restructuring, with possibility that certain of its home communications operations might be discontinued.

LBS Communications welcomed entry of A.C. Nielsen company (Auditors of Great Britain), into audience measurement business last week. LBS announcement qualified support with that evaluation of AGB People Meter is still under technical review. AGB has now signed six agencies national service—Y & Rubicam, BBDO, Ted Bates, Grey Advertising, D'Arcy Mullen & Bowles and N W Ayer.

Scrambling matter. In opinion of Register of Copyrights Ralph Oman, once satellite signals of cable superstations are scrambled, superstations' satellite carriers may not, under copyright laws, charge owners of home earth stations to descramble and receive them. In letter responding to query from House Copyright Subcommittee Chairman Robert Kastenmeier (D-Wis.), Oman also suggested that resale carriers may not even scramble superstations' satellite signals.

Under Copyright Act of 1976, carriers may distribute television broadcast signals to cable systems without incurring copyright liability as long as they don't control who receives signals or go beyond merely providing "wires, cable or other communications for the use by others."

A carrier that gets into business of selling scrambled feeds to dish owners voids copyright exemption, Oman said. "In selling or renting descrambling devices to some earth station owners, the carriers would appear to exercise control over the recipients of the programming. This result seems especially clear where the carrier both encrypts the signal and then purports to provide access through descrambling devices. But for the encryption, the satellite dish owners would be able to receive the signal on their own equipment. The carrier therefore controls who may receive the signal. Moreover, since licensing of descrambling devices would appear to be far more sophisticated and active function than the passive function of merely providing 'wires, cable, or other communications channels,' even those carriers who seek to license signals encrypted by someone else would lose their... exemption."

Partly in response to Oman's letter, attorneys for United Video, resale carrier of WGN-TV Chicago, sent letter to Kastenmeier's staff, challenging Oman's suggestion that carriers cannot scramble signals without losing their copyright exemption. Scrambling would not jeopardize carriers exemption, attorney David Silverman said in the letter. "Scrambling does not constitute a copyright-significant exercise of control of either the content of the primary transmission or over the particular recipients of the transmission," he said.

GO WITH THE WINNERS.

DYNAMAX CTR100 SERIES

*"The intelligent design
and on-air reliability of the
Dynamax CTR100 Series
give our stations a compet-
itive edge. We've purchased
about 60 machines and plan
to add more."*

Scott Knight

President

Knight Quality Group Stations



DYNAMAX®
BROADCAST PRODUCTS BY FIDELIPAC®

Fidelipac Corporation ☐ P.O. Box 808
☐ Moorestown, NJ 08057 ☐ U.S.A.
609-235-3900 ☐ TELEX: 710-897-0254
☐ Toll Free 800-HOT TAPE

See us at NAB for our special offer -- Booth 3092

Dependable VHF Transmitters from a Dependable Source. NEC.

The PCN-1400 Series transmitters feature high performance exciters, high power transmitter amplifiers, superior reliability, excellent stability with power ranges of 1 to 35kW, in band I to band III. 100% solid state to 10kW; only one tube to 35kW. A 30% reduction in exciter parts means you get a 50% increase in MTBF—30,000 hours. It's ready for stereo without modification. NEC is a leader in today's transmitter industry, with over 1400 installations worldwide. Each one carries NEC's commitment to excellence. For today, and tomorrow.

NEC

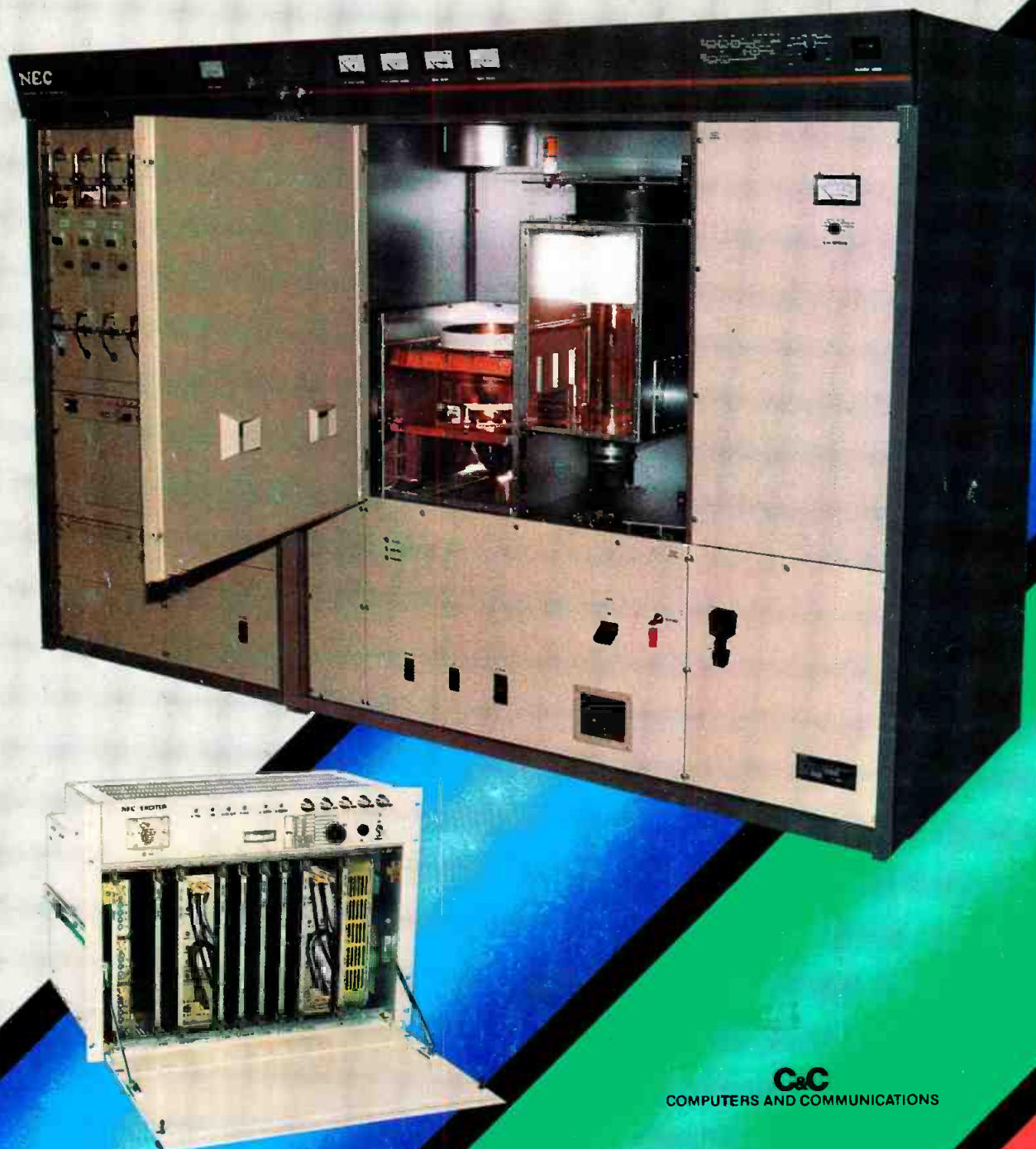
IMAGINE WHAT WE'LL DO FOR YOU

NEC AMERICA, INC., Broadcast Equipment Division
130 Martin Lane, Elk Grove Village, IL 60007
Phone 312-640-3792

See us at NAB Booth 3161

APR 8 1986

Air University Library
Maxwell AFB, Ala.



C&C

COMPUTERS AND COMMUNICATIONS