The LPTV Report

News and Strategies for Community Television Broadcasting

Vol. 4. Issue 4

A Kompas/Biel Publication

April 1989

An NAB Walk-Through The LPTV Broadcaster's Guide To The 1989 NAB Exhibit Floor



Crowds throng the aisles at NAB 1988.

Baton Rouge's WKG-TV: The Little Station That Can!

-by Louis (Woody) Jenkins

1989 has been a great year for WKG-TV, a group of five community television stations that simulcast over Baton Rouge, LA, the nation's 91st TV market and the largest market in the country without a full power independent. Although our broadcasts have been reaching only two of the thirteen parishes (or counties) in the ADI, and though we have been carried on only a handful of cable systems in a market with a 63% cable penetration, we have enjoyed a number of victories:

• WKG-TV gave its best performance yet in Arbitron's February audience estimates for the Baton Rouge market. Since signing on the air some nineteen months ago, we have earned numbers in six consecutive ratings books. In the February book, we earned higher ratings than did Baton Rouge's excellent full-power public television station in almost every major time period. We also beat most of the cable networks-CNN, CBN, HBO, Disney, ESPN and the rest-in the entire ADI in most time periods.

continued on page 7

—by Jacquelyn Biel

The annual National Association of Broadcasters' Convention is the showcase for manufacturers of television and radio equipment who market in the United States. It is here that new products are unveiled and improvements to existing lines are introduced to broadcasters from around the country. Virtually every equipment buyer window shops at NAB, and hundreds of deals are made here every year. In fact, the Convention has grown so big that the only city in the country able to handle it is Las Vegas.

So if you're attending for the first time, don't be surprised if you feel somewhat overwhelmed by the whole thing. We still do, and we've been at this a while!

To help you home in on at least some of the exhibits that you might find useful, we asked the manufacturers on our mailing lists to tell us what they'll be showing for LPTV broadcasters. Following, in alphabetical order, are the companies who responded.

By the way...don't forget to mark your calendar for the Community Broadcasters Association LPTV meeting. It will be held Saturday, April 29 at 5 p.m. in Room B-1 of the Convention Center. Everyone interested in LPTV is invited. And please stay for cocktails and hors d'oeuvres, courtesy of EMCEE Broadcast Products and Capitol Television Network, starting at 6:30.

continued on page 14

HALSTAD , MM 56548-0056 99 XO8 °0°d ERED MC CORMACK DESIGN ENG HASTAD ENGINEERING COMPANY WCCO-0388-0488-0380

21009 Mew Richmond, Wi Permit No. 16 **GIA9** U.S. POSTAGE

BULK RATE

ADDRESS CORRECTION REQUESTED

Milwaukee, Wisconsin 53225-0510

P.O. Box 25510 LPTV Report

WorldRadioHistory

PROGRAMMING 800-521-86

2025 Royal Lane, Suite 300 Dallas, Texas 75229 (800) 521-8683 (214) 243-2290

Circle (110) on ACTION CARD

While Vanna's turning letters, your viewers could be playing for their own fortunes on *The Name Game*, the hot new interactive game show from Channel America. Viewers play for fabulous prizes, including cameras, TVs, vacations and more.

They'll match videos on the show with free game cards we provide, like the one inserted in this magazine.

If you're an LPTV operator, you can add Channel America's great lineup of other new programs too, such as *Runway Club*, *Kennel Club* and breathtaking *Jai Alai*.

To beat Vanna with an exciting game show of your own, call. Channel America gets viewers involved.



24 West 57 Street, Suite 804, New York, NY 10019 1-212-262-5353

Void where prohibited by law



In Our View

This year marks the 67th Annual Convention of the National Association of Broadcasters. The convention theme, "On the Air: Proud Tradition—Dynamic Future," celebrates what has been and what is yet to be in a communications medium that has affected human life on this planet in a manner comparable to only the printing press, or the invention of written language.

Among those to be honored at this year's convention are 108 television stations that began broadcasting in the forties. Artists, innovators, risk-takers—these television entrepreneurs introduced the new medium to the American people and explored its possibilities for not only informing and entertaining, but also greatly shaping, our culture.

Now television has matured. New delivery systems—cable, consumer videotape, satellite, fiber optics—have brought television signals in abundance to the most remote and isolated areas of the country. Programming choices have multiplied in response to the new outlets.

Like the print media, like the food and clothing industries, like automobiles or nail polishes or magazines or ice cream, television has fractionalized. It has become discrete.

Our television—Community Television—is the natural and inevitable product of television's history. Thanks to our full power brothers, we do not have to satisfy millions of people at the same time. We are not limited by the need to speak only to widely common beliefs and attitudes. Instead, we can concentrate on the needs of the few. We can serve the interests of the small and personal. We are flexible and quick on our feet.

We are the new television entrepreneurs. We deliver the community to itself. We mirror the viewers we serve. We have a new response.

It was the mission of 108 pioneers to bring television to the masses. It is ours to bring television to the individual.

Jarhie Kiel

The LPTV Report

5235 North 124th St., Suite 22 Butler, WI 53007 (414) 781-0188

Finance and Treasurer

John Kompas, *Publisher*Jacquelyn Biel, *Editor*Colette Carey, *Reporter*Barbara Barr, *Administrative Assistant*Heather Kompas

Kompas/Biel & Associates, Inc.

S.E. Bradt, Chairman of the Board
John Kompas, President and
Chief Executive Officer
Jacquelyn Biel, Executive Vice President and
Secretary
Richard P. Wiederhold. Vice President—

Columnists: John H. Battison, P.E., Bob Horner, Peter Tannenwald, Lance Webster, Richard P. Wiederhold Guest Contributors: Ernest Hickin, Louis (Woody) Jenkins

Advertising Sales:

Kompas/Biel & Associates, Inc. P.O. Box 25510 Milwaukee, WI 53225-0510 (414) 781-0188

Affiliations: **CBA** The LPTV Report is the official information channel of the Community Broadcasters Association.

The LPTV Report, ISSN 0892-5585, is published monthly by Kompas/Biel & Associates, Inc., 5235 124th Street, Suite 22, Butler, WI 53007, or P.O. Box 25510, Milwaukee, WI 53225-0510. Copyright 1988 by Kompas/Biel & Associates, Inc. All rights reserved.

Subscription price: 1 year, \$25.00; 2 years, \$45.00. Outside USA: 1 year, \$31.00; 2 years, \$57.00. Back Issues: \$3.00 each. POSTMASTER: Please send address changes to: The LPTV Report, P.O. Box 25510, Milwaukee, WI 53225-0510.

806 LPTV Applications Filed In March Window

Slightly more than 800 LPTV and TV translator applications were filed during the March 6-10 window, said Keith Larson, chief of the Federal Communications Commission's LPTV Branch. The exact number was not yet available from the FCC, which was relying on a preliminary total of 806 applications provided by the Mellon Bank in Pittsburgh where the applications were filed.

"This number shows continued interest in the |LPTV| service," said Larson. "It's a manageable number. The LPTV Branch is capable of processing that number quickly enough so that we could open another window in the fall." But, Larson acknowledged, another window will depend largely on factors outside his control, such as the FCC's budget.

BON MOT

When a man builds, he can't hide. You know what, who, and how that man is.

Frank Lloyd Wright



Circle (135) on ACTION CARD

More and more people are lining up for the Panasonic SVHS Pro Series.

One look is all it takes. And you'll see why more and more people are lining up for the Panasonic® SVHS Pro Series. Because anyone in the market for a high-quality professional video production system, simply can't afford not to look at what the Pro Series can do for them.

Take Cost-Performance. The Panasonic SVHS Pro Series delivers both. By combining the efficiency and systems flexibility of half-inch technology with the exceptional performance of Y/C component signal processing.

The result. A comprehensive video production system that provides two hours of operation on a single cassette. With over 400 lines of horizontal resolution. And signal integrity through five generations.

By now it should be obvious. The closer you look and the more you compare the Pro Series to historical video formats, the sooner you'll line up for the Pro Series. As a Panasonic SVHS Pro Series user, you'll have direct access to Panasonic's nationwide network of engineering, service and technical support specialists. And with over 300 professionally trained dealers, many of whom are self servicing, you'll always get the most out of your Pro Series equipment.

Finally, a professional video format more and more people are lining up for. The Panasonic SVHS Pro Series.

For more information and your local dealer, call your nearest regional office.

Eastern Zone: (201) 348-7620 • Central Zone: (312) 981-4826 Southern Zone:

Dallas Region: (817) 685-1122 • Atlanta Region: (404) 925-6837 Western Zone:

Seattle Region: (206) 285-8883 • Los Angeles Region: (714) 373-7275





Our Readers' Comments

We operate three UHF LPTV's in a small ADI of about 27,000 homes. We sell spots between 7 and 11 p.m. [at] \$15 to \$18 per 30 seconds. We sweeten that by throwing in "bonus spots" for the regulars. None of the amounts are big, but the accounts are—for example, Proctor and Gamble. In fact, we are probably the only station in the country that has more national spots than local ones.

We also run some free lance "vanity" programming, but only before 7 p.m. and only on weekends. For this, we charge \$15 for thirty minutes or \$25 per hour. We get regulars and one-time specials—even some family vacations.

I would like to get some feedback from other broadcasters on the performance of their Super VHS equipment.

D. W. Strahan K51BG, K53CZ, K55CP Victoria, TX

We subscribe to The LPTV Report, belong to the CBA, are affiliated with Channel America Television Network, and currently own three CP's for LPTV's here in

Our company has been involved with this pioneering industry since 1982, and during that time I've seen countless networks come and go, have built, owned, operated, and then sold the first LPTV in the State of Hawaii, been through two FCC attorneys, three associations, three engineers, four lotteries, five equipment leasing companies, and more bottles of aspirin than I care to remember!

Through all of this, I've come to the conclusion that only the brave need apply for this line of work. I've also come to the conclusion that there is no other industry as promising as LPTV, and that if we stick together, we have the ability to launch one of the most powerful forces of communication in this country.

Also, I think there are issues screaming to be addressed that ultimately affect all of us...such as the need for national recognition of our industry (most people in this country have no idea that this sleeping giant we call LPTV is about to emerge in their communities); political recognition and the realization among our Congressional representatives of what they have to gain by utilizing us in communicating with their constituents; and, perhaps most important, advertiser recognition and their acceptance of us (on both the local and the national level) as a viable and effective advertising medium. Of course, there are other major concerns facing all of us as well—financing, cable carriage, programming, networking, engineering-to name just a few.

Thank you for providing a publication through which we can keep in touch with each other and find out what's going on in our industry.

Cherie Erwin Scala

Erwin Scala Broadcasting Corporation Arroyo Grande, CA

Your editorial in the February 1989 issue is a good one. As a former broadcaster and broadcast and marketing consultant, I can appreciate the concerns of local LPTV stations about high definition television.

However, the stance and recommendation of the NAB and the concerns of a segment of the television industry remind me of the numerous "tempests in a teapot" that have graced the industry since it began to grow up in the 50's...e.g., the politically-oriented payola scandals of

the late 50's (that turned ratings upside down for a while), the beginnings of cable in the late 60's and early 70's (and how it struggled with the entrenched powers of broadcasting), the technological advances of the 70's and 80's (tape formats, stereo, etc.) and the concerns about a diminishing reach and influence.... Yet television lives and prospers in spite of these temporary aberrations and is better and more effective because of them all.

LPTV serves a distinct economic and social purpose in Jour society.... People will continue to buy television sets without HDTV in spite of the economic posture...of our manufacturing system. People will continue to watch [television] with the best reception they can afford—and it will be increasingly difficult to continue to satisfy our personal wants and family needs in the face of inflation and still take advantage of the latest "sales pitch."

You say it best: "Is a better picture really worth no picture at all?" It's simple economics; the law of demand will affect the viability of HDTV.

Richard L. Burns

Director, Marketing and Development The Latham Foundation Alameda, CA

After reading the article, "A Shopper's Guide to S-VHS Equipment," in the February 1989 issue of The LPTV Report, I felt that I should bring to your attention that Prime Image, inc. (unmentioned in the article) manufactures the broadest line of S-VHS equipment in the industry.

Prime Image, inc. manufactures four types of S-VHS time base correctors and synchronizers, both with and without digital effects, as well as four types of transcoding time base correctors and synchronizers, both with and without effects (transcoding to all formats). Prime Image, inc. also manufactures the only true component/transcoding production switchers in the industry.

William B. Hendershot, III President Prime Image, inc. Saratoga, CA

Enjoyed your remarks in the February "In Our View." Nice!

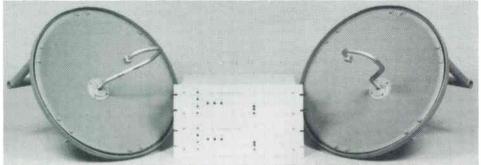
But what the heck is a "grackle"? A midwest creature? No one here knows.

Lee Shoblom

London Bridge Broadcasting, Inc. Lake Havasu City, AZ

A grackle is a type of blackbird-very sassy and noisy-and common in the northern states east of the Rockies.

BIDIRECTIONAL Microwave Systems



Broadcast STL \$10,846.40

Broadcast Portable \$9,246.40

DIVERSIFIED MARKETING

3918 W. Clearwater Kennewick, WA 99336 (509) 735-6812

Circle (115) on ACTION CARD WorldRadioHistory

SCALA ANTENNA SYSTEMS

VHF-TV AND UHF-TV ARRAYS ENGINEERED TO MEET YOUR EXACT REQUIREMENTS

SCALA BROADCAST AND COMMUNICATIONS ANTENNAS HAVE BEEN THE CHOICE OF PROFESSIONALS WORLDWIDE FOR MORE THAN 25 YEARS.

FOR QUALITY, RELIABILITY AND MAXIMUM PERFORMANCE, SPECIFY SCALA!!

CALL OR WRITE FOR OUR CATALOG

SCALA ELECTRONIC CORPORATION

POST OFFICE BOX 4580

MEDFORD, OREGON 97501

TELEPHONE: (503) 779-6500 TELEX: 151681

Circle (133) on ACTION CARD

WKG-TV 19

continued from front page

- Even more significant, we were competitive with the 5-million-watt NBC affiliate in Baton Rouge in every weekday daypart, except prime time and late night. In fact, we out-performed the NBC affiliate in one entire daypart—7 to 9 a.m., Monday through Friday—where we received a 2 rating/8 share while they earned a 2 rating/7 share in the Baton Rouge Metro. In our home parish, we beat the NBC affiliate in dozens of time periods.
- WKG-TV continued its dominance of the weekday kids' market, earning higher kids' ratings than the ABC, CBS or NBC affiliates in the entire Baton Rouge ADI from 3:30 to 6 p.m. We earned a 5 rating with children aged 6 to 11 with "The Jetsons" at 4 p.m. Monday through Friday, a 6 rating with "Alvin and the Chipmunks" at 4:30 p.m., and a 4 rating with "Duck-Tales" at 5 p.m. Kids ratings of 7 and 8 were common on many weekday afternoons.
- Overall, our numbers ranged from a 1 rating/1 share at 7 p.m. Saturdays to a 3 rating/8 share in certain weekday afternoon time periods. From sign-on to signoff, WKG-TV received a 1 rating/2 share in the Baton Rouge Metro.
 - Perhaps most important of all, the

largest cable system in our area, Baton Rouge Cablevision, a United Artists company, recently announced that on May 15 they will be adding WKG-TV to their basic cable line-up. Four smaller cable systems will also be joining our cable family by early summer. These five cable systems will increase our cable coverage from 16,000 homes at present to 105,000 homes by July 1.

We are pleased with the numbers we've earned in the ratings, especially considering our limited coverage area and lack of substantial cable carriage. To improve our signal in our home parish, we put four additional community stations on the air— Channels 7, 13, 39 and 65—all of which serve as translators for our primary signal, Channel 19. The addition of 89,000 cable households will help us enormously, and we expect to at least double ratings in the July 1989 sweeps.

Our Dream: Family Television

From the beginning, we had a dream, and a plan for success. Our dream was to provide wholesome, family entertainment to the people of the Baton Rouge community. We wanted to create an exciting, marketable alternative to the fare offered by the three major networks.

Frankly, I was tired of watching the con-

stant flow of "adult" situations and offcolor humor that pass for entertainment on the networks. If nobody was going to make television safe for my family to watch—then I would. And with 25 years' experience in radio, television, newspaper, and public relations, I felt prepared for the task.

Today, nineteen months and many dollars later, our dream is coming true. But it hasn't been an easy road. We're doing some things that have never been done before, and we've had to learn most of our lessons the hard way. There was simply no model to follow.

