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Streamlining With Automation

Dow Jones On SCA

STV Going, Gone?

Not Selling Radio Specials

# BROADCAST COMMUNICATIONS

JANUARY 1985 \$3.00

THE INTERNATIONAL JOURNAL OF BROADCAST TECHNOLOGY

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# TED TURNER

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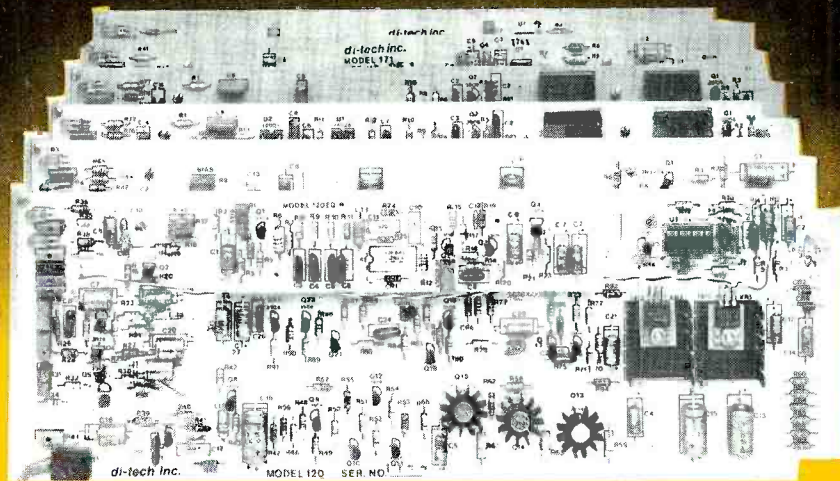
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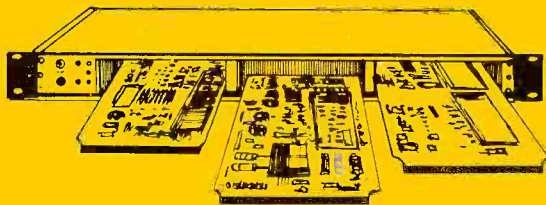


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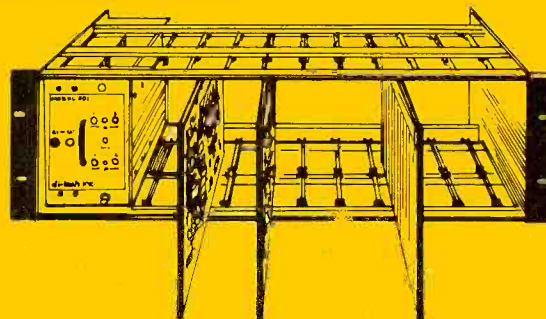
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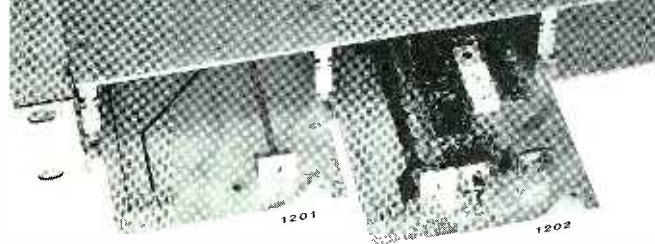
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THE INTERNATIONAL  
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# BROADCAST COMMUNICATIONS

THE INTERNATIONAL JOURNAL OF BROADCAST TECHNOLOGY

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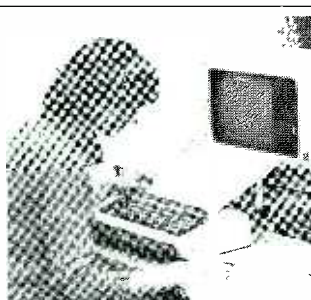
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Cover—Ted Turner, photographed in his Atlanta office, comments on a wide array of topics in an exclusive interview beginning on page 56. (Photo by Dan Helms)



# NEWSMAKER



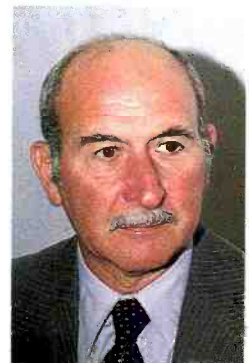
## WKRG-TV makes news in Mobile, Alabama with a GVG 300/Mk II Digital Video Effects production system... tightly formatted using visually exciting digital effects.

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WKRG-TV understands Grass Valley Group value...but if it's news to you, isn't it time you took a closer look at the 300 system?



DON KOCH

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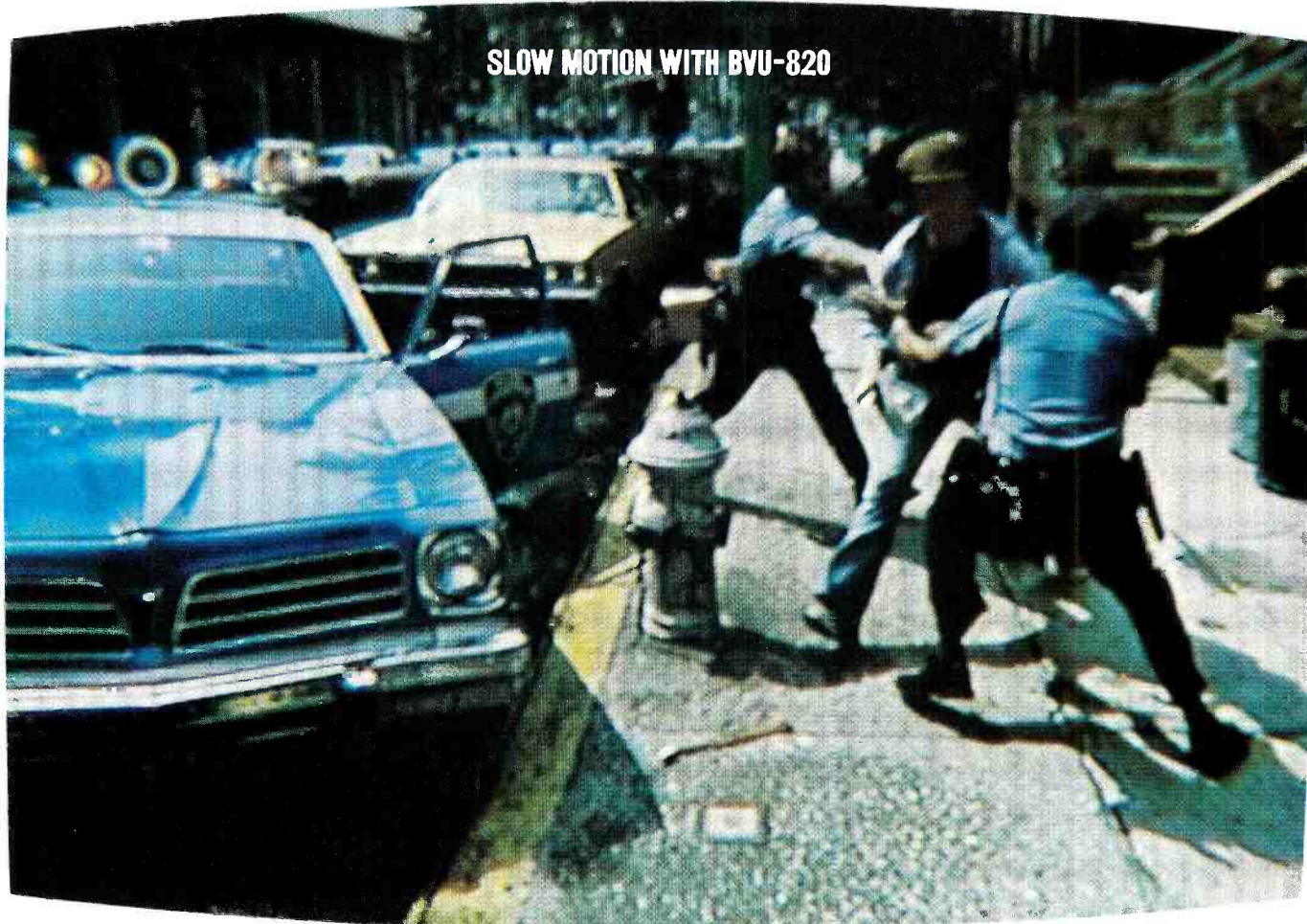
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At the heart of the new, fully integrated, plug-compatible Sony editing system is the BVU-820 videocassette recorder.

It retains all the outstanding qualities of the BVU-800 series. Including up to 40x play speed in shuttle, which is more than twice as fast as ever before—to stop, instantly, without slewing or breaking up.

But there's one brilliant addition—Dynamic Tracking. Which means U-matic users now have the ability to broadcast special effects—something which, until now, has only been associated with more expensive reel-to-reel broadcast VTR's.