In August 1985, we began negotiating to purchase a construction permit for channel 49 in Baton Rouge. A year and a half later, we finally had the CP in hand. In June 1987, we did a test broadcast from our transmitter atop One American Place, a tall office building in downtown Baton Rouge, to our business office three miles away. There was so much excitement among our new staff that you would have thought we were helping Bell invent the telephone!

By August, we had signed on the air with a flurry of publicity and advertising. We bought full-page ads in the daily newspaper, ran display ads on the TV page, advertised on radio, and sponsored



Tammy Trahan and Woody Jenkins of WKG-TV.

one promotion after another. One of the network affiliates did a news story on us that started with, "There's good news for Baton Rouge. A new television station signed on the air...."

The Competition Was in Stitches

But most of our competition just laughed. How could a "low power" station with no access to cable hope to survive in the highly competitive Baton Rouge market, which hadn't had a new station in 20 years?

Our competitors are big guys with big money. One of the local affiliates has 150 employees, including 60 people on the news staff alone. But what most of the competition didn't understand then, and still doesn't, is that we are playing to win. And right now, we're just warming up.

Fortunately, after we signed on, the general public didn't listen to the competition. They liked what we were doing. In fact, during our first two weeks on the air, we received more than 4,000 calls and letters from happy viewers commending us for providing an alternative and asking for copies of our program guide, an eightpage tabloid newspaper called the "Family TV Program Guide." People in Baton Rouge were hungry for an independent station. They wanted good movies, syndicated programs, sports, and children shows. And we were determined to satisfy them.

At the same time, the advertising market in Baton Rouge was ripe for an independent station. Spot sales in the market had topped \$30 million the previous year, indicating that an independent station could be profitable.

Programming Is The Foundation

Clearly our strong point at WKG-TV has been programming. Tammy Trahan, our

program director and assistant general manager, is an outstanding negotiator who has broken new ground in programming, not only for WKG-TV but for all community television stations.

We joined the National Association of Television Program Executives and attended our first NATPE convention in January 1987, seven months before sign-on. Wow, what an event! We went from exhibit to exhibit, pretending we knew what we were talking about (we didn't!) and hoping that no one would figure out that we were an LPTV station.

A couple of syndicators did figure out that we were LPTV, and physically threw us out of their exhibits. "We don't deal with low power!" they snarled. But, eventually, a few began to warm up. Baton Rouge is an important market, and they needed access. Our situation was unique, and the more they found out about us, the more they wanted to do business. One by one, we secured the Baton Rouge rights for every major show we wanted.

Since 1987, we have signed barter and cash deals with more than fifty major studios and syndicators, including 20th Century Fox, Warner Brothers, Viacom, Turner, Samuel Goldwyn, Buena Vista, and Republic. When we started, most of the doors were closed to us. But today almost all of them are open.

People in Baton Rouge love movies. and we run a three or four-star movie at 8 p.m. every night. Today, we have exclusive market rights to more than 700 movies. including many blockbusters like South Pacific and Oklahoma. We also own a couple of public domain movie packages, which we run late at night or at mid-day.

Popular syndicated programs offer some of the best chances to get ratings, but they can be very expensive-

SAVE 35% ON BLANK VIDEO TAPE

SAVINGS

HIGHEST OUALITY EVALUATED 3/4" and 1" BROADCAST VIDEO TAPE

AMPEX

MASTER DISTRIBUTOR



VIDEO TAPE SERVICES

MASTER DISTRIBUTOR

5921 E. SHEILA STREET • CITY OF COMMERCE, CA 90040

PHONE (213) 721-1656 FAX (213) 721-1506

New Tape — Evaluated Video Tape — Tape Cleaning and Evaluation Service CONSISTANT QUALITY, SERVICE, COMPETITIVE PRICING "TAPE IS OUR ONLY BUSINESS"

OPEN 7am Till 6pm (PST)

Circle (70) on ACTION CARD SEE US AT NAB BOOTH #5258

BE A RATINGS WINNER!!!

OUTSTANDING LIBRARY OF FEATURE FILMS AVAILABLE SUITABLE FOR ANY TIME PERIOD ★★112 FEATURE FILMS—ALL COLOR★★

ACTION-PACKED ADVENTURES ★ HEARTWARMING DRAMA AND ROMANCE FAMILY FAVORITES ★ WILD, WILD WESTERNS ★ HEART-STOPPING HORROR AWARD WINNING STARS, THE WORLD'S TOP FILMMAKERS ALL PART OF THE FORMULA FOR SUCCESSFUL NUMBERS

FOR FURTHER INFORMATION CONTACT:

ELLEN CANTOR OR DELANIE ABNEY CINEMA SHARES INTERNATIONAL TELEVISION L.P. 450 PARK AVENUE, NEW YORK, NEW YORK 10022 (212) 421-3161

Circle (51) on ACTION CARD

sometimes more expensive than they're worth. Of course, with our family entertainment concept, most of the recent offnetwork shows would never pass muster with us. But we have had success with "Gilligan's Island," "I Dream of Jeannie," "The Saint," "Combat," "Big Valley," "High Chaparral," "Lost in Space," "T and T," and several others.

Getting The Kids On Our Side

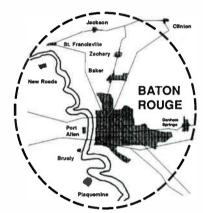
Children' programming has been one of our biggest successes, for a very simple reason. The three network affiliates in Baton Rouge air not one 30-minute weekday children's show—not even after school. So when we decided to fill the gap, we met with immediate success. Currently, our top performers are Walt Disney's "DuckTales," "Alvin and the Chipmunks," "Fun House," "Double Dare," "The Jetsons," "Yogi Bear," "Popeye," and "C.O.P.S." We have renewed all of these and cleared several new shows for this fall, including Disney's "Chip 'N

Dale," "Super Mario Brothers," "Denver, the Last Dinosaur," and "Bugsburg."

Children's programming can provide a network quality "look" for a new station at little or no out-of-pocket expense. But it's hard to turn this into advertising dollars from kids-oriented businesses, unless the station earns a significant share of the children's audience.

On the other hand, kids will find your station on the dial when their parents won't even try. In Baton Rouge, tens of thousands of adults have been introduced to our station because of their children.

Syndicated shows and kids' programs have given us strong ratings with women and children. But if we are to sell advertising, we also need men; and at WKG-TV, we use sports to attract them. Our sports programming includes sixty Houston Astros and Texas Rangers games each year; NCAA college football and basketball; Houston Rockets NBA games; LSU sports, including baseball, track, gymnastics, and tennis; and the Peach Bowl, Freedom



WKG-TV • CHANNEL 19 Baton Rouge, La.

Bowl, Bluebonnet Bowl, Independence Bowl, and Senior Bowl. We've found out: Sports sells!

Our weekly public affairs program, "Impact 89," is the only local interview show in Baton Rouge that airs in prime time. Guests on the show have included Louisiana's governor, members of Congress, a candidate for President, state legislators, mayoral candidates, and other newsmakers.

Under the direction of public affairs director Sharon Weston, WKG-TV also airs frequent public affairs specials, such as live coverage of political events from the State Capitol and "The Ollie North Slide Show," which was blacked out by Congress but aired in its entirety on WKG-TV!

Promotion and Advertising

WKG-TV has had so many promotions over the past year that the best thing to do is simply list some of them: the WKG-TV/Putt-Putt Easter Egg Hunt, which atcontinued on page 12



WorldRadioHistory



LPTV and the LAW

-by Peter Tannenwald



EEO Is Serious Business

Are you ready to file your FCC Annual Employment Report (Form 395) in May? What do you mean, you don't know what I'm talking about? You need to know, so please read on.

Most applications for new LPTV stations do not include an FCC Model Equal Employment Opportunity Program (Form 396), because the applicant checks a box stating that it anticipates fewer than five full-time employees. Many applicants assume that they will start with a staff of less than five. But once a station gets on the air, the payroll grows quickly if any kind of local programming effort is under-

The FCC requires every station to adopt

its Model EEO Program when the fifth full-time employee comes on board. whether an application is on file at that time or not. Owner-managers count as part of the total. The model program requires a commitment to avoid all discrimination based on race, sex, national origin, and other characteristics which may not legally be taken into account in making employment decisions.

Stations with five or more full-time employees must also file an Annual Employment Report by May 31 of each year. Full-time means at least 30 hours a week. not 40. The FCC should mail a report form to every operating station, but if you did not get one, you still must file. Write to the

FCC's EEO Branch, Mass Media Bureau. Washington, DC 20554, to ask for a form.

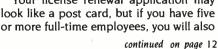
Follow Directions

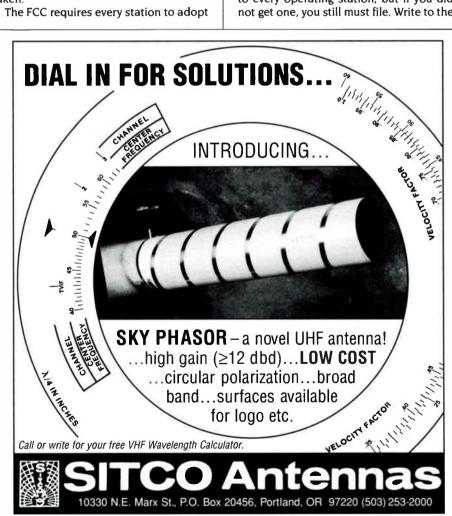
The Model EEO Program involves strong affirmative action and requires you to do specific things. Notices must be posted at the station and placed on any employment application form you use, advising employees and applicants of your policy. You must identify potential minority and female recruitment sources among employment agencies, community groups, and educational institutions, and you must contact them EVERY time an opening occurs, regardless of whether it is at the managerial or lower staff level. If you advertise for employees, media (whether print or otherwise) with substantial circulation among minority groups should be used. If a recruitment source does not refer enough minority and female applicants over time, you should find new sources.

A recent FCC ruling upheld the policy requiring that stations keep track of how many minority and female recruits are referred by each source. Many stations objected on the ground that employment applications are supposed to be blind as to race and sex. That is true of applications, but there is no law prohibiting you from keeping separate records that enable you to evaluate the effectiveness of recruitment sources. For example, your receptionist can make a note of the race and sex of each applicant who has a personal interview. Those applicants submitting resumes but not appearing in person can be sent a questionnaire on which they can indicate their race and sex without revealing their name or any other identifying information. The questionnaire can be returned to you by mail.

Records of race and sex should always be kept separately from employment applications and should not be seen by the person who makes employment decisions, except for reviewing overall statisti-

Your license renewal application may look like a post card, but if you have five





Circle (139) on ACTION CARD



THEJUKEBOX NETWORK

ALREADY MAKING MONEY IN JACKSONVILLE, FLORIDA AND DES MOINES, IOWA!

AN INTERACTIVE TV SERVICE OF VIDEO JUKEBOX NETWORK, INC.

LPTV and the LAW

continued from page 10

have to submit a model EEO program. This form includes more questions than the form for new applicants does; it asks for details about your recruitment efforts and for data on referrals. Every station is subject to the requirement. Even if your service area has no recognizable racial minority population, you must still implement and carry out an EEO program for women.

Evaluation Criteria

When the FCC evaluates your EEO performance, it will look for two things. One is the effectiveness of your recruitment sources. The second is the demographic composition of your staff. Stations receive special scrutiny if the percentage of their minority and female employees is less than 50% of the minority and female presence in the local area work force. And the 50% target must be met both overall and in the upper four job categories on the FCC's EEO report form. Remember also that even if you achieve 50% of parity, your recruitment efforts and the effectiveness of your sources will still be reviewed.

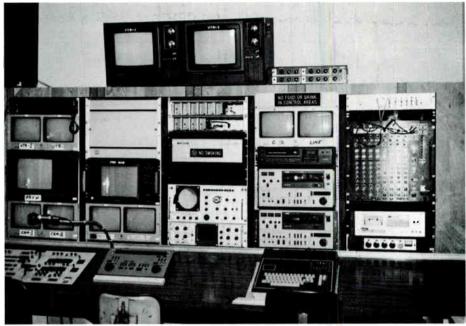
Stations who perform inadequately risk having their license renewals conditioned on filing special EEO reports every six months, or receiving only short-term renewals and having to file a full new application before the end of the usual five-year term. They may also be fined. In two recent cases, the forfeitures were \$7,000 and \$10,000.

The moral of the story is that EEO is definitely not de-regulated. On the contrary, the FCC's supervision of this area is increasing. The LPTV industry has not felt the brunt of the FCC's enforcement efforts so far; but radio, full power television, and cable TV have all been affected. LPTV operators should act now to avoid trouble later.

Put your EEO program in writing, using the FCC's model form. Do what your program promises you will do, every time you hire at any level. Keep detailed written records of everything you do, and be ready to document how many minority and female applicants you have had. Monitor minority and female representation on your staff, and compare them to the available work force.

The law does not require you to hire an unqualified person, but it does require you to make an affirmative effort to hire from all elements of the work force, and it does require you to be able to prove that your efforts are bona fide and intensive.

Peter Tannenwald is a partner in the Washington, DC law firm of Arent, Fox, Kintner, Plotkin & Kahn. He is general counsel to the Community Broadcasters Association.



The WKG-TV control room.

WKG-TV 19

continued from page 9

tracts 500+ youngsters to an annual hunt; the Marilyn Monroe Look Alike Contest; the WKG-TV/Cracker Barrel 3-D horror movie on Halloween night; the "Bozo Show," which brought 650 youngsters to the station; the WKG-TV/7-Eleven Super Loop Promotion, which resulted in the sale of 4,000 UHF loop antennas and free trips to the Astrodome for winning contestants; GI Joe and DuckTales Trivia Contests; the Jem Contest; and Charter Viewer Certificates, which were awarded to 8,000 people who asked to be named "Charter Viewers." These are only a few.

We stress viewer involvement and have more than 6,000 Viewer Comment Forms on file.

WKG-TV has spent a great deal of money—especially with print and radio—to make itself known in the community. We run daily newspaper ads next to the TV listings. In addition, 85,000 copies of our "Family TV Program Guide" are periodically inserted into the local morning newspaper to introduce us to those who haven't yet tuned in.

We have trade agreements that give us a daily drive-time presence on half the radio stations in the market. Of course, our best promotion is done on our own station. We strive to promote every show in the previous half hour, and movies and special events are promoted well in advance.

Advertising is Growing

One of the brightest spots so far in 1989 has been a significant increase in advertising revenue for the station. We have an excellent five-person sales team,

including senior account executive Pete Goff; fireball account execs Mike Sanchez, Lorrie Glaze, Tony Quiroz, and Michell Salomone; and sales assistant Sean Daigre. They are hard-working, creative, and determined to make the station a financial success.

We make every effort to learn all we can about prospective advertisers and their business goals before we even discuss advertising with them. When we have enough information to know that we can help, we make a formal written proposal, which includes is pecific performance goals. In that way, both we and the advertisers know what we are trying to accomplish and how to evaluate the results.

Led by production manager Nick Champion, our six-member production team shoots and edits all of our local spots—which comprise more than 80% of the commercials we air. In addition to commercials, the production team is responsible for our on-air "look," which must be comparable at all times to that of the network affiliates.

And We Got Cable

Before signing on the air in 1987, I met several times with the local cable operator, Baton Rouge Cablevision. However, the system had no available channel capacity because of existing contracts with various satellite networks. They did promise to conduct periodic subscriber surveys to ascertain the interest in WKG-TV.

Meanwhile, well began meeting with other area cable operators and, one by one, most of them agreed to carry our signal. At present, we are on cable in the communities of Baker, Zachary, New Roads, St. Francisville, Clinton, Jackson and Maringouin.

Last October, true to their word, Baton

Gold Standard.

In finance, the gold standard means unquestioned security and reliability. In broadcast-quality satellite receivers, it means the Agile Omni Professional. From Standard Communications.

Based on intelligent microprocessors, the Omni Pro does most of the thinking for you. You choose the desired satellite signal, and the Omni Pro automatically sets the correct format of C or Ku band antenna inputs, full or half-transponder operation, center frequency, channel spacing, audio subcarrier frequencies and more. In essence, two knobs let you select audio/video performance without confusing conversion or reference tables, without complicated switches and controls, without hassle. But that's just the beginning.

Order the optional RS-232 computer remote control and you can change everything from the transponder bandwidth to the subcarrier frequency, for a whole network or any individual unit, either by phone modem or Earth station uplink.

For broadcast applications, Standard offers the Omni Pro with the Broadcast Performance Package, which includes proof of performance, EPROMs pre-programmed for all domestic satellite formats and channels, multiple IF bandwidths, additional audio subcarrier demodulators, and more.

To get the full story, call or write Standard's SATCOM Division.

And find out how little gold it takes to get on the Gold Standard.



P.O. Box 92151 Los Angeles, CA 90009-2151 Telephone: (800) 243-1357 In California (800) 824-7766 (213) 532-5300 Telex: 67-7173



EBS EQUIPMENT Price Model CEB Encoder-Decoder \$540.00 Model CE Encoder 375.00 Model CE Stereo Encoder 405.00 Required for L.P.T.V. Model CD Decoder 320.00 Encoder FCC Type Accepted decoder FCC Certified **Exceeds FCC Specifications** Receiver can be supplied to drive Decoder \$100 All interconnections to the EBS equipment are made through a barrier terminal block. No special connectors necessary. In stock—available for immediate delivery. GORMAN REDLICH MFG. CO 257 W. UNION STREET • ATHENS, OHIO 45701 • (614) 593-3150

Circle (62) on ACTION CARD

Rouge Cablevision conducted a survey of their subscribers. The study was verified by an independent market research firm, and the firm submitted its report in late February 1989. As a result of the survey, Cablevision decided to replace two existing services whose contracts are expiring with the top two vote-getters in their survey—TNT and WKG-TV!

We think Cablevision and all other cable systems in the area have been fair in their dealings with us, and we look forward to a long relationship with them.

Honors and Awards

We were pleased to receive three top national awards at the Community Broadcasters Association Convention last October. They were "Best Local Program," for "Impact '88," hosted by Tammy Trahan and public affairs director Sharon Weston; "Best Commercial," for our spot for Kleinpeter Diary; and "Best Station Promo," for a spot featuring my 8-year old son, David Jenkins, who explained our channel change from 49 to 19 last September to the kids in our audience.

As I said before, the kids will find you on the dial when their parents won't try. By targeting the kids with that announcement, we were able to make the transition easily and without confusion.

Despite lean times during our start-up period, we think we will finish calendar year 1989 in the black. It is difficult to predict the effect of the new cable households on advertising sales, but they certainly won't hurt, especially when they show up on the ratings in July!

If we do finish the year in the black, we will have achieved our goal of reaching profitability within the first three years of operation.

Early on, we adopted this formula for success: Find the best family-oriented programming available, build the best possible delivery system, promote aggressively, keep costs low, emphasize sales, work hard, and *never* get discouraged. Our experience shows that a community television station with a family entertainment theme can draw an audience, become a competitive force in a top 100 market, and have fun doing it!

P.S.: A Few Pieces of Advice

We constantly get calls from other community television station owners and CP holders asking our advice. Here are a few of the things we tell them:

- Be sure your station fills both a programming and an advertising demand in your market.
- Be sure your station has the technical capacity to reach your target audience.
- Have the capital on hand to weather the early days when sales will be difficult.
- Get the best programming available, but don't spend an arm and a leg for it.
 Remember, prices for programming are negotiable.
- Establish a good relationship with an equipment manufacturer.
- Join the key organizations that can help you: the Community Broadcasters Association, the NAB, NATPE, and BPME.
- Subscribe to and read publications in the field of broadcasting such as The LPTV Report, Broadcasting, Electronic Media, and View.
 - Don't worry. Be happy!
 - Never, never give up!

Woody Jenkins is chairman of Great Oaks Broadcasting Corporation and general manager of WKG-TV, Channel 19 in Baton Rouge. During the past 25 years, he has been a radio newsman, a television announcer, a newspaper editor, and owner of a public relations firm. For the past 17 years, he has also served as a member of the Louisiana House of Representatives.



NAB Walk-Through

continued from front page

Acrodyne: Acrodyne will be exhibiting their line of high performance, low cost LPTV transmitters: the TLU/IKACT I kW UHF model featuring the 9017 tetrode, and the solid state 100 watt UHF model TLU/100T. The company backs these products with 24-hour technical service.

Also on display will be the TRU-25KVC 25 kW UHF tetrode transmitter. LPTV broadcasters may be interested to see how a I kW transmitter can be easily expanded to a 25 kW output.

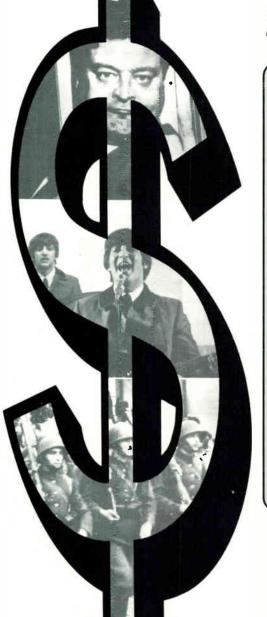
New at this year's NAB will be the TRU/1000. This is a compact, highly efficient, I kW solid state transmitter that is priced competitively with tube models. It features built-in diagnostics for trouble shooting amplifier boards and other components. And its slide-out amplifier design makes maintenance easy.



Acrodyne's TLU/1KAC 1 kW UHF LPTV transmitter.

Alpha Audio®: Alpha Audio Acoustics will be showing its acoustical product lines for the studio. Featured products

EARN REVENUE PI ADVERTISING



We are now expanding our PI efforts to include the LPTV industry. We are an aggressive marketer of pre-recorded videos utilizing the best and most exciting direct response commercials that sell. This means added revenue for both of us.

These commercials have run on MTV, VH1, CNN, The Discovery Channel, and broadcast stations around the country selling videos on diverse topics from Vietnam and WWII to music videos.

Here's what we have to offer:

- Top quality commercials with a proven track record.
- Weekly computer printouts detailing sales activity for your channel.
- A good steady stream of new commercials.
- In-house PI consultant outlining the best times for results.
- Commercials available on your format from 1", 3/4", Super VHS, or VHS.

Become part of our PI Network and have your revenues grow.

Call 1-300-333-7710

to get started!

Inside Illinois please call (312)532-2101

Circle (16) on ACTION CARD



Sonex sheets from Alpha Audio.

will be Sonex acoustical foam, Sonex I acoustical Melamine (class I fire rating), Soundtex acoustical wall covering, Acoustilead sound barrier, and Sonex ceiling tiles

The ALTA Group: The ALTA Group will introduce the ESD, a new external disk system that provides expanded storage capacity for the Centaurus dual channel still store system. The ESD offers both fixed and removable disks featuring one-second store/retrieve time with no loss of image quality. On-line storage capacity is available with more than 2,000 fields of memory.



The ALTA Group's new ESD external disk storage system.

The price of the ESD ranges from \$4,000 to \$14,250, depending on the type and amount of storage.



The "L" Series UHF broadcast antenna from Andrew.

ALTA will also introduce its new Cygnus 5.5 wideband TBC/synchronizer and effects system. The system has both Y/C 3.58 and composite inputs and outputs with 5.5 MHz of bandwidth and built-in chroma-luma delay correction.

Andrew Corporation: Antenna systems for LPTV applications will be featured in the Andrew booth. On display will be the Andrew "L" Series UHF broadcast antenna, which is available in a variety of patterns and gains, and Heliax® coaxial cable transmission lines.

Also on display will be a 1.8 meter VSAT receive-only earth station antenna with motorized mount.



Autogram's Pacemaker.

Autogram Corporation: Autogram Corporation will be showing a range of their audio equipment, including the IC-10 mono/stereo audio console, the AC-8 rotary pot audio console, and the R/TV-12 and R/TV-20 slide pot audio consoles.

The company will also be introducing the new Pacemaker audio console line, featuring eight inputs per slider, machine controls on each input, electronic switching, Schadow selector switches, pluggable miniature terminal strips, and optional Autoclock or Autocount.

From TELSYND, INC.

A NEW GAME SHOW YOU (FAN) AFFORD

13 SHOWS
IN
THE CAN
EXCLUSIVELY
FOR
YOUR MARKET





A GAME SHOW YOU CANNOT AFFORD TO LOSE

This is an unbelievable opportunity for your station to profit. Call the TELSYND, INC. rep at (619) 428-6387, and believe!!

AVCOM: One of the highlights in the AVCOM booth will be a new portable spectrum analyzer, the PSA-65A. The new unit covers frequencies through 1000 MHz in one sweep, with a sensitivity greater than -90 dBm at narrow spans. The light-weight, battery or line operated PSA-65A can be used for two-way radio. cellular, cable, LAN, surveillance, educational, production, and R & D work. Options include frequency extenders, an FM demodulator, log periodic antennas, and a carrying case.



From AVCOM, the PSA-65A portable microwave spectrum analyzer.

Bogner Broadcast Company: Bogner will be exhibiting slot array design antennas for VHF high-band, MMDS/ITFS or MDS television broadcast, and UHF high, medium, and low power applications. Also featured will be dipole design antennas for low-band VHF and FM frequencies, a UHF emergency or stand-by antenna, and a light-weight model for UHF LPTV.

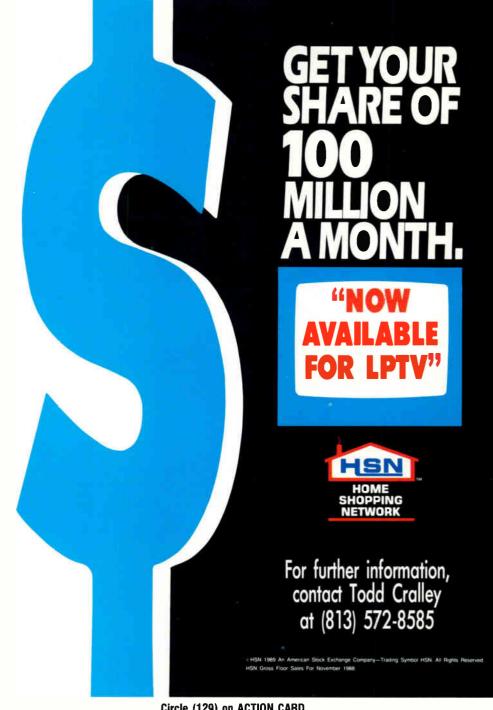
BTS Broadcast Television Systems, Inc.: A BTS 40 x 40 distribution switcher will serve as the central switching system for the NAB Convention's advanced television exhibit. The new BTS TVS/TAS-3000 wide band video/audio distribution switcher will handle all of the exhibit's switching functions.

The TVS/TAS-3000 provides a video bandwidth of more than 30 MHz and was developed in response to the increased resolution performance of new production equipment, especially digital effects and graphics generators, and in anticipation of the requirements of HDTV equipment.

BTS will also display the KCH-1000 high definition camera, the BVA-350 video distribution amplifier, and the BAA-350 audio distribution amplifier. (For more on BTS products, see "Supplier Solo," The LPTV Report, January 1989.)

Circuit Research Labs. Inc.: CRL will be displaying the TVS-3003, a digitally synthesized MTS generator with full dbx® encoding, a two-band variable transfer function pre-emphasis limiter, and stereo sound field enhancement.

Also on display will be the BAP-2000, a complete mono audio processor for full power and LPTV applications. The BAP-2000 features input Fh filtering, dynafex®



Circle (129) on ACTION CARD

single-ended noise reduction, dual band AGC, advanced limiter, and a 15 KHz audio low-pass output filter.

Finally CRL will be showing the DX-1 mono and DX-2 stereo noise reduction systems. The CRL patented dynafex noise reduction circuitry has gained wide popularity in the professional audio market because of its ability to remove noise from virtually any audio source. Both units pro-



CRL's DX-2 with dynafex® noise reduction system.

vide up to 30 dB of noise reduction without any encode/decode process.

Dynafex® is a registered trademark of Circuit Research Labs, Inc.; dbx® is a registered trademark of dbx, Inc.

Comark Communications: Comark will have a full complement of personnel and state-of-the-art products at NAB. Check out the new HDTV transmitters and the fully solid-state 1 kW UHF transmitter for LPTV applications.

Comprehensive Video Supply Corporation: Among the many items on display at Comprehensive's booth will be the Edit



Chicago, IL — channel 13 Evansville, IN — channel 69* Naples/Fort Myers, FL - channel 18* Newberry/Gainesville, FL — channel 33* Ocala, FL - channel 7** Orlando, FL - channel 4

Milwaukee, WI - channel 8

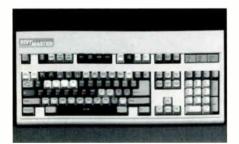
* Construction permit only

** Second fastest growing metro area in the U.S.

For Prospectus or Additional Information: Rick Lipps Woods Communications Group, Inc. 3040 E. Cherry St. Springfield, MO 65802 Phone 417/862-2727

Circle (130) on ACTION CARD

Master[™] videotape editing systems. Four versions are available. The Edit Master System 2 is a cuts-only system that controls two VTR's (source and record). Systems 3, 4, and 5 control three, four, and five VTR's, respectively, and include a color coded keyboard (available as an option for Edit Master System 2). All systems support a wide variety of VTR and VCR models.



The Edit Master™ from Comprehensive Video Supply.

Also being shown is the PC-2 and Fonts-Plus™ character generator system. The PC-2 plugs into any IBM PC, XT, AT or compatible with at least 256K RAM. It offers 32 font styles in varying sizes, 74 distinctive graphic symbols, and up to 64 colors for text and background. The Fonts-Plus plug-in board expands the font styles and adds additional size, case,

and face variations to the PC-2 fonts. Fonts-Plus also features Paintbrush™ software for creating custom logos, fonts, and symbols.

A third product is the Script Master™ PC word processing software created especially for professional video writers. Script Master automatically takes care of column alignments, margins, and format details, leaving the writer free to focus on narration and visuals. It can also double as a standard word processor.

Computer Prompting Corporation: Computer Prompting Corporation has developed a family of computerized teleprompting and closed captioning software systems that run on the IBM PC/XT/AT, IBM compatibles, and laptops. At NAB this year, the company will be showing its most recent system enhancements. For example, the CPC 1000 SmartPrompter+ now runs on laptop computers. The CPC-2000, which simultaneously prompts and captions script, has been upgraded to caption non-prompted segments of broadcasts, making it eco-

Brand new this year is the CPC-1000H SmartDisplay. This is the first of a new generation of lightweight, flat screen, oncamera displays. Instead of a bulky CRT, the CPC-1000H uses a computer-based,

nomically feasible to caption local news.

flat screen, gas plasma technology that is light weight and compact. The entire unit weighs only seven pounds and measures only 4" x 12" x 13" when folded.



The SmartPrompter software on a laptop.

Comtek: Comtek will be exhibiting their wireless microphone, intercom, and IFB systems. To be introduced for the first time is the M-182 handheld wireless mic featuring a full 50 mW and 50 hours of operation in a trim, easy to hold, all-metal package. Also new is the MR-180 portable wireless microphone receiver for camera

Dataworld: Dataworld offers comprehensive databases and computational programs for AM, FM, TV, LPTV, and ITFS applications. Sophisticated access programs provide sorting and computing flexibility and a wide variety of user-

WorldRadioHistory

specified search parameters. On-line 24-hour remote access is available.

Among the Dataworld's services are AM, FM, TV, and LPTV directories, allocation and interference studies, population counting based on updated census and ethnic/demographic data, a Flag Service of FCC releases for the protection of individual broadcast facilities, terrain elevation retrieval programs, FM and TV areato-locate studies on map overlay, AM groundwave calculations, license assignments and transfers, FCC/FAA tower location studies, unused call-sign listings, and industry mailing lists.

Recent additions include daytime channel studies (permissible radiation), detailed coverage maps, population density maps, terrain shadowing studies, and advanced presentation graphics.

Dubner Computer Systems, Inc.: Dubner will be showing the DSS-4 electronic still store, the Turbo Paint 2D graphics system, and their new 30K character generator. Also on display will be the new GF-50 3D modeling and animation system, a new graphics software package, and the MCA-14 TV master control.

Electro-Voice, Inc.: Electro-Voice will be displaying their full line of broadcast and production microphones, including the new RE45N/D. This unit is the first



The RE45N/D shotgun mic from Electro-Voice.

shot-gun mic designed to be held in the hand. It features a neodymium construction with a sensitivity of -50 dB at 1,000 Hz. Combining the characteristics of cardioid and distributed front opening line designs, the RE45N/D provides directional control at all frequencies.

Also on display will be the Reporter CVXTM portable wireless microphone system. This rugged mic is ideal for all ENG and on-location applications and can also be used in the studio. Available as either a body-pack or a hand-held system, the unit provides clean sound, a high signal-to-noise ratio, and a wide dynamic range.

EMCEE Broadcast Products: EMCEE will be displaying UHF and VHF transmitters ranging in power from 1 to 5000 watts. Also on display will be various studio products in both the S-VHS and 3/4" formats. There will be continuous live demonstrations of JVC S-VHS and 3/4" equipment throughout the show.