### TOTAL FLEXIBILITY AT YOUR FINGERTIPS.

If the BVU-820 is the heart of the system, then the BVE-800 is most assuredly the brain. Not merely because of its 128 multi-event edit memory,

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The Sony U-matic editing system features another marvel of Sony technology, the BVT-800 Digital Timebase Corrector.

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## ON-THE-AIR

RON MERRELL

# SBE leads frequency coordination efforts



It's getting tougher on the road. It's enough of a problem these days to set up on the scene of an important local event to do a remote. The congestion sometimes is so bad on RPU, TV ENG, STL, TSL, and wireless microphone frequencies that tempers flare and the thought of cooperation is furthest from everyone's mind. But that's just what's needed.

If the event is important enough, in come the networks. And the congestion only gets worse. In some cities there are frequency coordinating committees, but their activity often is not known or understood by the networks. So the work of any coordinating committee ends up no better than the potential confusion brought on by the uninformed.

Surely any broadcaster, local or network, will want to get involved with the recent movement of the Society of Broadcast Engineers to establish coordinating committees in all major cities. Equally important, the SBE wants its cooperative coordination to include the networks.

The SBE's formation of the National Frequency Coordinating Committee, which now includes radio and television representatives from the major networks and from stations around the U.S., deserves industry backing. If successful, the committee should make available frequency coordinating lists, including contact names and numbers. If all broadcasters use these lists, arrival on the event scene will begin with accord instead of immediate signal crunching.

### It's not over yet

AM stereo took another move down Main Street when Delco announced that it has recommended Motorola's system to be used in radios in General Motors cars.

It's not clear how much clout the Delco tests and recommendation will have. One thing is for certain: when the FCC side-stepped the issue with a no-decision vote, the commission forced the potential for a decision from outside broadcasting.

The AM stereo parade of products is full of sour notes. Along Main Street

broadcasters thought the prize would go to another system. There's a feeling today among broadcasters lining the way that even though the squeeze is on, units in the field may yet prevail over decisions in distant headquarters.

### Here's one for Harold

For decades, Harold Ennes was known as the father of broadcast textbooks. A highly respected broadcast engineer, Ennes wrote books designed to help engineers and technicians regardless of their backgrounds. It was a labor of love, and so he did it without making great royalty demands.

When Harold Ennes died, the SBE established the Harold E. Ennes Scholarship Fund. The idea was to award scholarships to young people who needed financial help to further their broadcast technical education. Annually, the scholarship winner is announced at the SBE national meeting.

Once again, friends, students, and members of the technical side of broadcasting are being asked to donate funds to keep the memory of Ennes alive and the Ennes Scholarship active.

Meanwhile, the SBE has announced that applications for the scholarship will be accepted until March 1. An interest in broadcast engineering and enrollment in an approved academic institution are primary prerequisites. The application should include (1) a brief biography and statement of interests and goals in broadcasting; (2) a statement of technical changes anticipated in broadcasting in the next five years; and (3) a description of how the award will be used.

Those interested can contact the SBE by writing to P.O. Box 50844, Indianapolis, IN 46250; or you can call (317) 842-0836.

### Dumping the code

U.S. District Judge Harold Greene has approved a consent decree filed by the NAB, ending the government's antitrust suit against the association's voluntary Television Code. The decree calls for the elimination of a provision which limits the number of non-program announcements that could be broadcast consecutively, the number of

times a program could be interrupted for non-program material, and the number of products advertised within a single commercial.

That last point has caused problems, because many saw it as a means of forcing advertisers into more ads. If you can't run multiple products in one ad, you must run multiple ads.

The number of times a program may be interrupted is another matter. And sans the code, we'll put it out to the marketplace. If we've learned anything from AM and FM in recent years, we can get a glimpse of what the marketplace thinks.

NAB president Eddie Fritts included these comments in a statement following the court decision: "It is our understanding that the government never attempted to assess the impact of these provisions by interviewing the advertising community—which has publicly supported our code since the initiation of the suit. Nor did it consult the Federal Communications Commission, which traditionally has recognized self-regulation as a complement to its regulations. Ironically, two years prior to the suit, the Justice Department appeared before the Court of Appeals to defend the FCC's children's television policy statement which relied on the code's children's advertising time limitations."

Somehow it all fits in the deregulatory scheme of things. But let's not junk the whole code because part of it was zapped in the courtroom.

### Casting your vote

According to a recent survey compiled by the Cable Satellite Public Affairs Network (C-SPAN), a majority of U.S. senators are either in favor of or are leaning in favor of televising Senate floor debates.

However, in the same survey, 28 senators have shifted their position. That's to be expected. C-SPAN reports that 40 senators are definitely in favor of it.

Of course it's not a major issue. But as in all other issues, no one asks the broadcaster, let alone the public. That leaves the ball in our court. If we want it, we'll have to go after it. **BC**





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## **SMPTE TV conference set for Feb. 4-5**

The 17th Annual Television Conference of the Society of Motion Picture and Television Engineers is scheduled for February 4-5 in San Francisco. The following is the tentative program:

*Friday morning, February 4—Generating the Pictures.* "Practical Application of HDTV," Pat Lewis, Ames Research Labs; "Film Relations to HDTV," Richard Schafer, Eastman Kodak Co.; "Generation of HDTV Still Frames," Glen Southworth, Colorado Video Systems; "New Chrominance Components for Consideration of HDTV," Charles Rhodes, Scientific-Atlanta; "Review of SMPTE and JCIC Committee Work in the Area of HDTV Generation," Bill Hogan, Ruxton Ltd.; "The HDTV Camera—Fighting the Resolution/Noise Battle," U. Reimers, Bosch GmbH; "Today's Photographic Imaging Technology for Tomorrow's HDTV System," R. C. Sehlin, Eastman Kodak Co.

*Friday afternoon—Manipulating the Pictures.* "Arithmetic Processing of Digital Video Effects," Jim Blecksmith, Grass Valley Group; "The Technical Director Interface to Digital Video Effects," Dennis Fraser, NEC America; "The Computer-Controlled Frame Buffer as a Production Tool," Tom Klimek, Computer Creations; "Manipulating the Pictures," Peter Black, Xiphias; "A Menu-Driven Control Structure for TV Graphics Generation," Dick Shoup, Aurora Imaging Systems; "Tools for Interactive Picture Processing—Input, Creation, Manipulation," Alan Bridges, Via Video; "Digital Animation Techniques," Lance Williams, NYIT; "Computer Animation for the Feature Film *Tron*," William Dungan, Jr., Information International.

*Saturday morning, February 5—Recording the Pictures.* "An Introduction to Analog Component Recording Techniques," K. Sadashige, Matsushita Electric Corp. of America; "Broadcast-Quality Recordings with Consumer Video Cassettes," I. Arimura, Matsushita Electric Corp. of America; "Digital Video Recording—New Results in Channel Coding and Error Correction," J. Heitmann, Bosch GmbH; "The Type C Format—A Moving Target," W. Carpenter, Ampex Corp.; "Channel Coding and Data Scrambling for DVTRs," J. Baldwin,

IBA; "Diagnostics for a Microprocessor-Based Videotape Recorder," G. Rose and G. Warren, Ampex Corp.; "A New Generation of Type C 1-Inch VTR," H. Tanimura, Peter Lowten, and Y. Fujiwara, Sony Corp.; "8-9 Block Code: A DC-Free Channel Code for Digital Magnetic Recording," H. Yoshida, Y. Hashimoto, and T. Shimada, Sony Corp.

*Saturday afternoon—Programming the Pictures.* "How Not to Be Frightened by Microprocessors," E. Stan Busby, Ampex Corp.; "Sharing the Software Development Load Between User and Manufacturer," Larry Seahorn, Control Video Corp.; "Microprocessor Control Achieves Design Flexibility for Video Production Switchers," Howard Butler, Grass Valley Group; "Comprehensive Computer Support in TV Production and Transmission," Michael S. Tooms, Protel Broadcasting Services Ltd.; "Videotape Editing Using Vertical Interval Time Code," Mike Racelo, EECO; "Product Growth Through Software," Bernard Hurley, RCA Broadcast Systems; "A Microprocessor-Based Camera Remote Control Unit," John A. Grey, RCA; "Diagnostics for a Microprocessor-Based Videotape Recorder," Glenn Rose, Ampex Corp.; "Digital Diagnostics—How Much Should the Patient Tell," Roy Trumbull, KRON-TV; "Rolling Your Own—Customized Microcomputer for Custom Applications," S. Merrill Weiss, KPXX.

## **NAB opposes use of STV to raise funds**

The National Association of Broadcasters believes that public television stations should not be granted unlimited authority to use subscription TV to raise funds. It has been suggested that authorization be granted on a limited, case-by-case basis when STV is a non-interfering adjunct to free noncommercial program service.

In a filing with the FCC, NAB noted that it has actively participated in helping to resolve public TV's financial crisis and has supported public television from its inception. But the association raised several questions about the proposal:

- Conceptually, charging the public to watch public television programming seems out of step with the essential nature and rationale for the existence of

the public broadcast service.

- Unlimited STV operation by non-commercial licensees seems impermissible under the Communications Act.

- Benefits may be illusory or problematical, and STV operation has the potential for serious negative results for noncommercial stations; STV as a cure could be worse than the disease.

## **Support voiced for cable bill on franchise fees**

The chairman of the Senate Commerce Committee and a nationally known expert on cable television have urged Congress to pass a law to prevent unfair and exorbitant taxation of cable viewers.

U.S. Senator Bob Packwood (R-Ore.) and National Cable Television Association board chairman John V. Saeman of Denver, Colo., said enactment of the Cable Telecommunications Act (S.2171) would require the FCC to set a reasonable ceiling on cable franchise fees.

"Should the people be forced to pay a tax to watch television?" asked Saeman recently. "Or should Congress pass legislation to encourage the widest possible availability of cable TV at a price people can afford without the burden of a 10-, 15- or 20-percent tax?"

Packwood told supporters of the bill, who rallied recently on the steps of the U.S. Capitol, that a Washington lobbying group called the National League of Cities "has been putting out misinformation about this bill—clear misinformation, frightening their mayors and city council people to death with things that simply weren't true."

Packwood, in expressing his commitment to the bill which would encourage competition in telecommunications, said, "Our cause is right and just. And in my experience in politics, in the long run right and justice will prevail."

In a separate appearance before the Washington Metropolitan Cable Club, Saeman detailed provisions of the bill which include a requirement that cable operators set aside 10 percent of available channels for public, governmental, and educational access; authorization for cities to set rates for basic services and to grant multiple franchises to foster competition; a requirement that cable operators meet a series of strict requirements to win franchise

*Continued on page 14*



# Communications

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## **Fiber Optics Bring Broadcast TV To EPCOT**

Walt Disney World's EPCOT Center now has broadcast video/audio capability in its extensive fiber optic communications network. Vista-United Telecommunications, which is tasked with providing communications facilities for the resort complex, has installed Artel's SL-2000 and EN-1000 systems for the long distance trunking of broadcast quality video and audio signals on the complex. Vista-United first used the Artel fiber systems in the live opening coverage of EPCOT on network TV.

## **SL-2000 Gets Low Cost Video/Audio Addition**

A new low cost fiber optic video/audio plug-in transmission module set is now available for Artel's widely used SL-2000. Designated the T-2020/R-2020, this new transmitter/receiver module set combines broadcast quality video and audio on a single card module set. The result is a compact, economical system that, for the first time, makes fiber optics cost effective in shorter distance video/audio applications. Maximum distance of the T/R-2020 is one kilometer (3281 ft.), compared to the 7 km range of other SL-2000 module systems.

## **Longest F.O. System Brings Cable Network On Air**

The Weather Channel, a 24-hour cable network devoted exclusively to weather forecast and reports, has begun operations through the longest studio-quality fiber optic video/audio/data installation in the country. The system employs Artel's SL-2000 fiber optic transmission system to span the 2.18 miles (3.5 km) from The Weather Channel studios to the RCA Earth Station in Atlanta.

## **ABC Approves, Uses Fiber Optics**

The American Broadcasting Company Engineering Lab has approved the Artel EN-1000/SL-2000 fiber optic systems for use by ABC. One of ABC News' first use of these systems was in a live New York-Plains, GA, interview of former President Jimmy Carter on ABC's "Nightline" program.

## **Free RGB Application Note**

A free application note on how to use and specify fiber optics in high resolution RGB computer graphics is available from Artel. Application Note CG-1 describes the use of the SL-2000 system in remoting RGB graphics monitors to achieve longer distance, higher resolution and elimination of interference.

**ARTEL** COMMUNICATIONS  
CORPORATION

P.O. Box 100, West Side Station, Worcester, Mass. 01602 (617) 752-5690 - Cable: ARTEL

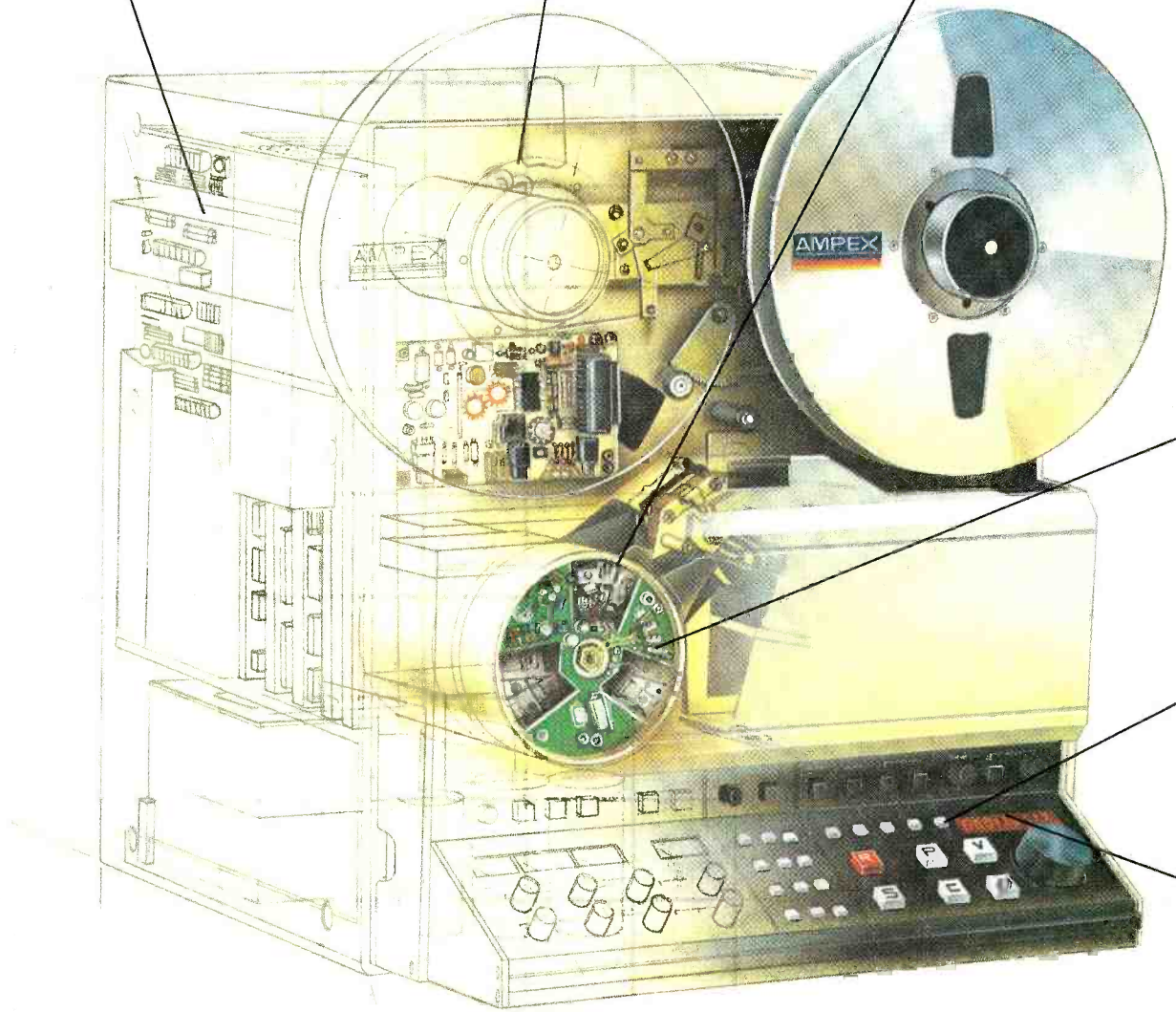


# AFFORDABLE

**Advanced Transport Design**  
For fast and gentle tape handling  
of all reel sizes from 6½ inch  
"spots" to 2-hour, 11¾ inch reels.

**Serviceability**  
From the top, front and back with  
hinged door assemblies providing  
easy access to the audio system,  
major plug-in printed wiring  
assemblies and power system.

**AST™ Automatic Scan Tracking**  
Delivers disturbance-free slow  
motion from play to  
still-frame mode.





# E ONE-INCH

## Introducing the Ampex VPR-80. Type "C" broadcast quality on a budget.

Excellent picture quality and low cost. That's what you get with the VPR-80, the new professional video recorder from Ampex. Whether you're adding to your present facility, or moving into the professional video market, you'll find the VPR-80 to be a totally new concept. Yet, it incorporates the most demanded features of the world's most popular one-inch Type "C" VTR, the VPR-2, plus several new and advanced capabilities.

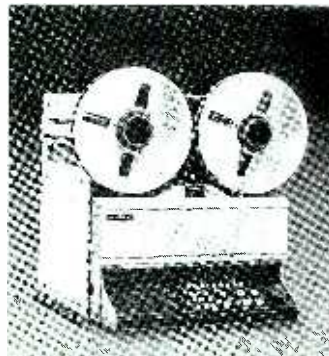
The VPR-80 provides the latest in recording technology. You get a transport designed for superior tape handling of all reel sizes from 6½ inch "spots" to 2-hour, 11¾ inch reels. It has dual microprocessors to control all VTR functions and servo systems, a universal power supply, built-in audio monitoring and a power-down feature that remembers the control panel setup even when the power's off. Plus built-in diagnostics to keep

operation and maintenance costs to a minimum. But there's more.