In addition, EMCEE systems engineers will be available for free consultations regarding the construction of LPTV stations. EMCEE offers full-time field engineering; tower, antenna, and transmission installation; and proof of performance services to its customers. Information on leasing and financing will also be available.

continued on page 22

BOOST THE POWER OF YOUR AUDIO



...with the CRL BAP-2000 TV audio processor

Features:

- A complete stand alone audio processor for any mono LPTV on-air or product application.
- Advanced 2 band AGC and variable transfer pre-emphasis limiter allows consistent full fidelity with high modulation levels.
- Fh filter removes stray sync leakage from audio.
- dynafex® single ended noise reduction system included.
- Rugged 13/4" Rack-Mount Chassis with Integral RFI protection.

CRL can make your LPTV station stand out with powerful full fidelity audio. The new CRL BAP-2000 mono TV processor will give your station consistent full audio modulation levels, while delivering the cleanest sound possible. The BAP-2000 uses an advanced two band AGC followed by our exclusive variable transfer function pre-emphasis limiter with integral 15 kHz low-pass filter. Background noise is all but eliminated by our dynafex® noise reduction

system, and stray sync leakage into audio is trapped by an input Fh filter. A dual 10-segment LED display makes set up a snap. Become the best sounding station in the market for **only \$1,950**.

For more information on the BAP-2000, call or write us at CRL. We have a two week trial program so you can audition one at your station. If you're going stereo, we have a complete MTS generator/audio processor package available for under \$6000. Better sounding audio is just a call away at (800) 535-7648.





CIRCUIT RESEARCH LABS INC.

TEMPE, ARIZONA TELEX: 350464 CRL TMPE, UD. (602) 438-0888 (800) 535-7648



The News In Community Broadcasting

The First Step: Researching Your Audience

-by Bob Horner

Many community broadcasters have already discovered that their most powerful programming tools are local news, sports, and special events.

The reasons are simple: Ratings are good. Revenues are strong because local news provides plenty of availabilities and delivers key demographics. And anchors, reporters, and photographers are walking promotion for the station as they cover events in the community.

Most importantly, local news gives your station an identity that your competitors

EXECUTIVE

can't match. The others can deliver the same kind of entertainment you do, but they can't cover your local community the way you can.

Local news, then, can be the single most important way you can create an identity for your station in the minds of your viewers. If you aren't doing local news, you're missing the best promotional opportunity you have.

However, doing a newscast can seem so complex that some operators may be reluctant to start one. Others may want to improve or expand their existing news programs, but they may not be sure how to proceed. In this column, we'll be addressing these and other problems facing community broadcasters who are producing, or thinking about producing, local newscasts.

Content and Research

As a broadcast news consultant, I find that station managers spend too much time worrying about equipment and production when they start a news operation. I think it's helpful, instead, to do what your audience is going to do—concentrate on the content. And good content begins with good research.

You may recall the article entitled "The LPTV Business Plan" by John Kompas and Richard P. Wiederhold in the December 1988 issue of *The LPTV Report*. The first step in LPTV business planning, they suggest, is to answer the question, "What do the viewers want?" That question is particularly crucial to local news planning; and answering it doesn't have to be expensive.

I suggest that you begin by creating a questionnaire that will determine which issues are really important to the people who live in your coverage area. First, get some general information:

- What are your current news media habits?
- What parts of the newspaper do you read?
- When do you listen to the news on the radio?
- What newscasts do you watch on television?

DECISION MAKERS Cont



DO YOU KNOW YOUR MARKET? YOUR COMPETITION DOES!

Are Your Contours Really Where You Think They Are?
Are Your Sales/Marketing People Market Oriented?
Can You Target Your Ethnic/Demographic Markets?
Do You Know Where Your Signal May Be Marginal?

Do You Have A Special Mapping Requirement?

DATAWORLD MAPS CAN WORK FOR YOU

MAP OPTIONS

- SHADOWING (TERRAIN SHIELDING)
- POPULATION DENSITY
- CONTOUR COVERAGE
- POWER DENSITY
- COMPOSITES
- SPECIALS

NAB 1374 Booth 1374

dataworld®

P.O. Box 30730, Bethesda, Maryland 20814 Fax (301) 656-5341

(301) 652-8822 (

20 / LPTV Report / April 1989

(800) 368-5754

Circle (4) on ACTION CARD

WorldRadioHistory

What items do you find most interesting?

The answers to these questions will tell you what the audience is doing now. (Don't ignore people who say they don't watch news now. They represent your biggest opportunity, and there will be some questions for them in a moment.)

Next, ask questions that will help you design your newscast:

- What time of day would you most likely to be able to watch our local newscast?
- How much time do you have to spend with local news?
- Would you want our newscast to include items from around the country, or to focus on our community exclusively?
- What types of events and subjects would you like to see us cover? What would be most useful to you?

The last question should be asked as an open-ended question, just to see what your viewers say spontaneously. Be ready to move in right away, though, with a list of items to prompt them.

Events or Issues?

The prompt list should include both events and issues. For example, ask about school board meetings and city council proceedings. But also ask about consumer news and medical news. Do your viewers want to know about accidents and fires, or about efforts to attract new industry? Or both? You are trying to determine whether events or issues should be the focus of your newscasts.

After you've written your survey questions, try them out on your staff and their families. (It's important that everyone at the station participate if you're going to get a useful cross-section of people.) Using the feedback from these test interviews, fine-tune your questions and technique. Then, perform the survey again by interviewing people, in person, in small focus groups of 10 to 20.

The next step is to conduct a telephone survey, with the help, if possible, of a local college or community group. Try to bring in at least 200 responses from your coverage area. This helps you to be sure that the information you developed in the focus groups is on target.

Even if you already have a newscast on the air, it can be a good idea to conduct this kind of survey regularly to see where you need to make changes, and where your opportunities are.

In the next column, we'll examine ways to turn this research into a plan for news coverage.

Bob Horner is a broadcast news consultant based in Atlanta. His experience includes nine years at CBS News, as well as extensive local news production. Bob welcomes your comments and suggestions on news-related topics for this column. Send them to him in care of this magazine.

ACRODYNE. OUR NUMBERS TELL THE STORY.

1st

LPTV transmitters in the U.S.

20

years in the broadcast industry

330 turnkey installations

4000 units in the field

24

hour, round-the-clock support

100%

spare parts availability

It all adds up.
Acrodyne has the products and technical skill you need to stay on the air. Plus on-time

air. Plus on-time delivery and competitive prices. For full service,

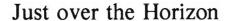
just remember our toll-free number 1-800-523-2596. (Inside PA, call 215/542-7000.)



ACRODYNE

Acrodyne Industries, Inc. 516 Township Line Road Blue Bell, PA 19422 215/542-7000 800-523-2596 FAX 215-540-5837

Circle (18) On ACTION CARD





MetroNet™

Over **900 new television programs** will be available to you in August 1989 as part of a network affiliation program that will revolutionize LPTV.

For more Information
call
Mr. Brooks McCarty
at
213-854-6595

Metronet™ is a subsidiary of FEC © 1989

Circle (154) on ACTION CARD

NAB Walk-Through

continued from page 19

ESE: ESE will be exhibiting 50 of their 80 standard products, including digital clocks and clock systems; timers; programmable timers; time code readers, generators, and inserters; distribution amplifiers; audio level indicators; the ESE "Phone Patch"; an edit enhancer; and a monitor ID.

Also being introduced for the first time is the ES-CG89 color digital effects character generator. This is a low-cost rackmounted, standalone generator with a unique genlocking system that provides



ESE's ES-CG89 color digital effects generator.

solid stability from any source. The digital special effects include sprinkling, dissolve, tumble, flash, and borders. Features include four upper and lower case anti-aliased and proportionally spaced fonts, full word processing capability, nine page display styles, and user-friendly operation.

Ft. Worth Tower Company, Inc.: In the Ft. Worth Tower booth will be a selection of guyed or self-supporting towers, equipment buildings, mobile communications buildings, fiber optics splicing trailers, and standby power systems.

G + M Power Products, Inc.: G + M manufactures a complete line of battery packs, belts, and chargers that use Sanyo Cadnica cells for long life and reliable performance. Among the products to be displayed at this year's NAB are the GM12BP, a BP90 replacement; 12-volt and 14.4-volt battery belts—the GM12B and GM14B; the GM14OB W/C, a 14.4-volt on-board camera battery with a charger attached; and the GM30B, a 30-volt lighting belt.

The Sanyo Cadnica cells are fully guaranteed for one year from the date of purchase.

WorldRadioHistory

Gorman-Redlich: Gorman-Redlich will be showing Emergency Broadcast System encoders and decoders, as well as weather radios. Check out the Model CEB encoder/decoder, a complete two-frequency EBS system that meets all FCC requirements. The unit features gold contacts on all switches and relays, a self-testing decoder, barrier strip interconnection, CMOS digital circuitry in the encoder, and precision engineering in the decoder for low power drain.

The Model CRW is a highly sensitive and selective receiver for National Weather Service transmissions. It will automatically record weather forecasts and emergency alert messages, and its three channels make it possible to market your audio for commercial services.

Harris Video Systems: Harris will be debuting new three-dimensional software options for the Harris Vws™ video graphics work station. The packages include the Vws 3D Modeling for three dimensional image creation and modeling; the Vws 3D Rendering, for high resolution rendering of 3D images and mattes; and the Vws 3D Animation, for three-dimensional animation.

Also on display will be the IRIS™ II Plus digital still store system that can catalog and store up to 80,000 video images, and the 642 frame synchronizer/TBC, which provides separate frame synchronizer and time base corrector inputs. Both inputs feature patented circuitry that offers up to 12 dB of automatic digital noise reduction, allowing the unit to operate with extremely noisy input signals.

Also shown will be the VW-3 frame synchronizer/TBC. This unit features a full frame "infinite window" that allows field and frame freeze and the integration of multiple feeds by hot switching between sources such as VTR's, microwave feeds, or satellite transmissions while, at the same time, maintaining a stable picture.

Hitachi-Denshi America, Ltd.: Recently introduced and on display at NAB will be Hitachi's new high resolution color monitors. Both the CM-150 15" monitor and the CM-210 21" monitor feature high contrast and sharp images produced by the FS type in-line CRT and comb filter. The CM-150 provides horizontal resolution of 450 lines, the CM-210 500 lines. Both monitors offer multiple inputs including Y/C for S-VHS applications.



The Z-31SX from Hitachi.

Also featured will be the Z31SX ENG/EFP Computacam camera. The ultra-high resolution of 850 lines is achieved by the camera's LOC twist field saticon tubes. A new, low noise circuit insures a high signal-to-noise ratio of 61 dB. The camera also features a component out for Beta and MII, as well as Y/C for S-VHS. A high precision deflection circuit gives the Z31SX improved registration.

The world's smallest dockable broadcast camera—the three-chip FIT-CCD portable SK-FI—incorporates an advanced frame interline transfer CCD device which eliminates the problem of vertical smear typically found in other CCD cameras. It delivers 700 lines of resolution and 60 dB signal-to-noise ratio, as well as electronic variable speed shutter, auto knee and knee aperture, masking, and flare compensation.

The VL-S100 S-VHS portable recorder, introduced at last year's NAB, will be on display again this year. Carefully designed to withstand the demands of ENG/EFP production, the VL-S100 is the only field unit with a built-in time base corrector. It provides 400 lines of resolution in S-VHS and 240 lines in VHS. The signal-to-noise is 45 dB in both modes.

New at this year's NAB will be the SK-F3, similar to the SK-F1 but having 400K pixels rather than the SK-F1's 300K. Also new is the SK-F700, a studio/field CCD camera that virtually eliminates vertical smearing. The F700 boasts special prism optics that produce color matching the color quality of plumbicon tubes. One of its most outstanding features is the virtual elimination of vertical smearing. It also incorporates special anti-aliasing filters to eliminate distortion.

Intergroup Technologies: Intergroup Technologies' new switcher, the 9524-D, will be shown for the first time at this year's NAB. The 9524-D is the 24-input version of Intergroup's 9500 Series switcher. It is a 2 ME switcher with triple level effects in each ME, with a total of four linear keyers. An effects memory of 250 events and 42 patterns is standard. The 9524-D also features seven layers of video for one-pass production, and ten hot keys for fast, accurate event/sequence recall.

ITS Corporation: ITS Corporation, supplier of experimental high definition transmitters to NAB and the Advanced Television Test Center, will be displaying some of their new products. These include UHF transmitters and translators with output powers ranging from 10 watts to 10 kW; and VHF and UHF exciter retrofits that upgrade existing transmitters for extended life, increased performance, and multi-channel sound TV capability.

ITS transmitters feature solid-state circuitry, convection cooling, dual power supplies for high reliability, IF linearity for the best possible signal, a slide-out tray

construction for easy maintenance, low power consumption, and built-in lightning and surge protection.

JBL Professional/Urei Electronic Products: JBL Professional will be exhibiting their two newest Control Series studio audio monitors, the Control 10™ and the Control 12™. The versatile and lightweight monitors are ideal for remote broadcasts, production rooms, or portable applications where quality and size are important. Both monitors are accompanied with mounting hardware for permanent installations.

Also to be demonstrated is JBL's complete line of 4400 Series studio monitors, and the 7110 limiter/compressor, used for "critical path" processing such as remote trucks, and STL's.





The Control 10 from JBL.

Lake Systems Corporation: Lake offers turnkey design, engineering, construction, and installation services for broadcast facilities. They will be demonstrating their approach by taking visitors through the entire new facility design and construction process. continued on page 26

Bogner—22 years, over 1000 TV transmitting antennas and still climbing!



In the twenty-two years since we innovated a remarkable slot array design, we have succeeded to a leadership role in TV broadcast antennas. We had to be better than the competition. We still are.

Today, there are over 1000 Bogner TV transmitting antennas in use, more than from any other single manufacturer. Antennas with a long history of trouble-free performance and unequalled coverage.

Bogner antennas come in every power range and with the largest number of standard patterns in the industry. In addition, Bogner offers hundreds of custom patterns plus special designs to meet particular requirements.

Find out more. Call or write: Bogner Broadcast Company, 603 Cantiague Rock Road, Westbury, New York 11590, (516) 997-7800.

When you need us we'll be there.

BOGNER®WE MAKE THEM SMARTER

Circle (23) on ACTION CARD

NOW

LPTV CAN COMPETE WITH THE BIG BOYS!

NEWS SPORTS WEATHER

- * HALF-HOUR NEWS PROGRAM EACH WEEKDAY
- * 8MINUTES FOR COMMERCIAL AD SALES TO AFFILIATES...
- *LOCAL INSERTS AVAILABILITY FOR AFFILIATES...
- * YOUR NEWS, YOUR SPORTS, YOUR WEATHER
- * DISTRIBUTED VIA SATELLITE...
- *SUPRISINGLY AFFORDABLE!

INQUIRIES CONTACT:

DAVE MURRAY

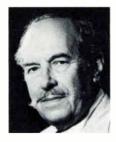
(904)656-7000

9AM-5PM EASTERN TIME



CENTER ONE VIDEO PRODUCTIONS 1706-D CAPITAL CIRCLE N.E. TALLAHASSEE, FL 32308

Circle (132) on ACTION CARD



Technical Talks

—by John H. Battison, P.E.

Calculating Coordinates

In my last column I discussed topo maps and contours and coordinates. This month I plan to show how to measure the coordinates of a site on a topo map, and how to use coverage contours.

Earlier, I said that the FCC requires the use of topographic maps. The actual wording of Form 346 is "...preferably topographic,...such as Geological Survey quadrangles." These maps are often referred to as "quad maps." Four of these maps are generally used to cover a given area, although sometimes because an area is very large—or very small—more or fewer will be required.

The name of the town being covered by the quadrangle map is generally given to the map. For example, in the case of Columbus, OH—which is covered by four maps—the titles are "Columbus North East," "Columbus South East," and so on.

The name of the county is given on topo maps, and this can be very important. The Commission requires that the county in which the transmitter is located be stated in the engineering portion of the application. Sometimes it is difficult to find this information, and topo data can provide it.

It is crucial to obtain the correct latitude and longitude of a transmitter site. When the applicant marks a cross, or any other kind of indicator, on a map, the FCC will not normally know whether the mark corresponds with the actual place on the ground. The assumption is that the "X" marks the spot where the applicant's transmitter and antenna will be. And generally it is relatively easy to be sure of this.

Finding Coordinates

If you are locating on an existing transmitter site, the coordinates are on record, and the tower is often marked on the topo map. If you are putting your transmitter on a building downtown, the large scale topo map will generally show the cross streets, thus making it easy to determine the coordinates.

Sometimes, however, the location is in a field or on a mountain. In cases like these, it is often possible to make an accurate determination by referring to road

WorldRadioHistory

intersections, distances on a car's odometer, or the relationship of the location to existing landmarks. If none of these methods is possible, the services of a licensed surveyor are required. Such a person will come out to the site and determine its latitude and longitude by using proper surveying methods having reference to known marks, and in some cases to the Pole Star (if accurate bearings are required for orientation purposes).

The statement of the licensed surveyor will confirm the transmitter site to the FCC's satisfaction: but it still has to be plotted on the topo map. The Commission's engineers check the coordinates of the "X" on your map, and compare the plotted location with what you said in paragraph 2 of Form 346, Section II. If your map shows an incorrectly plotted site (that is, it does not agree with the stated coordinates), your application can be rejected. If you have a surveyor's statement, the Commission will generally accept that as overriding the incorrect statement on the Form. The same generally applies if you have specified an existing licensed tower, and the Commission can determine the correct coordinates from that.

However, in the absence of confirming data, if the "X" on your topo map and the coordinates given in the Form do not agree, you are in trouble! The FCC will not know which is correct—your listed coordinates, or the "X" on the map. In this case, the Commission can, and probably will, reject your application.

If you have marked your "X" on the map at the place where you honestly think the site is, and if your calculated coordinates agree with this, the Commission will normally accept your statement. The Federal Aviation Administration will use it for issuing warnings to aircraft, and the FCC will use it for calculating potential interference, or freedom from interference, to other applications or existing stations.

Measuring Latitude and Longitude

Latitude and longitude are measured in degrees, minutes, and seconds. Degrees

are indicated by a $^{\circ}$ sign, minutes by $^{\prime}$, and seconds by $^{\prime\prime}$.

There are 60 minutes in a degree, and 60 seconds in a minute. This combination often leads the beginner to make mistakes in the addition and subtraction of latitude or longitude. Normally when you are subtracting, and a value is "borrowed" from one column, the same amount is added to the next column to the right: \$10.34 minus \$1.46 becomes, in essence, \$9 and 134¢ minus \$1 and 46¢.

If you are subtracting 30° 49′ 57″ from 33° 47′ 56″, you have to "borrow" 60 from the degree column and 60 from the minute column in order to perform the operation:

33° 47′ 56″ -30° 49′ 57″

This now becomes, taking a step at a

ime: 33° 46′ 116″ -- 30° 49′ 57″

This allows the seconds subtraction to be performed. And the minute operation is:

32° 106′ 116″ -- 30° 49′ 57″

The answer: 2° 57′ 59"

The important thing to remember is that 60 is "borrowed" each time.

If the answer above had been 2° 57′ 69″, we would have subtracted 60″ from 69″, leaving 9″ and adding 1′ to the minutes column. The answer would have been 2° 58′ 09″. It is important to write numbers less than 10 as "09" or "01," and so on. This is to avoid the possibility of errors or confusion due to the absence of a second figure in a number. It is for the same reason that we write "0.1," not just ".1."

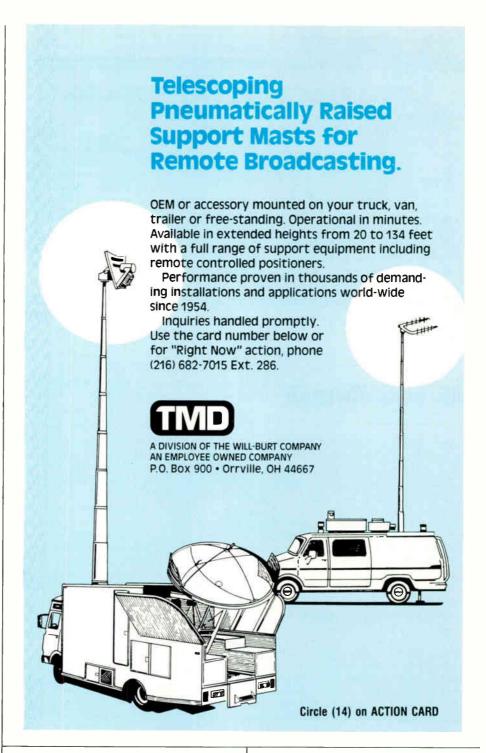
Converting to Inches

Now, how do we convert degrees, minutes, and seconds to inches on a map, and vice versa?

Last month, I said that there are at least two plotting devices that you can use to determine coordinates. I also said that I prefer my own old method. So I'll describe that one. If you want to use an "instant" method, these devices can be bought at map stores or from suppliers of surveying devices.

The simplest situation is one in which the site is close to the edge of the map and in a corner section. In this case, it is relatively simple to measure along the adjacent edges to obtain latitude and longitude.

It often happens, however, that a site is located right in the middle of the map where the distance from an edge is significant. If the coordinates are referred to the edge markings, an error can creep in. This happens because the lines of longitude are not parallel; they converge slightly to the north and south. Because of this, they are sometimes referred to as Great Circles. As you will see later, the distance between two longitude markers on the bottom edge of the map will be slightly



greater than the same difference in longitude measured at the top edge.

In contrast, lines of latitude do not converge but remain parallel to each other from pole to pole.

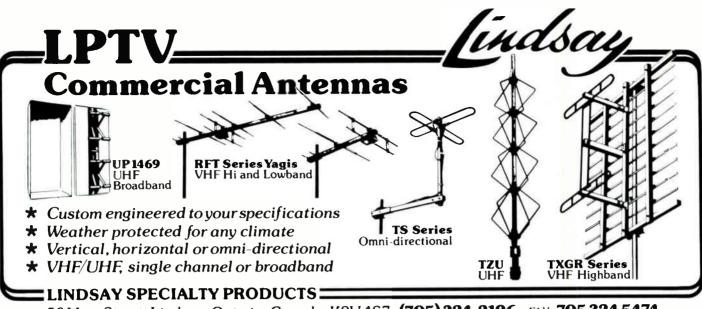
To make accurate measurements easier to achieve, small crosses are placed on the map at the intersections of the graticule, as the grid of longitude and latitude lines is known. These occur at 2' 30" intervals and correspond to the values printed at the edges.

My method of calculating coordinates is by means of proportion. I measure the distance on the map from the site to the nearest latitude or longitude mark, and

then add or subtract the answer from the appropriate map marker. This is the part where it is easy to make a mistake in addition or subtraction with the minutes and seconds. Also it is only too easy to add the distance when it should have been subtracted. To prevent this, I write down the reference latitude (or longitude) and place a large minus or plus sign under it to remind me of the way to go.

This description took longer than I anticipated, so we'll have to conclude our description of measurement methods next month.

John H. Battison, P.E. is a consulting engineer with offices in Loudonville, OH.



50 Mary Street, Lindsay, Ontario, Canada, K9V4S7 (705) 324-2196 FAX: 705 324 5474
Circle (12) on ACTION CARD

NAB Walk-Through

continued from page 23

Leitch Video: Leitch Video, manufacturer of video and audio test equipment, will be exhibiting several new products. The D1G-2200 digital component generator generates eight test signals. The 2600FG is a frame generator for the SPG-1300N or the MTG-2600N test generator. The module is a digital test signal generator with eprom storage for one color frame. This allows any image to be displayed.

To be introduced are the DDA-7100 Digitee digital distribution amplifier and the DSM-7150 Digipeek digital signal monitor

Magni Systems, Inc.: Magni Systems will be showing their full line of multistandard, multi-function test and measurement equipment. Products will include component/composite signal generation equipment with optional D-1 and D-2 signals and D-3-to-NTSC transcoding; waveform monitors and vectorscopes for component/composite use; fully programmable signal generators; and the 2030 programmable HDTV generator.

Being introduced at NAB is the new SC-H phase measurement capability for the VS530 and VS531 vectorscopes, cursors as a standard feature on the WFM530 waveform monitor, as well as a new product for multi-format waveform and vector monitoring.

In the PC video/graphics area, Magni will be showing the 4004 genlockable video graphics encoder for the Amiga 2000.

Microdyne Corporation: Microdyne will be introducing its new Microdyne Au-

tomated Terminal, the MAT II. Billed as "ideal for the LPTV market," the satellite reception system comprises a 12-foot motorized antenna, Microdyne's combination C-band/Ku-band feed system, Kuband LNB, C-band LNB, and a microprocessor controller with internal software. Self-diagnostic routines simplify servicing for non-technical operators.

The MAT II is a fully automated receiv-



Microdyne's 12-foot motorized antenna, part of the new MAT II satellite reception system.

WorldRadioHistory

being
IP-25 N
Systen
ware in
tance
shador
graphs
Also
RP-1 3
digital
RP-1 require
compo
mixing
with as
of eac

ing terminal that allows users to receive programming from any geosynchronous satellite regardless of program, transponder format, or frequency. It can be programmed to turn on and tune in to a selected program automatically, and it can automatically switch channels, frequency, format, signal polarity, and satellite. The terminal can also be configured to turn on such associated peripherals as scramblers, descramblers, printers, video recorders, or cameras. It can be remotely controlled and programmed via a modem, dumb terminal, or computer; and it can be programmed for up to 32 timed events.

Microtime: Among the new products being shown by Microtime is the new IP-25 version of their ImagePlus Graphics System. New features in this latest software include auto page effects, 2D reflectance maps, automatically generated shadows, grid transformations, 3D bar graphs, and many others.

Also being shown is a new dual channel RP-1 3D digital video effects system. The digital compositor cards plug into the RP-1 mainframes and therefore do not require any additional rack space. The compositor cards perform linear digital mixing of the video from the two channels with assignable priority. The transparency of each channel can also be varied.

Microtime will also be introducing a new AB Roll effects system that accepts inputs from virtually any VTR, including composite, U-Matic dub, S-VHS, and component. Simultaneous outputs of composite, component, and S-VHS are also standard. The system has a framestore memory in each channel, enabling an extensive range of channel transition effects: horizontal, vertical, and corner pushes and pulls; and horizontal, vertical,

and corner wipes. Other effects include mosaic, posterize, solarize, strobe, and more.

Finally, there are the time base correctors—the Tx3 FIT Format Interchange Time Base Corrector and the Tx4 low cost TBC. Both units use a full frame of memory and are designed to accommodate extended bandwidth VTR formats such as S-VHS.



The Nady narrator headset.

Nady Systems, Inc.: Nady will be showing their newly introduced NHM-220, a narrator headset that allows a video camera operator to record voice-overs while shooting. The NHM-220 is a lightweight monaural headphone/boom mic combination that is compatible with all video cameras and camcorders and is easy to attach and use. The headphone connector plugs into the camera's headphone jack, allowing the user to hear his or her voice track as it is being recorded.

Nova Systems, Inc.: Nova will be introducing three new products—the 900S Super TBC featuring S-VHS and heterodyne processing with effects and component outputs; the 710S wide band TBC with S-VHS, direct, and heterodyne processing; and the 502, a field portable, direct TBC for the remote playback of broadcast VCR's.

Also on display will be the NOVASync™ frame synchronizer featuring A/B plus alternate inputs with auto default and AGC; the NOVA 700 digital TBC; and the NOVA 620S full frame TBC with S-VHS, direct, and heterodyne processing with freeze frame.

Panasonic: Panasonic Communications & Systems Company will introduce a selection of new products: the CT-1381Y 13" S-VHS monitor; the CT-1381VY 13" monitor/receiver: the CT-2580Y 25" S-VHS monitor; the prototype of an advanced digital scanner converter; the AG-7450 dockable S-VHS VCR; the AG-A800 AB Roll multi-event controller; the AG-SW800 AB Roll: the IFP-45 interface unit: the AG-460 Hi-Fi 2-CCD S-VHS camcorder: the AG-2510 1/2" recorder/player; the AG-1960 1/2" Hi-Fi recorder/player; the AG-1730 VHS Hi-Fi recorder: the AG-1240 1/2" recorder/player; the AG-180U camcorder; the AG-1000B 1/2" VHS player: the WV-F70 2-CCD color camera with 500 lines of horizontal resolution; and a still video system, comprising the AG-ES10 video floppy camera, the AG-EP70 video printer, and the AG-ES100 video floppy player.

The Panasonic Broadcast Systems Company will introduce the following products: the AK-450 3-CCD color camera with 800 lines of horizontal resolution; a digital VTR using the 1/2" videotape cassette format; the DPC-1 digital camera with 700 lines of horizontal resolution and a signal-to-noise ratio of 60 dB; and a professional R-DAT with SMPTE time code for broadcasters.

Prime Image, inc.: Prime Image will be showing their new S-Switch, model 600, a true component video production switcher for under \$5,000. The S-Switch accepts Y/C (S-VHS), Y/688 (U-Matic) and composite inputs. It transcodes between formats and provides output in any of the three modes. The unit provides 16 video transition effects, and features six video inputs and seven stereo audio follow video inputs.



The new HR600+ from Prime Image.

Also from Prime Image is the new HR600+ high resolution/freeze frame TBC. This unit features selectable chroma noise reduction/enhancement and luma noise reduction. It provides clean transcoding between all popular component and composite VCR's. It is also a full frame synchronizer that can be used to synchronize non-capstan/non V-lock VCR's, microwave, satellite, and off-air feeds.

Pro Battery, Inc.: Pro Battery manufactures premium Nicad power packs. Included are 14.4, 13.2, and 12.0 volt on-

WorldRadioHistory



FINALLY...

A Fully Solid State 1 kW UHF TV Transmitter,*

NO TUBES!!!

Visit
COMARK
At NAB
Booth #5141
To See The
Latest
Advancements
In UHF TV
Transmitter
Technology.

*U.S. STANDARD



Rt. 309 and Advance Lane Colmar, PA 18915

(215) 822-0777 • Fax (215) 822-9129 • Telex 846075

— Circle (155) on ACTION CARD —

NAB '89

Alpha Audio

SELECTED BOOTHS, BY BOOTH NUMBER

Lake Systems Corporation	819
Circuit Research Labs, Inc	
Autogram Corporation	
RAM Broadcast Systems, Inc	
Gorman-Redlich	.1271
Harris Video Systems	.1305
Dataworld	
Shure	
	.1317
RTI Research Technology	
International	.1706
Uni-Set	.1752
Magni Systems, Inc	
Pro Battery, Inc.	
•	
Alpha Audio	
Television Technology Corporation.	
Intergroup Technologies	
Leitch Video	.3568
JBL Professional/Urei Electronic	
Products	3577
Computer Prompting Corporation	.0077
Nady Systems, Inc	3711
Nady Systems, Inc	.3740
Ft. Worth Tower Company, Inc	.3840
ESE	
Acrodyne	
Sony	
BTS Broadcast Television	.4101
	=
Systems, Inc	
Microtime	.4126
Prime Image, inc801, 1773, 3948	, 4130
Dubner Computer Systems, Inc	.4130
Panasonic	
Electro-Voice, Inc.	
EMCEE Broadcast Products	
Hitachi-Denshi America, Ltd	
The ALTA Group	
Scala Electronic Corporation4962	, 4963
G + M Power Products, Inc	.5083
AVCOM	
Microdyne Corporation51	
Comark Communications	
Bogner Broadcast Company	
ITS Corporation	
RF Technology, Inc	
Nova Systems, Inc54	172-75
United Media	
Comprehensive Video Supply	
Teatronics, Inc	
Comtek	68-69

SELECTED BOOTHS, BY COMPANY

Alpha Audio	3455	
The ALTA Group	.4526	
Autogram Corporation	1026	
AVCOM		
Bogner Broadcast Company		
BTS Broadcast Television		
Systems, Inc.	4110F	
Circuit Research Labs, Inc.		
Comark Communications		
Comprehensive Video Supply		
	5546	
Computer Prompting Corporation		
Comtek		
Dataworld		
Dubner Computer Systems, Inc		
Electro-Voice, Inc.		
EMCEE Broadcast Products		
ESE		
Ft. Worth Tower Company, Inc		
G + M Power Products, Inc		
Gorman-Redlich	1271	
Harris Video Systems	1305	
Hitachi-Denshi America, Ltd	4519	
Intergroup Technologies	3526	
ITS Corporation	5180	
JBL Professional/Urei Electronic		
Products	3577	
Lake Systems Corporation	819	
Leitch Video	3568	
Magni Systems, Inc	3173	
Microdyne Corporation5	119-20	
Microtime		
Nady Systems, Inc		
Nova Systems, Inc5		
Panasonic		
Prime Image, inc801, 1773, 3948		
Pro Battery, Inc.		
RAM Broadcast Systems, Inc.		
RF Technology, Inc		
RTI Research Technology	431-33	
	1706	
International		
Shure		
Sony.		
Teatronics, Inc		
Television Technology Corporation		
Uni-Set		
United Media	5544	

board packs; BP-90's; and battery belts. The company also manufactures and distributes chargers, primary (non-rechargeable) batteries, and portable power supplies. They specialize in rebuilding old battery packs.

RAM Broadcast Systems, Inc.: RAM Broadcast Systems will be displaying three types of products—consoles, route switching and automation equipment, and noise reduction equipment.