You also get as standard the Ampex exclusive AST™ automatic scan tracking for perfect slow motion and still frame pictures, plus frame-accurate editing with simple, operator-oriented controls. Not to mention table-top or rack-mount versatility and compatibility with the entire family of Ampex VPR accessories. With the VPR-80, everything from setup to servicing can be accomplished with a minimum of effort and time.

The VPR-80 was truly designed for the operator. And it's backed by the unique world-wide service and support that

Ampex is known for. To find out how the VPR-80 fits into your application contact your Ampex representative or write Ampex Corporation, Audio-Video Systems Division, 401 Broadway, Redwood City, CA 94063 (415) 367-2011.




**Individual Head Replacement**  
Quickly with only a screwdriver.  
No mechanical adjustment or drum change required.

**Frame-Accurate Editing**  
Results from the VPR-80's precise tape timer and search system, AST™ and simple edit controls.

**Fault And Non-Standard Operation Detection**  
Performed as part of the power-up sequence. If detected, the specific condition appears as a unique code in the timer display.

# AMPEX

## TOOLS FOR TOMORROW

Ampex Corporation • One of The Signal Companies 

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renewal; and establishment of a reasonable franchise fee ceiling.

The ceiling is being challenged in court and through a rulemaking procedure at the FCC.

## Business Hotline

**CHYRON CORPORATION**—The latest model of the Chyron television graphics and character generator has been acquired by Laurel Video Productions, Cherry Hill, New Jersey. Chyron has endowed their latest unit with a 90-font library, logo compose, and animation features.

**MCI/SONY**—Melodiya, the Soviet state recording company, has acquired an MCI-equipped, 32-foot remote recording van to be used for broadcast and recording of popular, classical, and ethnic music. The fully air-conditioned van is equipped with a 24-track MCI recorder and MCI multitrack console, in addition to two MCI stereo mix-down recorders. All MCI/Sony equipment features fully transformerless input and output stages for improved frequency response, phase linearity, and transient response. Op-amp circuit design is also standard.

**VICTOR DUNCAN**—The new offices of Victor Duncan in Dallas have been

completed at the Dallas Communications Complex, centrally located between DFW Airport and downtown Dallas. The new location will consolidate corporate administration with the branch functions of rentals, sales, and technical services. In addition, it will provide expanded showroom area; enlarged rental areas for film/video and lighting preparation; extensive facilities to house the technical services in mechanical, optical, audio, electronics, and video; and other features. The new address for the Dallas operation is Victor Duncan Inc., Four Dallas Communications Complex, 6305 N. O'Connor Road, #100, Irving, TX 75039; (214) 869-0200.

**MSC VIDEO**—RCA Broadcast Division has announced the appointment of MSC Video, a division of MSC Electronics, as the Canadian distributor for the RCA Broadcast video products. MSC will work in conjunction with the established RCA offices to promote and sell the Hawkeye camera/recorder system; studio, ENG, and telecine cameras; and VTR equipment. MSC Video will have three sales offices in Toronto, Montreal, and Winnipeg. The Toronto location will also provide a repair service and parts-supply facility. MSC Video manager, Dave Codling, can be contacted at MSC's head office. Phone (416) 661-4180.

**FORTEL**—Fortel is now manufacturing full-function stand-alone time base correctors to be used with the Type M (Hawkeye) videotape format. The first unit of this type was introduced at last year's NAB in Dallas. The time base corrector uses digital YIQ technology, similar to the digital component technology developed and used by Fortel in the Y-688<sup>32</sup> Total Error Corrector. These units will be sold by RCA as part of the Hawkeye system. Another version will be marketed by Fortel as model CYIQ32. This stand-alone TBC will accept Type M or U-Matic inputs.

**ORROX CORPORATION**—An agreement in principle has been reached by Orrox Corporation with its subsidiary, Satcom, whereby Satcom will be merged into Orrox. Satcom was established by Orrox in early 1980 to develop a line of compact, low-cost satellite receive-only systems for use with direct broadcast satellite service. Orrox presently holds over an 80 percent equity interest in Satcom. When the merger is finalized, Satcom will become a wholly-owned subsidiary of the parent company. The proposed transaction has been approved by the boards of directors of both companies, although specific terms of the transaction have not been disclosed. **BC**

## RTNDA NEWSLINE

### Regional workshops planned

Holding more and better regional workshops will be one of the primary goals for RTNDA in 1983. President Dean Mell has appointed a special committee to push for more such meetings as a way to substantially increase RTNDA's services to its members. Says Mell: "I hope non-members, especially small-market radio and television news directors, will find these strengthened regional meetings useful in solving their problems and realize the value of RTNDA membership."

Heading the new committee appointed by Mell to increase regional meeting opportunities are Region 12 director Lou Adler, news director, WOR, New York; and Region 9 director Skip Haley, news director, WSFA-TV, Montgomery, Alabama. Each of the 14 RTNDA regional directors is expected to hold at least one regional meeting every year. Many hold more than one. Adler has already scheduled three in his populous region, which includes the states of New York, New Jersey, and Pennsylvania.

Mell says RTNDA will be working closely with other journalism organizations like the Society of Professional Journalists, Sigma Delta Chi, the Association for Education in Journalism, Associated Press Broadcasters, United Press Broadcasters, and state broadcaster associations in planning and producing the regional seminars. RTNDA director of conference planning and services, Robert Vaughn, will be coordinating the regional planning at the national level in the RTNDA Washington office.

A typical RTNDA regional meeting is a day-long event usually held on a weekend with a program directed at addressing problems and issues of national and local concern to all electronic journalists. Registration fees are kept at a minimum in order to allow as many journalists as possible to attend. Special rates are usually provided for students. Journalists working in the growing field of cable news are also invited to attend.

Regionals already scheduled for 1983 include Emeryville, Calif., February 5, Northern California chapter; Gulf Shores, Alabama, March 24-26, with Georgia and Alabama UPI; Curry College, Milton, Mass., April 9; Spokane, Wash., April 9, with SPJ and SDX; Atlanta, Ga., April 22-23, with Georgia UPI; Syracuse University, April (date to be determined soon); Fredericksburg, Va., May 7, with Virginia AP; Tampa, Fla., May 14, with Florida AP; Pittsburgh, Penn., May 20-22, with Pennsylvania AP; and New York City, October (date to be determined).

Adler and Haley are expecting another 10 or 12 such meetings to be scheduled before the end of the year. Watch the RTNDA Newsline column and your local wire service for news of the RTNDA regionals in your area, or call Robert Vaughn at the RTNDA national office in Washington at (202) 737-8657.





# CEI 310SP: Innovation by Panavision

The 310SP represents a new generation of electronic features that provide both the "film look" of electronic cinematography while delivering unmatched performance in a video production camera. **All this at a purchase price that's very easy on your budget.**

- Recessed prism mounted preamps provide unprecedented signal-to-noise ratio
- Soft Clip "Film Look" increases the dynamic range and simulates the exposure range of film.
- In-band and out-of-band detail enhancement provides finer detail without signal-to-noise loss
- Detail Blanker defeats enhancement in peak whites thereby eliminating unnatural black outlines

- Microprocessor featuring automatic pedestal, centering, size, white and black balance, interactive viewfinder displayed adjustment procedures
- Saticon\* II pickup tubes

**SP performance package is retrofittable to all 310's**

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# NEWSMAKERS

**Ruth Macy** is the new satellite editor for BROADCAST COMMUNICATIONS, it has been announced by **Ron Merrell**, executive vice president and editorial director. Macy is founder and president of TeleWords, a Santa Monica-based public-relations and editorial consulting firm serving the communications industry. Prior to founding TeleWords, Macy served as director of information services for the Robert Wold Company. In addition, she has worked as an editor for ABC Radio News in Washington, D.C., and has served as an editorial consultant to numerous federal agencies and national commissions.

**Hirozo Ueda**, a managing director of Fuji Photo Film, was recently presented the Herbert T. Kalmus Gold Medal Award by the Society of Motion Picture and Television Engineers. He was honored for his role in the development of Fuji's negative and positive photographic materials, including the Oscar- and Emmy-winning A250 ultra-high-speed color motion picture film.

**Robert Reichblum** has joined WPXI-TV, Pittsburgh, Pennsylvania, as executive producer of the station's newscasts. He replaces **John Edwards**, who left to become news director at KTVX-TV in Salt Lake City, Utah.

**Scott Vaughan**, general manager of KGUN-TV, Tucson, Arizona, was elected president of the Arizona Broadcasters Association. Vaughan is past president of the Tucson Broadcasters Association. Other officers include **Dick Deangelis** of KPHO-TV, vice president; **Tom Hagner** of KYEL-TV, secretary/treasurer; and **Dick Paye** of KAIR/KJYK, and **Steve Jacobs** of KCEE, board members.

**Gary Radnich**, formerly of KTXL-TV in Sacramento, has taken the position of sports anchor for WBNS-TV, Columbus, Ohio. He will assume on-air duties for the 6-, 7-, and 11-p.m. newscasts.

**Bill Baker** was appointed to the newly created position of executive vice president, Times Mirror Broadcasting. Baker will assume his new responsibilities with the group's seven television stations: KDFW-TV, Dallas/Ft. Worth; KTBC-TV, Austin, Texas; KTVI-TV, St. Louis; WVTM-TV, Birmingham; WHTM-TV, Harrisburg, Pennsylvania; WSTM-TV, Syracuse, New York; and WETM-TV, Elmira, New York.

**Mike Meehan** has joined radio station WCMS in Norfolk-Virginia Beach, Virginia, as news anchor. Meehan had been operations manager of WFOG and WLPM, Norfolk-Suffolk, Virginia, since 1977. In his new position, Meehan will anchor morning newscasts and produce public-affairs programs for WCMS-AM/FM.

**Don Dunkel**, former West Coast bureau chief for ABC News, recently took over as news director of KING-TV, Seattle. He replaces **Paul Steinle**, who was news director since 1979. While with ABC, Dunkel was responsible for the network's coverage of the Anwar Sadat and Moshe Dayan funerals, and of the Sinai turnover.

**Robert Dye** has been promoted from chief engineer to the newly created position of manager of facilities development at WCMH-TV, Columbus, Ohio. In his new capacity, Dye recently supervised the purchase and installation of WCMH-TV's new transmitter and antenna.

**Ray Dolby** was presented the first Alexander M. Poniatoff Gold Medal for Technical Excellence by the Society of Motion Picture and Television Engineers. The annual award is sponsored by Ampex to honor its founder, the late **Alexander M. Poniatoff**. Dolby was cited for his contributions to the advancement of magnetic sound recording.

**George Marti**, designer and developer of remote broadcast and studio-transmitter link equipment now in use throughout the world, has been named the first recipient of the Texas Association of Broadcasters President's Award for Special Achievement. Marti was selected in recognition of his many contributions to the broadcast industry.

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## Business Moves

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**Hans D. Batschelet** has been appointed president of Studer Revox America. Formerly vice president of marketing for the Studer division, Batschelet will now direct all Studer Revox operations in the U.S. from the company's corporate headquarters in Nashville, Tennessee. Batschelet replaces **Bruno Hochstrasser**, who has returned to the Studer factory in Switzerland to assume the position of product manager for professional recording systems.

**Jack B. Hanks** has been named manager and **Jerry Tapley** manager of distributor sales of 3M's Broadcast and Related Products department, including International Tapetronics Corporation, the Professional Audio/Video Equipment program, and the Sound Products program. Hanks succeeds **William Madden**, who has been named general manager of the Industrial Mineral Products division.

**Jack Baughman** was recently promoted to national sales manager of Hughes Electronic Devices Corporation (HEDCO). Baughman will direct the sales efforts and support activities of HEDCO's sales representatives for audio/video distribution and routing-switcher product lines.

**G. Alfred Dodds** has been appointed midwest regional manager of Sony Broadcast Products. In this position, Dodds will be responsible for directing sales activity in a 13-state region. Also at Sony, **Bill Powers** was named southeast regional manager, responsible for a seven-state region that includes Puerto Rico; and **Laurence Thorpe** was appointed manager, camera products.

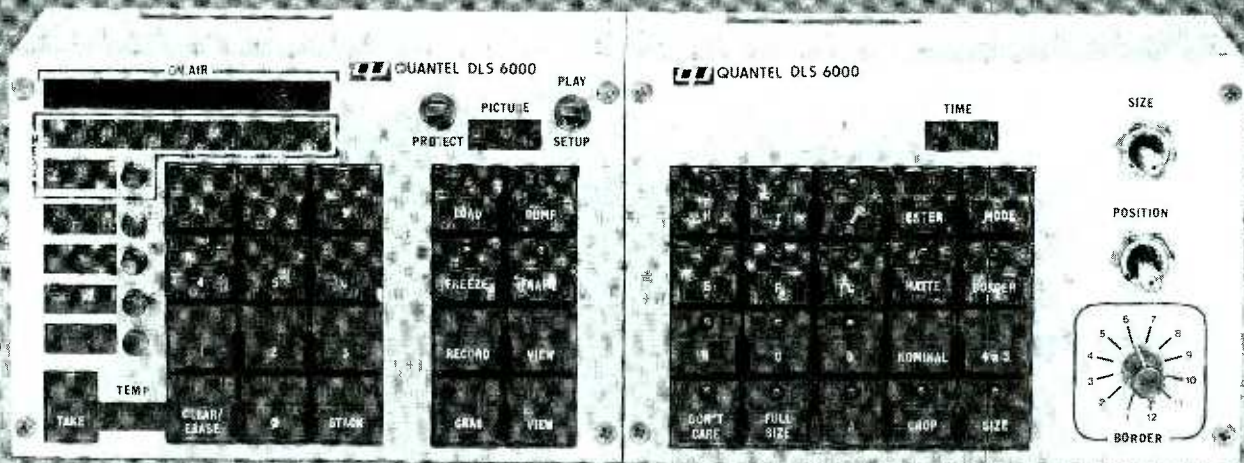
**Betty Dirham** is the new marketing manager of MZB & Associates, and will operate out of the company's headquarters in Dallas. Also at MZB, **Richard S. Hajdu** has been named area manager, sales and operations, for the company's south-Texas territory.

**Robert D. MacCormack** has been elected president and chief executive officer of BTX Corporation. He succeeds **David Krumholtz**, a founder and director, who becomes manager of product development.

**William E. Baird**, formerly southeast regional manager for Microtime, has joined Fortel as sales manager, responsible for dealer and distributor sales programs in the U.S. Also joining Fortel are **Raymond Connelly**, product manager, Faroudja and CCD products; and **Harris Rogers**, western regional manager. **BC**



# The Quantel DLS 6030.



## Every other way to store stills is obsolete.

Introducing the state-of-the-art in electronic still-storage—the Quantel DLS 6030 digital library system.

Obviously it stores still pictures. Up to 800 on each small Winchester disk drive. And with the quality that is a hallmark of Quantel. But the DLS 6030 goes far beyond still-storage.

It is the only electronic still-store with production effects capabilities. So now you can compress still pictures to any size. Crop them to remove unwanted material. Position them anywhere you want. Put borders around them. And dissolve from one shot to the next.

You can even build up totally new pictures—composites or montages—from existing material.

And you can always retain your "originals" in their pristine state.

The DLS 6030 lets you browse through its disk library to select the pictures you need, and gives you unprecedented facilities for on-air editing, previewing, and presentation.

Off-loading? You can dump all the pictures—in digital form—onto

standard videotape. Then reload at the remote site via any VTR. The transfer is digital, so there's no generation loss

Because Quantel's technology is leading-edge, the DLS 6030 is small—about one-quarter the size of still-stores using older technology—and draws far less power. So it's ideal for mobile operations as well as the studio.