The feature product is the RAM Series-SX console for on-air or production applications. Also being shown are the Sierra Automated Systems (SAS) Model 32000 stereo audio route switching system, a full multi-processor system designed for easy use and modular expansion; the SAS ASC-1600 automation system controller, which can control up to sixteen different sources; and the ANT telcom c4 analog noise reduction system.

RF Technology, Inc.: What's new from RF Technology? First, there is the Flashback, a highly portable, low-cost, news car system that includes everything from the frequency agile transmitter to the pneumatic mast and antenna. The Flashback features a full 12 watts into the 16 dBi gain, and requires little or no modification to the vehicle.

There is also the Pathfinder, an ENG truck system with a 19" shelf for transmitter mounting, a weatherproof PA with a HI/LO switch, and a dual quad polar antenna system.

There is the 03 Series of highly portable systems for point-to-point ENG or sports applications in the bands from 1.7 to 13.25 GHz. The systems are available with a low profile rod or a parabolic antenna of up to 3.8 feet.

Finally there is the Pathfinder antenna system, a series of offset fed, semi-parabolic antennas for either transmitter or receiver applications. The Pathfinder antennas feature single, dual, or quad polar options in any frequency band to 13.25 GHz.

RTI Research Technology International: RTI's new D11 dropout analyzer prevents lost time and money by testing videotapes for dropouts before recording, editing, or duplicating.

The DII can analyze virtually any videotape format, including MII, Betacam SP®, I" B and C, and S-VHS. The unit's hard copy printer provides detailed reports—total dropouts, bad tape intervals, dropouts per evaluation interval, elapsed evaluation time, date and tape ID numbers, and user programmable set-up criteria. The compact 19" unit is rack mountable.

Also being displayed is a new high energy degausser, the VRS-V90. This unit is capable of erasing advanced technology tapes such as the MII, Betacam SP, and

IIS

CORPORATION

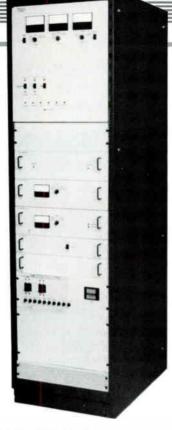
The Closer You Look The Better We Look

At ITS, we've been designing and producing quality modulators and full service transmitters for years. Our products are widely known for their superior engineering, quality construction, and reasonable cost.

Our low power transmitters and translators offer many features that are either costly options or simply not available on other brands — without compromising performance, quality, or price.

Along with these superior products, we offer top-notch field support. Over 100 full service customers value this service — we think you will, too.

If you'll look closely and compare, you'll agree that ITS looks better and better.



ITS-230 1kW UHF Transmitter

PERFORMANCE: standard broadcast (not cable TV) modulator/processor is FCC type accepted under both part 74 (LPTV) and part 73 (full service).

FEATURES: many full service features such as IF processing, stereo aural, interactive control circuits, and extensive remote control are standard.

QUALITY: totally designed and manufactured by ITS.

OPERATING COSTS: Low power consumption and designed for easy maintenance - final amplifier uses RCA 9017 tetrode (approximate replacement cost \$1,900).

PRICE: very competitive.

ITS CORPORATION • 375 VALLEY BROOK ROAD • McMURRAY, PA 15317 • (412) 941-1500

Circle (123) on ACTION CARD

D2 tapes with coercivity up to 1500 Oersted. It generates a high intensity, focused, multi-axis magnetic field that effectively covers every square inch of the tape, rather than just a part of it. According to the company, test results show a significant improvement in erasure level over ordinary degaussers.



RTI's V90 degausser.

The VRS-V90 is automatic and can erase up to 50 one-inch reels per hour or 200 cassettes per hour.

Scala Electronic Corporation: Scala will be showing LPTV broadcast antennas,

professional receive antennas, low noise pre-amps for both TV and FM, broadcast auxiliary antennas, and antenna accessories.

Shure: Shure Brothers, Inc. will be introducing the Beta Series microphones, featuring an all-new microphone design incorporating a toroidal neodymium magnet structure and three-stage directional tuning network. This results in a "true" supercardioid polar pattern (uniform at all frequencies) for maximum gain before feedback. Both the Beta 57 and the Beta 58 feature humbucking coils, diecast handles, durable steel grilles, permanently sealed connectors, and an attractive metallic blue finish.

Also on display will be Shure's Automatic Microphone System (AMS). This is an integrated, automatic microphone circuitry system that controls the number of open mics in an installation. It solves such common problems as false and choppy gating, muddy sound, system "pumping," and missed syllables.

The Shure professional microphones (the SM Series) and the Shure wireless mics in a range of styles and sizes will also be shown, as will the FP Series of professional circuitry products, including the



FISHING AMERICA AND BEYOND

FEATURING:

SPECTACULAR NATIONAL LOCATIONS
KNOWLEDGEABLE LOCAL GUIDES

SAMPLE 1988-89 TITLES:

TRUMAN LAKE (MO) BASS CLACKAMAS RIVER (OR) STEELHEAD GEORGE NILET, ALASKA LAKE ERIE WALLEYE COSTA RICA SAILFISH NEW ZEALAND YELLOWTAIL

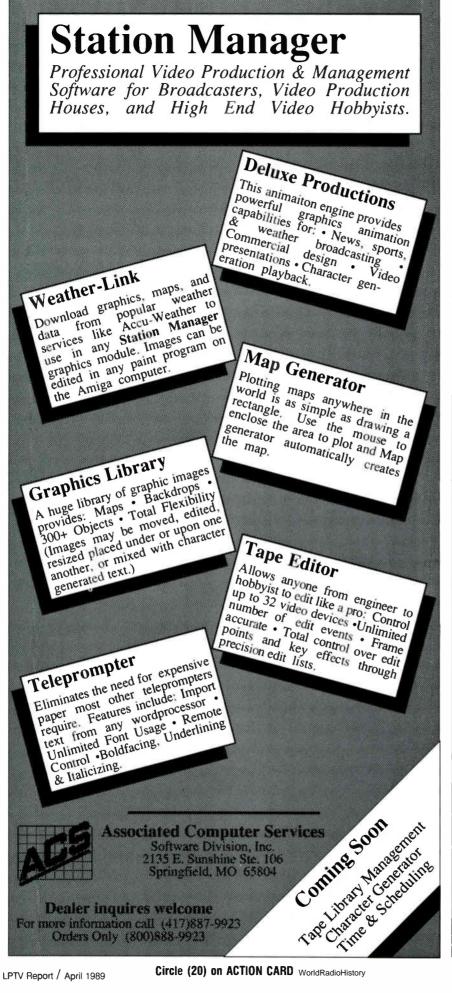
BARTER . AVAILABLE 13 TO 52 WEEKS . 1/2 HOUR

FISHING THE WEST.

TELEVISION

1-800-523-0927 5484 S.E. INTERNATIONAL WAY, MILWAUKIE, OR 97222

Circle (120) on ACTION CARD



FP11 mic-to-line amp, the FP12 headphone bridging amp, the FP16 audio distribution amp, the FP31 mixer, and oth-



The FP11 microphone/line amplifier from Shure.

Sony: The Sony Broadcast Division will be showing the Betacam SP® family of ENG/EFP equipment, including the BVW-70 recorder/editor and the BVW-200, the first one-piece camcorder based on CCD technology. Two digital VTR's will also be shown—the DVR-10 D-2 composite DVTR and the Emmy-Award winning DVR-1000 D-1 component DVTR.

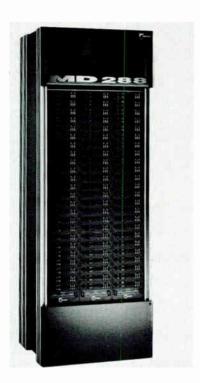
New products to be unveiled at NAB include a Betacam SP CCD camcorder, a still store device, and two new versions of the D-2 composite DVTR.

The Professional Video Division will display the new VO-9850/9800 U-Matic SP editor and feeder/recorder, the VO-8800 field-portable recorder and the BVU-920 player. Also on display will be the DXC-325 camera. This Multicam™ System can hook up to many kinds of portable or studio VTR's, and can be used as an image acquisition device for computer graphics and teleconferencing. A full range of color monitors will also be shown, including the PVM-1342Q and the PVM-1344Q, both of which feature 600 lines of horizontal resolution, auto white balance, and comb filter.

Sony's Professional Audio Division and Sony Magnetic Products Company will also be showing new products.

Teatronics, Inc.: Looking for lighting? Check out Teatronics' studio lighting systems and equipment. Featured this year are the MD-288, a high density modular dimmer rack, and the Producer II+, a computer-assisted, two-scene preset control console.

Television Technology Corporation: TTC will be showing two new transmitters at this year's NAB. The new XL1000A offers notable improvements over the company's XL1000. It has standard features not previously available, including an in-



The MD-288 from Teatronics.

tegral remote control unit, and a single solid-state driver stage with a rated output of 1,000 watts peak visual. The list price is \$44,500.

Also being introduced is the XL1200, which includes the major advance features of the XL1000A, as well as a broadcast-quality modulator, a built-in vector/IF correction unit—which reduces differential gain and differential phase distortion, automatic power output control, and interstage isolators. The list price of this unit is \$52,500.



TTC's XL1000A transmitter

Ready. Get Uni-Set. Go.





You've got a set-design problem. We've got a quick and easy answer: The Uni-Set® Modular Studio Staging System.

Design your set using the Uni-Set® Planning Model, working out your camera angles as you go. Then your studio floor people can easily assemble the full-sized modules into a workable setting in record time. The Uni-Set® Graphic Design System completes the transformation. In only a few hours you've gone from an idea to a finished, camera-ready setting.

Call Uni-Set® Corporation today, and let us show you how this low-cost, reusable staging system can solve your studio setting problems.

UNINE ZE CAMA® CORPORATION

449 Avenue A Rochester, New York 14621 (716) 544-3820

Circle (29) on ACTION CARD

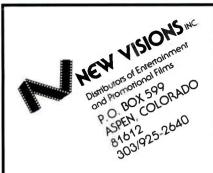
Uni-Set: Uni-Set once again will be displaying their popular Modular Studio Staging System. Sets can be designed using Uni-Set's miniature planning modules, and the full-sized set can be built from the miniature pattern. This low-cost staging system can be assembled in dozens of different ways for a new studio look whenever necessary.

United Media: United Media will be introducing their new videotape editor, the UMI 500, especially suited for ENG and off-line editing. The UMI 500 is equipped with an audio/video dissolve unit capable of performing audio and video dissolves simultaneously with, but independently of, each other using different rates. It is ideally suited for off-line editing because it permits the operator to generate an industry-compatible EDL list on disk for easy transport to an on-line facility.

Also to be shown are the Multi-Tasking Series (MT 30, MT 60, MT 90) videotape editors. These editors can perform several major tasks at the same time using from three to nine video or audio machines with switcher, and either on-line or off-line SMPTE/EBU time code or control track. The Commander Series (Commette, Mini-Comm, and Commander II) videotape editors use from two to eight machines. All models are expandable up to the next level of sophistication with 100% trade-in.

TRYLON A.B.C owers A low-cost alternative for Low Power Television 96' self-support, delivered to your door for \$1500 · Designed to meet your unique requirements Rugged, dependable triangular construction ANUFACTURING CO. LTD. PO BOX 186 21 HOWARD AVE. ELMIRA, ONTARIO CANADA N3B 2Z6 TEL. (519) 669-5421 FAX (519) 669-8912 Delivery included to most major centres in the continental U.S.

Circle (67) on ACTION CARD



AWARD-WINNING

half-hour sports specials available on a 2/4 barter split. Celebrities and sports commentators step into the sports arena and touch your viewing audience with the magic that makes America's love affair with sports so great! When you need entertainment for people of all ages, call Dabney Mann at New Visions, Inc. for the best in sports syndication.

Circle (25) on ACTION CARD

Comments Needed On Transfers Of Non-Stock Licenses

The Federal Communications Commission is seeking comments on guidelines for granting a transfer of control of licensed non-stock entities such as public television stations, some religious broadcast stations, and stations operated by educational institutions.

The Commission proposes applying the basic principles with which it governs transfers of control of stock entities to any non-stock entities that are directed by a governing board and that operate pursuant to a written organizational document. Such entities include membership organizations, certain governmental bodies, and organizations with self-perpetuating boards.

Comments are requested on whether the Commission's assumptions about these types of entities are correct, and if the proposed guidelines should be altered.

For further information, see the FCC's Notice of Inquiry (FCC 89-90), or call David E. Horowitz at the Mass Media Bureau, (202) 632-7792.

Erwin Scala To Build Third California LPTV

Erwin Scala Broadcasting Corporation has won a lottery for its third LPTV station, Channel 31 in Arroyo Grande, CA. The new station will broadcast to about 140,000 residents in Arroyo Grande and the surrounding area.

Spanish language programming, as well as programs for seniors and children, will be a top priority for the new station, according to Cherie Erwin Scala, general

manager. Also planned are locally produced news, entertainment, and community events programs.

Erwin Scala Broadcasting also owns construction permits for Route 66TV (K66CY), a Channel America affiliate, and 68TV (K68CT), both in Arroyo Grande. In 1984, the company built and operated K21AG, the first LPTV station in the State of Hawaii.

Fulbright Fellowship In Film And TV Announced

The United Kingdom Fulbright Commission, in association with both the British Academy of Film and Television Arts and Shell UK, has announced the 1990-91 professional fellowship in film and tele-

HDTV Experiment Uses Andrew Antenna

The Federal Communications Commission's Advanced Television Test Center has chosen an Andrew HMD Series slotted array antenna for high definition television propagation experiments.

Experiments are being run in both the 2.5 GHz and 12.45 GHz bands to determine if these spectrum areas would be suitable for transmitting the augmented HDTV signals.

The antenna, model P/N HMD-16HC-S05, will be connected to the test transmitter with 375 feet of Andrew 15/8" air dielectric HELIAX® cable. It will provide 17 dBi gain with 0.5° beamtilt in a cardioid pattern for transmission in the horizontal polarization.

"Two-Year Rule" Repealed

The Federal Communications Commission has repealed the "two-year rule" which limited the term of affiliation between networks and full power television stations to two years (see The LPTV Report, October 1988).

The Commission said that eliminating the rule would make both stations and networks more attractive to investors by allowing the security of a longer affiliation contract. It also said that in today's marketplace, it is no longer necessary to help networks by regulating competition.

The two-year rule was adopted in 1945 to encourage the development and growth of new networks. It was modeled after a similar rule for radio networks that had been adopted four years earlier.

vision. The recipient will pursue extended professional work and study in the United Kingdom, and will work to further professional ties between the American and British film and television communities.

Applicants must be U.S. citizens with a minimum of three years of experience in any area of professional film or television. Because the fellowship is intended to foster professional activity, purely academic proposals will not be considered.

The nine-month fellowship comprises a fixed grant of approximately £10,000 Sterling (about \$17,200), plus travel expenses. The starting date is flexible, beginning approximately September 1990.

Applications, including references, should be postmarked no later than September 15, 1989. For application materials and further information, write Steven Blodgett or Michael Doyle, Council for the International Exchange of Scholars (CIES), 3400 International Drive, NW, Suite M-500, Washington, DC 20008-3097. Or call (202) 686-6239.

Montreux Symposium Set For June

The 16th International Television Symposium and Technical Exhibition will be held in Montreux, Switzerland June 17-22, 1989. Concurrently with the Symposium, the Second International Electronic Cinema Festival will be held.

Both events will focus on innovations in television production, terrestrial and satellite broadcasting, satellite program distribution, and cable television. Among the sessions will be workshops on HDTV, television commercials, recent developments in electronic news gathering, advanced TV systems on cable, satellite and studio equipment, and new cable services.

The International Symposium and Technical Exhibition is held every other year in Montreux. For registration information, write P.O. Box 97, Rue du Theatre 5, CH-1820 Montreux, Switzerland.





TTC TOTAL SUPPORT

Quality people stand behind every TTC transmitter. Our service begins the minute you buy TTC—and it never ends. We still support products made over twenty years ago. Our marketing, engineering, manufacturing, and service personnel *keep you on the air*.

Advanced broadcasting technology acknowledged worldwide. TTC advanced LPTV transmitters and translators meet your most stringent technical specifications. All our products are made with strict attention to quality control and thorough testing. TTC builds LPTV transmitters, translators, and boosters from 1 Watt to 10 Kilowatts, UHF STLs and intercity relays recognized worldwide for quality and performance.

We're there with Total Support if you need us. At TTC, we take pride in our rapid response to customer needs. Our twenty-four hour Total Support Hot Line lets you call for technical or engineering support at any time—for questions and assistance, additional parts, or maintenance.