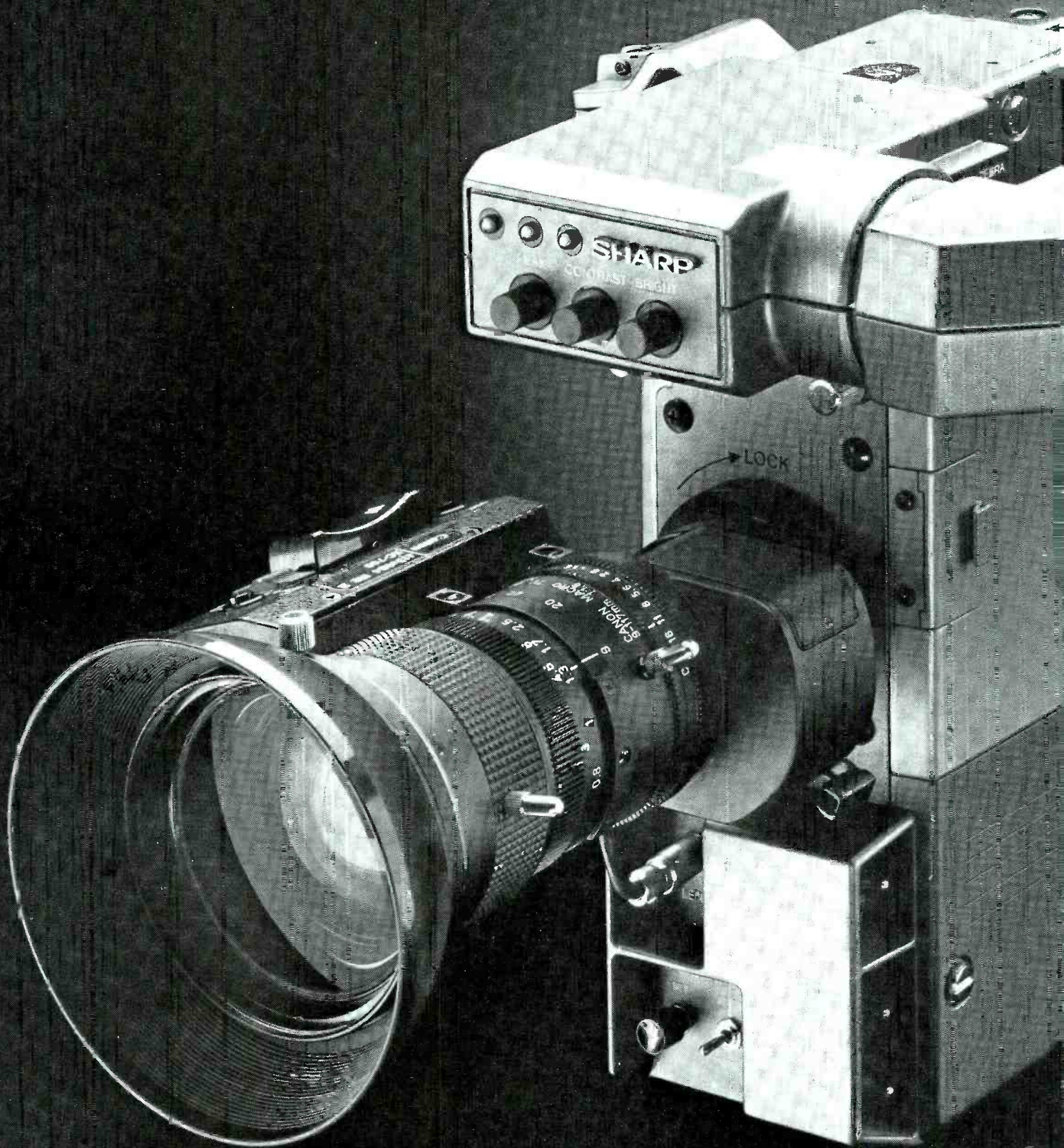
There's nothing else like it. See for yourself. Call your local MCI/Quantel representative. Or get in touch with us directly at 415/856-6226. Micro Consultants, Inc., P.O. Box 50810, Palo Alto, California 94303.



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The digital video people.



# THE SHARP® XC-800 ELSE OUT OF THE



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# TAKES EVERYONE PICTURE. AGAIN.



While everyone else was introducing a mid-priced camera, Sharp introduced a whole new generation.

The Saticon II Generation.

The Sharp XC-800 is the first camera in its class that combines Saticon® strengths with a Plumbicon® plus.

So unlike conventional Saticons, you get substantially less highlight sticking, even when you pan across bright lights.

And you still get the higher resolution and depth of modulation Saticons are known for.

But that's just the beginning.

Pound for pound, feature for feature, nothing comes close to the new Sharp XC-800. It's lightweight and perfectly balanced.

And while we're proud of our new on-board computer, and newly designed Remote Operations Panel with serial data transmission and black stretch, the name of our game is more than just features.

It's reliability.

That's what the pros were looking for when we introduced the original XC-700, the first mid-priced camera that didn't perform like a mid-priced camera.

In fact, it performed so well, there are over a thousand of them out in the field today.

And it's been so successful, it's encouraged a rash of new mid-priced cameras.

We encourage you to compare any of them with the new Sharp XC-800.

Between the Saticon II breakthrough and everything else, nobody offers more camera for the money.

For more information, contact your local dealer, or write: Sharp Electronics Corporation, Professional Products, 10 Sharp Plaza, Paramus, New Jersey 07652. (201) 265-5548



*From Sharp... the people who replaced half a million transistors and diodes with one tiny chip.*

**SHARP**

FROM SHARP MINDS  
COME SHARP PRODUCTS



# The telecine without tubes.

## Digital CCD technology means better pictures.

Advanced technology in the new Bosch FDL 60 "U.S. Series" with PanScan and black stretch gives you tremendous advantages over conventional film scanners.

And the most important of these is superb picture quality with high resolution, excellent signal-to-noise ratio, and brilliant color rendition with negative or positive film.

### CCDs make the difference

The use of solid-state CCDs—charge-coupled devices—completely

eliminates electro-optical problems inherent to pickup or scanning tubes.

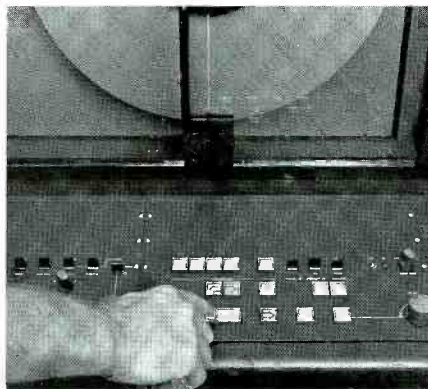
You don't have to worry about burn-in, afterglow, or field lag because there's no photoconductive or phosphor layer to cause these effects.

You can forget about shrinkage, flicker, vertical deflection, horizontal misregistration, and positioning errors of all kinds.

And never again will you be subjected to the expensive ordeal of tube changes.

### New operational modes

Thanks to the FDL 60's capstan drive and digital signal processing, you can operate slow motion, fast motion, forward, reverse, and freeze frame—all in full broadcast quality. You can start and stop instantly, and with frame accuracy. You can search for scenes or frames either with variable programmable search or frame jogging, both with full format color pictures.



*Convenient film deck controls include speed, mode, direction, format, framing, and focus. Adjacent decks control audio, video, and color correction.*

### Low operating costs

The solid-state devices used in the FDL 60, including the CCD sensors, need no maintenance. They have all the reliability and long operating life typical of semiconductors. So besides giving you a better picture, the FDL 60 saves you money on maintenance.

### Operational flexibility

The FDL 60 gives you operational flexibility you'd expect only in a modern videotape recorder. You control it like a VTR, too. The servo deck with continuous capstan drive and microcomputer control ensures gentle film handling. And it's totally insensitive to perforation damage.

A keyboard that lets you enter time code cue points and a changeover switch give you disturbance-free transitions between two machines in parallel operation.

You can even integrate the FDL 60 into your VTR editing and film-to-tape transfer systems.

A quick-switch optical block lets you run either 35mm or 16mm film in combination with all the usual types of sound track.

Find out for yourself how high technology can mean better pictures. Call your local Fernseh office. Or get in touch with Fernseh Inc., P.O. Box 31816, Salt Lake City, Utah 84131, (801) 972-8000.

## BOSCH



1982 Emmy Award  
Winner For  
CCD Technology

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# TECHNOLOGY HOTLINE

**T**echnology Hotline is a monthly feature that updates what's happening in the emerging technologies. Where possible, contact names and telephone numbers will follow the items reported:

## **Listen to your computer**

The Alien Group, a New York City-based company, has just announced that they are ready to market the Voice Box™. This is a low-cost, unlimited vocabulary, programmable speech synthesizer that works with personal computers. In its present version, the Voice Box is compatible with Apple and Atari computers.

The unit converts typed or stored text into speech or interesting sound effects. It comes with diskette or tape-based pronunciation dictionaries for thousands of words and word fragments. It also can be programmed for an unlimited number of pronunciations for unusual words, names, and foreign languages.

The Voice Box features a random sentence generator that creates grammatically correct sentences, and it has an easy-to-use screen menu. Both pitch and speed can be varied to create different computer personalities. (Bob Ezzard, 212-741-1770.)

## **On feeling secure**

Oak's Orion satellite security system is keeping Satellite Television PLC of London secure. Satellite Television is Europe's pioneer commercial satellite television program service, and it's supported by ad revenues. Its programming goes free to cable systems, apartment blocks, and hotels throughout Europe.

Programming consists of light entertainment, drama, comedies, music, and sports. Satellite Television PLC has begun transmissions to Norway, Finland, Malta, and Switzerland. Licensing agreements are now pending with a number of other countries, subject to the regulation

of the National Telecommunications Authority.

Orion was the world's first operational and fully-addressable satellite security system. The system delivered to Satellite Television is the first to be used in Europe.

Each decoder can be individually turned on and off by addressing and controlling information hidden in the television signal. This unique addressability feature provides the capability of narrowcasting to selected decoder groups and of blocking out advertisements prohibited by the National Authority. (Herb McKee, 619-485-9880.)

## **Perfect timing**

Tektronix has introduced a fiber-optic time-domain reflectometer that they hope will be the standard of the industry. This unit is capable of making quantitative, calibrated loss and distance measurements on multi-mode fibers with a diameter of 50  $\mu$ m.

The instrument applies a pulse of radiant energy to the fiber under test via the optical output connector. As the pulse is travelling through fiber, some energy is reflected back. These reflections are processed, and then displayed on the CRT, where distances and loss measurements can be made using horizontal and vertical markers.