Made in the USA. Get to know TTC and our full line of transmitters, translators, and broadcasting equipment. For more information or product literature, call or write TTC:

Television Technology Corporation,

650 South Taylor Ave. • Louisville, Colorado 80027 • USA Telephone: (303) 665-8000 • FAX: (303) 673-9900

The Quality is TTC

Circle (7) on ACTION CARD
OR FILL OUT THE TTC RESPONSE CARD ATTACHED

LPTV Distribution by State and Territory

March 8, 1989

	Licenses	CPs*
ALABAMA	5	27
ALASKA	223	32
ARIZONA	11	47
ARKANSAS	5	36
CALIFORNIA	23	85
COLORADO	14	37
CONNECTICUT	0	6
DELAWARE	3	0
WASHINGTON, DC	1	0
FLORIDA	21	106
GEORGIA	9	54
HAWAII	1	22
IDAHO	17	40
ILLINOIS	2	33
INDIANA	7	24
IOWA	8	56
KANSAS	3	60
KENTUCKY	5	33
LOUISIANA	6	54
MAINE	5	13
MARYLAND	1	4
MASSACHUSETTS	5	18
MICHIGAN	5	18
MINNESOTA	18	44
MISSISSIPPI	10	19
MISSOURI	8	43
MONTANA	16	46
NEBRASKA	3	19
NEVADA	11	24
NEW HAMPSHIRE	1	5
NEW JERSEY	2	10
NEW MEXICO	8	60
NEW YORK	10	45
NORTH CAROLINA	4	48
NORTH DAKOTA	3	18
OHIO	7	37
OKLAHOMA	15	31
OREGON	15	36
PENNSYLVANIA	11	31
RHODE ISLAND	0	3
SOUTH CAROLINA	1	22
SOUTH DAKOTA	4	19
TENNESSEE	13	44
TEXAS	35	129
UTAH	18	19
VERMONT	0	10
VIRGINIA	2	22
WASHINGTON	5	36
WEST VIRGINIA	0	5
WISCONSIN	8	28
WYOMING	12	51
GUAM	1	0
PUERTO RICO	2	9
VIRGIN ISLANDS	0	1
TOTALS: Licenses: 623	4	

Construction Permits: 1,719

*Construction Permits

Kompas/Biel & Associates, Inc.

Supplier Side

Fulfill your public service obligations, and perhaps save some lives, with a new series of PSA's on highway safety by Imagemaker Productions. Produced and hosted by Mark T. Moennig, a Wisconsin county traffic officer, the spots stress the positive side of safety on the road.

The first segment in the series talks about the importance of safety belts. Others discuss such safety topics as schoolbus rules and drinking and driving. Officer Moennig has witnessed many of the kinds of traffic accidents he is trying to prevent with his series. His first-hand accounts lend credibility to his spots.

Circle (159) on ACTION CARD

The neighborhood butcher comes to your viewers' living rooms in a new insert series by **Corposant Communications**.

Entitled "Your Minute Message On Meat with Frank Maturo," the series is available in daily 30- or 60-second inserts on a cash license basis. It is specifically targeted to the local or national news program viewer, according to M & M Syndications, distributor of the program.

The inserts are hosted by Frank Maturo, a butcher with 41 years of experience. In 265 first-run segments, Maturo discusses how to select and prepare beef, veal, pork, lamb, poultry, and wild game.

Maturo is available to host 30- and 60second tie-in commercials promoting local food merchants. He will also do live promotions with local or regional super-

Circle (160) on ACTION CARD

The Theosophical Society in America is offering a series of free videotapes featuring nationally known speakers and authors. The programs, delivered on ³/₄" tape, include such titles as "Reincarnation: The Untrue Fact," "Joy Before Night: Native American Values and Healing," "The Mystic's Laboratory," and "The Meaning of Tibetan Buddhist Chanting." In production for release in the fall are programs on Gnosticism, Hawaiian Shamanism, and death and dying.

The Theosophical Society in America is a century-old, non-profit service organization that encourages the study of comparative religion, philosophy, and science.

Circle (158) on ACTION CARD

Aristo Video Promotions has recently announced several new music video releases. Among them are "If I Never See Midnight Again" by Sweethearts of the Rodeo, "I Wonder What She's Doing Tonight" by Russell Smith, "Come From The Heart" by Kathy Mattea, and "Spanish Eyes" by Willie Nelson.

The videos are free and available on 1" tape.

Circle (157) on ACTION CARD

WorldRadioHistory

Supplier Solo

The M/A-COM MAC Short Haul Microwave

-by Ernest Hickin

M/A-COM MAC (formerly Microwave Associates Communications), the company that introduced the first 23 GHz FM microwave link back in 1981, and which now has over 4,000 in service worldwide, has added a new low-cost video radio to its short-haul family. Joining the MA-23CC and MA-18CC, the MA-23VX is aimed at the LPTV, surveillance, and video-conference markets. Other versions of the MA-23VX are geared to the voice and data and LAN markets previously served by the MA-23VFM.

Short-Haul Microwave

The 23 GHz band is ideally suited to short-haul connections (up to one or two miles with 1-foot diameter antennas, more with larger antennas). The equipment is simple and can be installed by users with little or no microwave experience.

If you can see one end of the link from the other end, then the path is satisfactory—literally a line-of-sight situation. The minimum clearance required from buildings, trees, or other obstructions along the path is only 10 feet on a 4-mile path, even less on a 2-mile path.

Applications

The M/A-COM MAC range of short-haul video/audio microwave has a number of applications.

LPTV: Studio-transmitter links (STL) can be provided by the MA-23VX with a I-foot diameter antenna for paths of one to two miles (depending on region), or up to four miles with the 2-foot antenna.

Typically, the link would be fitted with one audio sub-carrier, but two are available if stereo or a second language program is required. If transmitter control or monitoring is needed, a return audio or control sub-carrier can be fitted in the same RF/antenna head unit; a second interface is then needed at each end.

For longer ranges, M/A-COM MAC has the MA-23CC with 4-foot or 6-foot antennas, and the MA-18CC. The latter operates in the 18 GHz band, which is less susceptible to rain attenuation and therefore gives nearly twice the range (for a given antenna size and similar performance). Both the MA-23CC and the MA-18CC meet EIA RS-25OB standards.

Surveillance: The MA-23VX is also suitable for security systems that require

a video link from a camera, or group of cameras, to a master control room, with a return link to operate azimuth, elevation, and zoom controls. The return link can be used to interface with control systems in RS-422 or RS-232 format.

Video Conferencing: All three shorthaul products are ideal for two-way video conference inter-classroom use.

Installation

The radio-frequency (RF) equipment is housed within the 1-foot diameter antenna structure (Fig. 1), or in a small box attached to the rear of larger antennas.



Figure 1

Simple U-bolts secure the assembly to a vertical $3^{1/2}$ " pipe. This can be on a tower, if one exists, but it is typically on a roof-top pole, or building wall. It can even be inside a window if the glass is not of the metallized heat-reflecting, or other high loss, type.

The video and audio interface equipment (Fig. 2) is 1.75" high, 19" wide, and

AUTOMATED VIDEO PLAYBACK

PROVIDES UNATTENDED CONTROL OF LIVE FEEDS OR PRE-RECORDED VIDEO PROGRAMS FOR LPTV, CCTV, MATV & CATV



The PVC-5A is a sequential timer that allows you to reliably control your Programming... without hassle or worry.

- ALL ELECTRONIC CONTROLLER
- Compatible with most VHS, SVHS or UMATIC VCRs
- Single or Dual channel operation
- Easy to Program...Simple straightforward commands
- Controls up to eight VCRs plus C.G. Switching
- Internal Video Sensing...Eliminates blank screen
- Battery back-up for time and Memory function

To view an 11-minute video tape on the PVC-5A contact:

TECH ELECTRONICS, INC.

6000 Peachtree Road, NE • Atlanta, GA 30341 • (404) 446-1416

Circle (80) on ACTION CARD

14.3" deep. It contains the power supply, baseband and main IF amplifiers, and metering equipment. It is connected to the RF unit by a very flexible coax/power cable.

The antennas must be pointed at each other and finally aligned to within $\pm 1^{1/2}$ ° (closer for the larger antennas) to minimize the loss between them. Then turn the switch on, and the system will be op-

erational. Because of its simplicity, ease of installation, freedom from right-of-way requirements, and low cost, and because it is a one-time investment with no rental fees, short-haul microwave is an economical transmission method.

Other M/A-COM MAC Products and Services

M/A-COM MAC supplies long-haul video systems around the world and has a complete range of microwave radios in the 2, 6, 7, 8, 10-13 and 15 GHz bands. Supplementing these radios are hotstandby, diversity, and 1+N protection systems.

M/A-COM MAC's System Engineering Group has experience in integrating engineering order wire, supervision and control, multi-channel telephony above the video baseband, and remotely controlled route switching. M/A-COM systems have been installed throughout the USA as well as in many overseas territories.

Finally, to complete their turnkey capability, M/A-COM MAC has a Field Engineering Group experienced in the installation of radio, power, towers, antennas and other ancillaries, and capable of commissioning the overall system.

Ernest Hickin is a senior staff engineer with M/A-COM MAC.



Figure 2

JVC Named Manufacturer Of The Year

JVC Professional Products Company of Elmwood Park, NJ has been named 1988 Manufacturer of the Year by the International Communications Industries Association (ICIA).

The company received the award for its introduction of S-VHS technology, "which provided users, especially those in the television industry, with a high quality, low cost and reliable format," said the ICIA. "JVC not only filled a significant gap in the market, but also caused the video industry as a whole to look ahead and begin serious preparation for the 1990's."

The ICIA, a worldwide trade organization for the professional communications products industry, presents the award each year to a manufacturer that has developed and marketed a highly innovative or effective professional communications product. Previous winners have included General Electric Company; Projection Display Products Corporation of Syracuse, NY; and Schneider Corporation of America of Woodbury, NY.

IVC manufactures a complete line of broadcast and professional cameras, recorders, duplicators, editing equipment, and professional audio equipment.

ADM Technology Acquired

ADM Technology, manufacturer of audio mixing consoles, distribution amplifiers, and other audio equipment, has been acquired by an investor group. The group includes Dewey Norton, ADM's new president and CEO, and Richard Stiennon, vice-president of marketing. The company's founder, Robert Bloom, will remain as a consultant.

ADM Technology designs and manufactures audio equipment for the broadcast industry. It was a pioneer in the audio console industry and was one of the first manufacturers of totally modular comprehensive audio consoles for recording and broadcast.

NTA Technical Seminar Set

The National Translator Association will hold its annual TV & FM Translator Technical Seminar May 18-20, 1989 at Nendels Inn & Convention Center in Medford, OR.

The Seminar will feature hands-on technical workshops, technical papers and panel discussions, equipment displays and demonstrations, tours of broadcast facilities, and social activities. Special guest speakers from the Federal Communications Commission will include Keith Larson, chief of the LPTV Branch; Alan Schneider, chief of the Auxiliary Services Branch; and Tom English, an engineer with the Auxiliary Services Branch.

For registration information, write NTA Seminar, P.O. Box 628, Riverton, WY 82501; or call NTA president Darwin Hillberry at (307) 856-6827 or 856-3322.

NCTA Gearing Up For May Convention In Dallas

The National Cable Television Association is putting the finishing touches on its program schedule and exhibit line-up for "Cable '89—The National Show," to be held May 21-24 at the Dallas (TX) Convention Center.

Three general sessions are scheduled: "Programming Directions for the 90's," "Television and Politics," and "Communications and Entertainment: The CEO Perspective." Forty panel, or "track," sessions will cover topics in six subject areas—public policy, marketing, programming, finance, management, and technology. And the exhibit hall will feature more than 200,000 square feet of cable programming and technology displays.

For registration information, contact the NCTA, 1724 Massachusetts Avenue, NW, Washington, DC 20036. Or call (202) 775-3629.

Cables Cited For EEO Violations

The Federal Communications Commission has determined that the following cable television employment units did not comply with the Commission's Equal Employment Opportunity Rules during the 1987 reporting year:

Acton CATV, Inc., Anne Arundel County, MD; Adelphia Communications Corporation, Nassau and Erie Counties, NY; American Cable Systems Corporation, Broward County, FL and Cook County, IL; American Television & Communications, Outagamie County, WI and Arapahoe and Denver Counties, CO; Bachow & Elkins Communications, Inc., Grenada County, MS, Smyth and Pulaski Counties, VA, and Galax City, VA; Cable Management Associates, Inc., Kanawha County, WV, Dauphin County, PA, and Mineral County, WV.

Cable TV of Coral Springs, Broward County, FL; Cablevision Industries, Inc., Lee and Volusia Counties, FL and Calvert County, MD; Cablevision Systems Corporation, Bergen County, NJ and Cuyahoga County, OH; Cencom Cable Associates, Inc., Madison County, IL, Greenville County, SC, St. Louis County, MO (4 units), and Buncombe County, NC; Century Communications Corporation, Los Angeles County, CA; Century Telephone, Ouachita Parish,

Colorado Springs Cablevision, El Paso County, CO; Columbia International, Inc., Prince William County, VA; Combined Cable Corporation, Jones County, IA; Comcast Cable Communications, Inc., Mobile County, AL, Allen and Marion Counties, IN, Genesee County, MI, Montgomery County, PA, and Baltimore County, MD; Communications Systems, Inc., Harris County, TX; Community Cablesystems, Inc., San Patricio County, TX; Community Cablevision Framingham Associates, Middlesex County, MA; Daniels & Associates, Inc., San Diego County, CA and Denver County, CO.

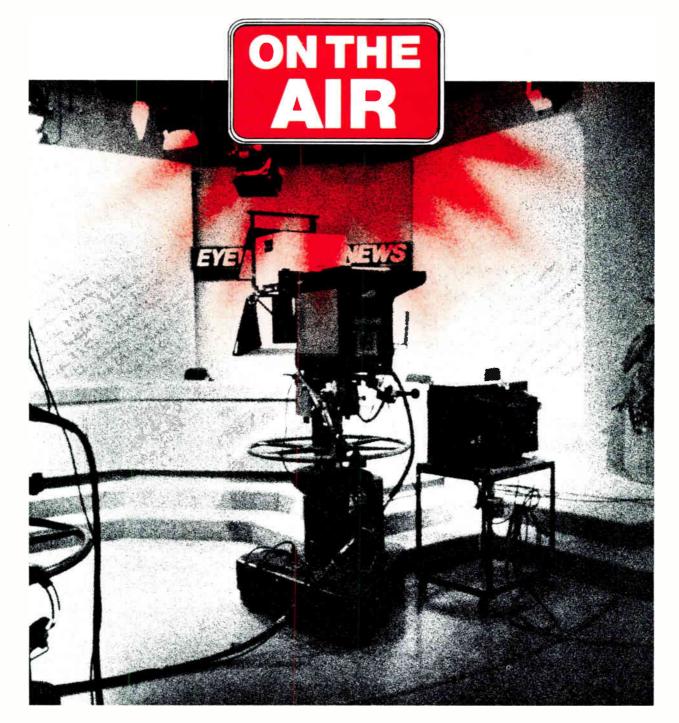
Eastern Connecticut Cable Television, Inc., New London County, CT; Eastern Telecom Corporation, Allegheny County, PA; Essex Communications Corporation, Hidalgo County, TX, Santa Rosa County, FL, and Mobile County, AL; Fairbanks Communications, Inc., Palm Beach County, FL; First Carolina Communications, Inc., Cochise County, AZ and Sevier County, TN; Friendly Hills Apartments, Guilford County, NC; Grafton Cable Company, Inc., Taylor County, WY; Group W Cable, Inc., New York County, NY; Jones Intercable, Inc., Jackson County, MO, Milwaukee County, WI, and Arapahoe County, CO; Jones Spacelink, Ltd., Palm Beach County, FL and Arapahoe County, CO; Mountain Zone Television, Brewster County, TX.

Palm Communications, Inc., Palm Beach County, FL; Premier Cable Services, Washoe County, NV; Prime Cable Limited Partnership, Clark County, NV and Travis County, TX; Rifkin & Associates, Inc., Palm Beach County, FL and Denver County, CO; Rite Communications, Burke County, NC and Du Page County, IL; Saco River Communications Corporation, York County, ME; Scott Cable Communications, Inc., Montgomery County, TX; Service Electric Cable TV, Inc., Lehigh County, PA; Shamrock Cable Corporation, Medina County, OH; Signet Cablevision Company, Gloucester County, NJ.