## **How to lose the race**

In the race to be first in cellular radio, more than 70 percent of all licensee applications could come in last for failure to show "reasonable assurance" of antenna site availability. According to a recent study by McAllister Associates, a Memphis-based corporate real-estate consulting firm, "The smartest companies have made very sure that antenna site availability is well-documented in their applications. They expect that the FCC will end up screening applications on this basis, because it is the easiest place to

find indisputable errors. And they plan to use the real-estate issue to throw competitors out of the running in future FCC hearings."

There will be plenty of errors to find, according to the consulting firm's study. Of all the sites surveyed, 60 percent were secured only by letters of intent that are unenforceable and can easily be rendered worthless. The study was based on applications filed in 12 cities, involving 106 site locations. (312-565-1200.)

## **Personal computer data interface**

Only about 15 percent of today's personal computer users are equipping them with modems or other data interface devices, but this will soon change to 100 percent, according to a new report from International Resource Development. The 357-page report projects "dazzling" growth in markets for local network interfaces, 1200 bps modems, and other interface devices for the "new generation" of personal computers and office work stations.

The IRD researchers expect a trend toward the inclusion of model chips as standard equipment in future microcomputer designs. Texas Instruments is already selling a 300 bps model-on-a-chip for less than \$30. (203-866-6914.)

## **Who's up to DATE?**

The Korean Telecommunications Authority has placed an order with M/A-COM DCC for Digital Audio for Television Equipment (DATE). The KTA will be installing the equipment for the Korean Broadcasting System to provide digitized satellite radio programming, terrestrial microwave programming, and television audio.

The DATE system combines up to four high-quality network audio channels with the network video baseband signal for concurrent distribution over a single transmission facility. (301-428-5773.)

## SBE MONTHLY LOG

### CALIFORNIA

FRESNO (Chapter 66)—Ken Fay of Harrison Systems gave a presentation and demonstration of the Harrison TV-3 audio console and modules used in their TV-4 console.

NORTH VALLEY (Chapter 83)—New officers are Dan Butner (KPAY-FM), chairman; and Eric Fellersen (KHSL-TV), vice chairman. Terry Green (KFMF-FM) remains sec./treas.

### FLORIDA

CENTRAL FLORIDA (Chapter 42)—Bill Baird of Fortel gave a slide presentation and theory of operation on the Y-688 TBC/processor.

SOUTH FLORIDA (Chapter 53)—New officers are Bill Lathan, chairman; and Tom Weems, vice chairman. Luis Endara, Jr., remains sec./treas.

### GEORGIA

ATLANTA (Chapter 5)—Member David Priester conducted a complete tour of the audio/video production facilities at the Georgia Power Co. building in Atlanta. The center controls all the power production and distribution in the state.

### KENTUCKY

KENTUCKY STATE (Chapter 35)—Art Constantine of Fidelipac presented a demonstration on alignment of cartridge machine heads and features of old and new audio cartridges.

### MICHIGAN

SOUTHEASTERN MICHIGAN (Chapter 82)—Irby Tallant, EIC of the Detroit FCC, discussed the policies and procedures of his office. Duane Ehret, with the Detroit FCC, described and demonstrated the operations of the FCC Mobile Enforcement Monitoring Unit. New Officers are Richard Kennedy, chairman; Paul Gzebrk, vice chairman; and Jerrold L. Martin, sec./treas.

### NEBRASKA

HOLDREGE (Chapter 67)—Jerry Fuehrer, director of engineering, NTV Network, conducted a tour of the KHGI-TV transmitter facilities.

### NEW YORK

BINGHAMTON (Chapter 1)—Robert Streeter, consultant to Belar Electronics Laboratories, discussed AM stereo with an overview of what is currently happening with all five competing systems.

NORTHEAST NY (Chapter 58)—Bob Raffaele, chapter member and a pro-

fessor at Hudson Valley Community College, gave a presentation on AM/FM frequency analysis. New officers are Andy Yacevich, chairman; Chuck Zariello, vice chairman; and Ira Singer, sec./treas.

### NORTH CAROLINA

WINSTON-SALEM AREA (Chapter 84)—George Fold of E.M.E. demonstrated the Cushman AM/FM communications monitor, showing its value in repairing and tuning up any kind of two-way radio equipment.

### SOUTH CAROLINA

GREENVILLE AREA (Chapter 86)—Larry Roberts of Ampex demonstrated the Ampex VPR-80 one-inch helical tape machine.

### TENNESSEE

MEMPHIS (Chapter 61)—Rob Herrin III, CE of QMPS-WHRK-FM, demonstrated the Time Domain Reflectometer.

### TEXAS

CORPUS CHRISTI (Chapter 29)—Wayne Bradberry of Autatronics presented a program on black-and-white security cameras.

### VIRGINIA

RICHMOND (Chapter 60)—Gordon Chubbs of Canon USA presented a program on lenses.

### WISCONSIN

FOX VALLEY (Chapter 80)—New officers are Gary Mach, chairman; and Gordon Dailey, vice chairman. Steve Brown remains sec./treas.

### CERTIFICATION NEWS

SBE is accepting applications for the new entry-level Broadcast Technologist certification. Engineers may qualify to be certified as Broadcast Technologist in one of two ways. Engineers holding a valid FCC First Class Operator license and having two years of continuous satisfactory service or three out of five years of satisfactory service in broadcast engineering may apply at any time. Engineers who do not hold a First Class license and who do not meet the service requirement, may apply for the Broadcast Technologist examination.

For a copy of the application and Program of Certification booklet, write to the Certification Secretary, Society of Broadcast Engineers, P. O. Box 50844, Indianapolis, IN 46250. **BC**

SHIBASOKU MONITORS  
the true measure  
of performance.

**ASACA**

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Los Angeles, CA 90066  
(213) 827-7144  
(800)-423-6347



# PROGRAM GUIDE

ED SHANE

## Listen to meanings, not words

How much salt do you put in the stew?" Bob Hughes asks. He's the program director of WASH in the nation's capital, and he wrote to say that he and his chief engineer both enjoyed the recent *Program Guide* about communication between programming and engineering (*BC*, November 1982).

Bob has added to my discussion of the language barriers that affect communication between departments. For instance, WASH uses comparisons like "near/distant," "soft/loud," and "crisp/mushy" when shaping their on-air sound. Like any other language or communication system, it's not the words we use, but the meaning of the words that's important. There may be as many different interpretations of "mushy" as there are interpreters. As long as Bob and his chief engineer each understand the same thing when the word is used, they can maintain the "sound" of WASH without it being "mushy."

The meanings come through in terms of what can be heard on the air, Bob says. "What about the articulation of the music: finger squeaks on guitar strings, felt hammers on piano strings, the buzz of the bow on a violin, mallets on percussion instruments? In other words, can you clearly hear *all* the sounds involved in making the music? Does the station sound flat or does the station have depth? It is appropriately dramatic or is it lifeless?"

Bob wraps up with a thought that should be used as a guiding rule for radio station operation. "I suggest that in today's competitive environment, stations must be competitive in every area of operation: great music, great news, great promotion, great personalities, great management, great sales staff, and great audio."

He answers his own question about how much salt to put in the stew, salt being analogous to any of the elements in the competitive mix. The answer, of course, is "just enough!"

### Evaluating your sound

One way to evaluate the public's reaction to your station's technical sound is to examine where the base treble setting is placed in car radios.

I realize this suggestion has almost no

scientific merit, but it can help you understand the "user" of your radio station. In the early seventies, Lee Abrams did a classic "Hitchhike study" to watch reactions of car listeners to various records and radio presentations. Lee literally hitched rides and shared radio experiences with drivers.

The passage of time has made such activity more dangerous today than it



was then. I suggest casual observation of acquaintances rather than scientific study of the public at large. Your aim is insight, not hard fact.

### More about outdoor ads

October's *Program Guide* about advertising radio stations brought reader questions about outdoor advertising. The best place to turn for information is the Institute of Outdoor Advertising, 625 Madison Avenue, New York, NY 10022. They act as consultants to the users of outdoor; and they do it free.

The Institute can provide guidance on color combinations, lettering, visual impact, and copy length. They also have a scale viewer that lets you look at your proposed artwork before spending a ton of money on something that won't do the job. Your billboard may look great on paper, but put it on the roadside and it becomes *part* of a landscape, not the focal point.

The same is true with any advertisement. A beautifully laid out print ad changes dramatically when it's put into the context of the newspaper. Another ad on the same page might diminish yours. Junky little ads all around yours can make your masterpiece seem like just another in the junkpile.

Apply the same "context" considerations to your TV spots. Environment means a lot. Your commercial in the six o'clock news and your commercial in a game show or sitcom may be the same *spot*, but the *message* is different because the editorial environment has changed substantially. There's even some thinking among marketing people that the same spot played in different dayparts constitutes a different message.