Sonic Communications, Santa Cruz, San Luis Obispo, and Contra Costa Counties, CA; Southern Cablevision, Marnett County, NC; Storer Communications, Inc., Harris and Dallas Counties, TX; TCA Cable TV, LaFayette Parish, LA and Smith County, TX; Telecommunications, Inc., Grundy County, IL; United Cable Television Corporation, Tulsa County, OK, Worchester County, MI, Santa Fe County, NM, Wayne and Oakland Counties, MI; Warner Cable Communications, Inc., Blair and Franklin Counties, PA, Hillsborough County, NH, Kosciusko County, IN, Berkshire County, MA, Mahoning County, OH; and Wometco Cable TV, Inc., Wilson County, NC.



5...4...3...2...1...



You're on the air!

And your dream's come true.
Your LPTV station is sending out a signal, loud and clear. Every hour of planning and every piece of equipment is backing that signal, because EMCEE is backing them: site selection, satellite earth station, transmitter, transmitting antennas and line, towers, translators. . . even a complete studio package of cameras, lighting, video switcher, audio console and more.

EMCEE's 27 years of experience in low power television guarantee the best equipment, installation, service,

maintenance, training and parts. You wouldn't entrust your dream to just anybody. EMCEE is on the air with you.

EMCEE BROADCAST PRODUCTS, Div. of Electronics, Missiles & Communications, Inc. White Haven, Pa. 18661 FAX (717) 443-9257 Call Toll-free: 1-800-233-6193

(In PA: 717-443-9575) TWX: 510-655-7088 Ans: EM@@@RWHHW

Circle (1) on ACTION CARD



advanced technology systems excellence

SEE US AT NAB BOOTH #4251

Classifieds

FOR SALE

Used Bogner B8-UO, channel 54 antenna. Allonas Communications, Inc. Contact Bill Allonas at (419) 562-3830

TV news desk, 2 persons, custom made: 34" high, 39" wide, 8' long. Formica top. Perfect for your local news set. Cost \$3,000 to build, yours for \$1,000, F.O.B. Rice Lake, WI. Call J. Dorrance, (715) 234-2121.

WANTED TO BUY

LPTV station in South Florida area. Call or write M. Greenberg, c/o Silvercup Studios, 42-25 21st St., Long Island City, NY 11101, Dept. T, (212) 349-9600.

Immediate buyers for LPTV construction permits, top 100 markets. Call Bill Kitchen at Television Technology Corporation, (303) 665-8000. Or write for full details to: Bill Kitchen, Television Technology Corporation, P.O. Box 1385, Broomfield, CO 80020.

500 foot tower; UHF 1 kW transmitter, channel 26; UHF antenna, channel 26. Paul DuBose, (512) 884-9456 or (512) 833-4460.

CLASSIFIED RATES: All classified ads are payable in advance. When placing an ad, indicate the exact category you desire: Help Wanted, Situations Wanted, Services Offered, Business Opportunities, Wanted to Buy, For Sale, Miscellaneous. The publisher reserves the right to abbreviate, alter, or reject any copy

Classified advertising is sold at the rate of 50¢/word. There is a \$15.00 minimum charge for each ad. Count each abbreviation, initial, single figure, or group of figures or letters as one word each. Symbols such as mm, C.O.D., P.O., etc., count as one word each. Telephone numbers with area codes, and ZIP codes, count as one word each.

Business Card ad rates are \$45.00 per insertion. \$35.00 each for six or more consecutive insertions. For Classified Display rates, call John Kompas at (414) 781-0188

Cancellations of or changes in on-going ads must be made 30 days prior to the month in which the cancellation or change is to take effect.

TO PLACE YOUR AD CALL BARBARA BARR AT (414) 781-0188

USED TRANSMITTERS AND ANTENNAS (save thousands)

DEALERS FOR: ANDREW, BOGNER, CABLEWAVE, EMCEE, LINDSAY, M/A COM, SCALA & TTC

(one watt to 50 KW)

Broadcasting Systems, Inc. Turnkey LPTV Construction

21617 North Ninth Avenue, Suites 105 & 106 Phoenix, AZ 85027

(602) 582-6550 FAX (602) 582-8229

Kenneth Casey (30 YEARS EXPERIENCE)

FCC ON-LINE DATABASE

dataworld

AM · FM · TV · LPTV · ITFS P.O. Box 30730 Bethesda, MD 20814 (301) 652-8822 (800) 368-5754

Arent, Fox, Kintner, Plotkin & Kahn

Washington Square 1050 Connecticut Avenue, N.W. Washington, D.C. 20036-5339

General Counsel to the Community Broadcasters Association

Telephone (202) 857-6000 Telex WU 892672 Telecopier (202) 857-6395

JOHN H. BATTISON, P.E. & ASSOCIATES

Consulting Low Power TV Engineers 2684 State Route 60, RD #1 Loudonville, Ohio 44842

Applications, Licensing, Turnkey (419) 994-3849



Developers of the Crown System Family of Radio and TV Broadcasting Software - Established in 1980

AM • FM • TV • LPTV • Custom Programming

(614) 888-8388

5354 N. HIGH STREET . COLUMBUS, OHIO 43214

LPTV STATIONS COAST TO COAST

MEDIA BROKERS . APPRAISERS

RADIO . TV . LPTV A Confidential & Personal Service

Illinois Office:
3125 Maple Leaf Dr. • Glenview, IL 600251

312 . 272 . 4970

Washington D.C. Office

Ellen Sherwood Lyle 105 S. Alfred St. . Suite A-43 Alexandria, VA 22314

WAKE UP YOUR AUDIENCE!

THE LIBRARY OF SPECIAL VISUAL EFFECTS ON TAPE READY TO USE

500 EFFECTS \$ 500

DARINO FILMS (212) 228-4024

WAYNE S. McCULLOUGH

WMc Communications

Complete Field Service Specialists MMDS . ITFS . LPTV . TRANSLATORS

P.O. Box 87 White Haven, PA 18661 (717) 443-8028 (412) 241-6551

... at the FCC

The following LPTV stations received licenses on the dates shown. Station call sign, location, and the name of the licensee are also given.

K44CN Cottonwood, AZ. Scripps Howard Broadcasting Company, 2/28/89.

K34BW Willow Creek, CA. California Oregon Broadcasting, Inc., 2/28/89.

W35AJ St. Petersburg, FL. Frontier Broadcasting, Inc., 2/28/89. K13VG Jennings, LA. Jennings Broadcasting

Company, Inc., 2/28/89. K07TV St. Louis, MO. American Christian TV

System, Inc., 3/8/89.

K25AK Fallon, NY. Fallon Community Television, 2/28/89.

W12BR Altoona, PA. Victoria D. and Silas F. Roystar, 2/28/89.

K07TS Falfurrias, TX. Evarista Romero, 2/28/89. K67DW San Antonio, TX. M & M Communications, 2/28/89.

K51BX Woodrow, TX. Ronald J. Gordon, 2/28/89. W25AU Dubois, WY. Central Wyoming College,

LPTV LICENSE RENEWALS

The following LPTV stations received license renewals on the dates shown. Station call sign, location, and the name of the licensee are also

W63AT Hazlehurst, GA. Jeff Davis Broadcasters, Inc., 3/3/89.

NEW LPTV CONSTRUCTION PERMITS

The following parties received LPTV construction permits on the dates shown. Station call sign and location are also given.

W49AY Birmingham, AL. Glen Iris Baptist School, 2/28/89.

K48DF Randall, AR. Mountain TV Network, Inc., 2/28/89.

K14HR Tucson, AZ, K. Sandoval Burke, 2/28/89, K22DA San Luis Obispo, CA. Alameda Television 2/28/89

K69FT Denver, CO. Peter B. Van De Sande, 2/28/89.

K28BW Snowmass, CO. Snowmass Mountain Resort Television, 2/28/89.

W03BC Monticello, FL. Manuel A. Cantu, 2/28/89. W49AW Palatka, FL. Pentecostal Revival Association, Inc., 2/28/89.

W05BO Sarasota, FL. Juan Ramon Ortiz, 2/28/89.

W07CF Vero Beach, FL. Russell Communications, 2/28/89.

W13CC Savannah, GA. Norma Levin, 2/28/89. K42CO Honolulu, Hl. Charles Billings, 2/28/89.

K51CR Dubuque, IA. Robert H. Hanson, 2/28/89. K38CO Lewiston, ID. Colleen B. McDonald and Associates, 2/28/89

W29AS Highland Park, IL. Albert Morrison, Jr., 2/28/89

W50AZ Columbus, IN. Minority Enterprises, Inc., 2/28/89

W67CB Evansville, IN, Randolph Victor Bell, 2/28/89

W69CF Greenville, KY. Sue P. Thomas, 2/28/89. K10NG New Orleans, LA. Video Jukebox Net-

work, Inc., 2/28/89. K67ER New Orleans, LA. Mintelco, Inc., 2/28/89.

W19BA Grand Rapids, Ml. All American TV, Inc., K58DH St. Louis, MO. Kurt J. Petersen, 2/28/89.

K52DH Springfield, MO. John Wayne and Kathryn Lou Wilson, 2/28/89.

W54BC Brookhaven, MS. Southwest Publishers, Inc., 2/28/89.

K41CX Helena, MT. Ellen Angelia Murray, 2/28/89. K22CZ Lewistown, MT. Mountain TV Network, Inc., 2/28/89.

W67CD Sanford, NC. T. B. Buchanan, 2/28/89. W62DM Omaha, NE. Christian Communications Corporation, 2/28/89.

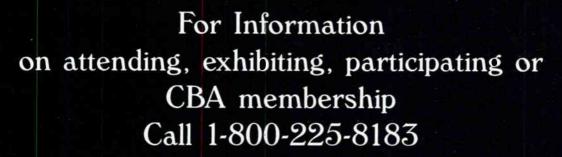
K30CU Santa Fe, NM. K. Sandoval Burke, 2/28/89.

Mark Your Calendar!

THE DATE — November 5-8, 1989

THE PLACE — Riviera Hotel in Las Vegas

THE EVENT — 2nd Annual LPTV Conference and Exposition



Circle (131) on ACTION CARD

K27CY Taos, NM. Mountain TV Network, Inc.

K38CH Taos, NM. El Crepusulo, Inc., 10/31/88. K25DG Lake Tahoe, NV. John E. Bloemer,

K29CD Lake Tahoe, NV. Mark S. Severence, 2/28/89.

W15AS Oneonta, NY. Rastus Broadcast, 2/28/89.

W23AU White Plains, NY. Westchester Broadcasting, Inc., 2/28/89.

W59BT Pittsburgh, PA. Turnpike Television,

W17AW State College, PA. Silas F. Roystar,

W29AR State College, PA. Ann Elizabeth Plenderleith, 2/28/89.

K28CV Brownwood, TX. American Lo-Power TV Network, Inc., 2/28/89.

K55FN Carrizo Springs, TX. Villareal Broadcasting Company, 2/28/89.

K44CU Provo, UT. Oxford Investment, Inc., 2/28/89

K36CJ Salt Lake City, UT. National Minority TV, Inc., 2/28/89.

W66BF Norfolk, VA. Stephen S. Evans, Jr.,

W28AU Barton, VT. Bruce M. and Susan E.

Lyons, 2/28/89. W44AQ Burlington, VT. Residential Entertainment. Inc., 2/28/89.

K53DB Bellingham, WA. Russell Communications, 2/28/89.

ASSIGNMENTS AND TRANSFERS

K54CR Kayenta, AZ. Voluntary assignment of permit granted from Navajo Community College to The Navajo Nation on 2/27/89.

K40AP Tsaile, AZ. Assignment of license granted from Navajo Community College to The Navajo Nation on 2/27/89.

W22AN St. Augustine, FL. Voluntary assignment of permit granted from First City Broadcasting, Inc. to Lumen, Inc. on 3/7/89.

W67BJ Savannah, GA. Assignment of license granted from Entertainment Systems, Inc. to Trinity Christian Center of Santa Ana, Inc. on 3/4/89.

W05BC Evansville, IN. Assignment of license granted from S. Jerry Kissinger to South Central Communication Corporation on 2/27/89.

W54AE Paducah, KY. Assignment of license granted from David Lee Grimes to Family Video Entertainment Corporation on 3/7/89.

K18BT St. Louis, MO. Voluntary assignment of permit granted from Kim Mooney to Trinity Christian Center of Santa Ana, Inc. on 3/8/89.

K28CN Harlowton, MT. Voluntary assignment of permit granted from Rural Television System to Colstrip Public Schools on 1/22/89.

K48AW Shiprock, NM. Voluntary assignment of permit granted from Navajo Community College to The Navajo Nation on 1/27/89.

K62DG Lubbock, TX. Voluntary assignment of permit granted from Local Service Television, Inc. to Ramar Communications, Inc. on 1/22/89.

LPTV LOTTERY WINNERS

The following are tentative selectees of the LPTV/translator lottery held on March 1, 1989. If no petitions to deny the selectees are filed, and if they are otherwise qualified, they will be granted construction permits.

Ch. 54 Harrison, AR. Mountain TV Network, Inc. Ch. 31 Arroyo Grande, CA. Erwin Scala Broadcasting Corporation.

Ch. 23 Dublin/Livermore, CA. Warren L. Trumbly. Ch. 39 Santa Maria, CA. Blacks Desiring Media,

Ch. 27 Homosassa Springs, FL. Owen Broadcasting Enterprises.

Ch. 52 Wailuku, HI. Jose Castellanos.

Ch. 34 Burlington, IA. Mountain TV Network, Inc.

Ch. 62 Burlington, IA. Burlington Broadcasting Company, Ltd.

Ch. 45 Cedar Falls, IA. Taft Broadcasting Company.

Ch. 58 Paducah, KY. Millard V. Oakley. Ch. 59 Lake Charles, LA. Spectrum Media.

WorldRadioHistory

Ch. 34 Portland, MF, Barbara Dilley.

Ch. 22 Poplar Bluff, MO. Evarista Romero. Ch. 26 Natchez, MS. Free State Broadcasting,

Ch. 58 Natchez, MS. Black Media Associates. Ch. 20 Bozeman, MT. American Lo-Power TV

Network, Inc. Ch. 54 Grand Forks, ND. Midamerica LPTV

Associates, Inc. Ch. 24 Clovis, NM. American Lo-Power TV

Ch. 53 Clovis, NM. Minerva Rodriguez Frias. Ch. 27 Hempstead, NY. New York Public Interest Research Center.

Ch. 18 Charleston, SC. Allbritton Communications Company.

Ch. 30 Kingsport, TN. C. Philip Beal.

PROPOSED CONSTRUCTION PERMITS

Ch. 43 San Juan, PR. Arzuaga and Martinez Association.

Ch. 52 Newport, Rl. Perry Communications, Inc. Ch. 31 Canadian, TX. C. L. & O. Translator

System, Inc. Ch. 58 Jasper, TX. Mountain TV Network, Inc. Ch. 05 Livingston, TX. Polk County Broadcasting

Ch. 30 Lufkin, TX. Channel America, Inc.

Ch. 67 Snyder, TX. Ramar Communications, Inc. Ch. 69 Snyder, TX. Ramar Communications, Inc.

Ch. 55 Victoria, TX. Community Television of Victoria.

Ch. 30 Beaver, UT. Beaver City.

Ch. 67 St. George, UT. Mohave County Board of Supervisors.

Ch. 52 Colville, WA. Mountain TV Network, Inc.

Ch. 69 Puyallup, WA. Bonneville Holding Company.

Ch. 14 Walla Walla, WA. Apple Valley Broadcast-

Ch. 56 Yakima, WA. Ronald Alan Theodore Bevins.

Ch. 13 Mammoth, WY. Mammoth Community TV & FM Association.

Ch. 21 Rawlins, WY. KTWO Corporation.





omething revolutionary is happening in the world of television.

People are turning off TV that's predictable, and they're coming over to something new and creative. FamilyNet will soon be airing new, original programs especially for the millions who are saying, "The family is the most important part of our lives. We want television that reflects our values!"

REVOLUTIONARY PROGRAMS

Our 24-hour program schedule offers a wide selection of excellent family shows, including music, women's shows, sports,

outdoor adventures, children's shows, health and fitness, movie classics, inspirational and issues-oriented programs.

A BIG REVOLUTION TO COME

In the coming months, you'll see more original programs on **FamilyNet**. It's already happening, with **FamilyNet Sports**™, shows for young adults, music programs, TV shopping, family dramas, and more. It's all part of the growing **FamilyNet** Revolution.

COME ON OVER!

If you are an LPTV operator who would like to affiliate with a growing, family entertainment network, call FamilyNet today.

Circle (106) on ACTION CARD

Monthly Programming News
Release ■ Local spot avails
New and Original Shows ■ Live
NCAA Football & Basketball
Classic Movies ■ The Best
Inspirational Programs ■ Available on Galaxy III Transponder 23.

FamilyNet programming is now carried by LPTV's nationwide. To find out how your station can become an affiliate, call 1-800-8 FAMNET.



The Family Television Network