### The season of competition

The fall football season brought more radio and cable competition. I talked to one Arkansas broadcaster who was being hit by two different cable channels with the same Razorback game he had on the radio. Problem was, they were selling video spots at about the same rate he had established for his radio spots.

His asset, of course, was that he could cover the whole marketplace and provide free access to the game. His listeners could even carry the game with them without trailing a wire behind.

On the same subject, a recent McGavren-Guild study showed that radio broadcasters view cable as "disruptive" of radio listening patterns. With a score of 1.0 meaning "most disruptive," free cable audio was rated 3.31; cable TV with premium movies scored 3.32; basic cable scored 3.53. At the other end of the scale, videodiscs were judged "least disruptive" at 6.07.

The point of combining these two items is that radio still has the opportunity to jump into the local cable business as program supplier. Radio can do audio better than anybody, and radio can learn video as fast as most cable newcomers can. It's the old adage: "If you can't beat 'em, join 'em."

*Ed Shane, radio programming editor, is program director at KTRH, Houston, and an independent programming consultant.*

## RADIO LOUD & CLEAR

# Dow Jones provides SCA service

BY LARRY TITUS

An FM station's ability to incorporate more than just a music channel on its signal has been well known for many years. In 1934 Major Armstrong, pioneer of FM broadcasting, transmitted several different types of information over an FM carrier.

In the early 1960s, the Zenith/GE system of generating stereo information over an FM signal was accepted as a standard by the FCC. This system left room for a Subsidiary Communications Authorization (SCA) to be encoded on the FM signal. Usually the SCA is generated so that a carrier of 67 kHz is frequency modulated, then the 67 kHz modulated carrier frequency modulates the main FM carrier—an FM on FM system.

The most common use of an SCA is to transmit audio in the form of subscription background music service or telemetry tones indicating the status of a transmitter. Until recently the FCC has generally restricted the use of an SCA to services of a broadcast nature. The FCC is presently proposing to drop many of the rules governing the use of an SCA (Notice of Proposed Rule Making, BC Docket 82-536).

Dow Jones Radio 2 is utilizing a blend of the latest in technology to provide a unique service via an FM station's SCA.

The name Dow Jones is most commonly associated with the Dow Jones Stock Averages, *The Wall Street Journal*, and *Baron's* magazine. A new Dow Jones subsidiary called Dow Jones Radio 2 is providing subscribers with a unique SCA service of the latest financial and business news. This service is called DowAlert.

Radio 2 has studios located in Princeton, New Jersey. From this facility virtually every news source is monitored for financial and business news and information. This information enters a sophisticated newsroom where each story is edited, checked, and re-edited by a large staff of news writers and announcers. The stories are then assigned a code group of numbers that indicate the type of story it is and what types of businesses are mentioned in the story.

A computer tracking system is used to

follow each story through the airing process. Information such as the "slug line," priority, code numbers, writer, and comments on the story, are entered into the computer. The story then goes to a "production stop" where air times are logged into the system and a determination is made of which studio is to be used for the broadcast of the story. After the story is aired, it is "logged off"



One of the four air/production studios at Dow Jones Radio 2. (Photo by Larry Titus)

into the computer along with the time and date that the information was transmitted for later meshing with the logging tape.

Radio 2 uses four studios linked to a master control room. Each studio can be used as a production studio or an on-air studio. All studios are identical, and have access to the computer system for confirmation of control information.

Master control is equipped with computer-access terminals and a unique computer-generated system for putting studios on the air. When an announcer is ready to read the next story, he presses a button in the studio. The computer acknowledges him and tells him when to begin reading the story. At the same time, the computer will initiate sending the code groups down the line and activate the studio for airing the audio. During this procedure, alphanumeric displays, which are incorporated into the on-the-air signal lights and into the studios, display information about what is occurring.

The on-the-air light will say STUDIO UP NEXT when the studio is going to be live, DO NOT ENTER when it is live, and PRODUCTION WORK when the an-

nouncer is producing a story. The display in the studio is telling the announcer when he will be live, when the codes are being sent, and when to read the story. When the story has aired, the announcer then presses a button to initiate the end sequence which then tells the computer to send the "end tones" (end of the story) and start another studio through the process.

By using this method, "toggling" between two or three studios is simplified and the stories are aired in the proper priority. The average story is between 20 and 30 seconds long. Longer news summaries and features can be edited together and aired during slow periods.

The audio from the studios is ultimately mixed with the code tones, audio processed, and sent via phone line to New York, where it is microwaved to Western Union's New Jersey satellite uplink facility for transmission to Westar III, transponder one. The audio is then recovered typically via an AP affiliate's satellite dish, and phoned to an FM radio station for rebroadcast over their SCA.

The subscriber to this service rents a custom-designed, microprocessor-controlled receiver for receiving the SCA. The receiver normally will sit idle until it receives the code combination that is the same as that entered by the subscriber on a keypad built into the receiver. When the codes match, the receiver will then unmute and play the news story. At the end of the story, the receiver again mutes.

A cassette machine is built into the receiver to record the story for listening at a later time. The cassette machine is also turned on and off with the receiver mute. Highest priority stories, such as airplane crashes or major business mergers, will unquiet the receiver so the subscriber is never out of touch with current news information.

The future for this type of service is unlimited. The use of new technologies in conjunction with an SCA can make inroads into the diversity of broadcast communications.

**BC**

Larry Titus, audio editor, is chief engineer of WTIC, Hartford, Connecticut.



# **MOTOROLA AM STEREO. ONE BIG STEP CLOSER TO AN INDUSTRY STANDARD.**

The world's largest maker of automobile radios has decided that Motorola has the winning AM stereo system for its 1984 model cars. This might make your decision about what kind of AM stereo your station should broadcast a lot easier.

For more information about the significance of this decision, call Chris Payne at 202/862-1549 or Dick Harasek at 312/576-3591.

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Fortunately, there's an alternative: the Sony BVH-2000—the only 1-inch video system that can be tailored to fit your present applications and

budget, then retailed as your needs change.

For example, any of three different recorder control panels can be incorporated, ranging from a basic model to one with virtually every feature and function currently available to 1-inch video users.

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tional time base corrector—plug directly into the BVH-2000 recorder.

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All of which enables the BVH-2000 to simplify one of the most complicated processes in the broad-

cast industry: the transition to success.

To find out how the BVH-2000 can help you deal with both your present and future needs, call Sony in New York/New Jersey at (201) 368-5085; in Chicago at (312) 860-7800; in Los Angeles at (213) 841-8711; in Atlanta at (404) 451-7671; or in Dallas at (214) 659-3600.

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## STV: Going, going, gone?

Not unlike American automobile manufacturers, subscription-television operators have suddenly become an industry in search of a market. Rapid technological progress and a dramatically altered competitive environment, combined with an acutely recession/depression-stricken economic climate, have left both industries gasping for breath.

Last June, in an attempt to breathe new life into the STV industry, the FCC eliminated most of the rules regulating STV operators. The FCC deleted the complement-of-four and 28-hour rules, which barred STV operators from markets served by fewer than four conventional television stations and required STV stations to broadcast a minimum of 28 hours per week of nonsubscription programming. The FCC also deleted its rule requiring STV applicants to ascertain the STV programming needs of the communities they sought to serve. And it likewise removed its prohibition on the sale of decoders. (Until June, STV operators were only permitted to release decoders to subscribers, thereby depriving the operators of the upfront capital available from consumer sales.)

Removal of these restrictions, the FCC reasoned, would increase program diversity, open up new business opportunities, and allow STV to compete more effectively with other pay-TV services.

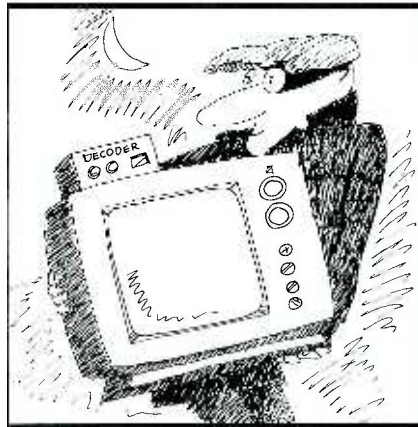
Originally adopted to protect conventional broadcasters, the STV rules were simply no longer needed, explained FCC commissioner Anne Jones to attendees of the Annual Over-the-air Pay TV Conference in November. "As it grows, STV will take viewers away from conventional TV, but it is not threatening to its viability as a medium," she said.

That may just qualify as the understatement of the year—1982 or any other. In 1982, according to figures from the Television Bureau of Advertising, commercial TV industry revenues approached \$17 billion. In the same year, STV industry revenues totalled \$420 million.

Currently, the STV industry consists of 27 operating stations; 16 more stations have been authorized but are not yet operating. Theoretically, with

deregulation, any commercial television station in the country can now switch over to subscription-television operation. Does this mean that the FCC should be gearing up for a deluge of new applications for STV authorization? Hardly, given the myriad of problems plaguing the industry today.

Among the major problems is piracy. While difficult to quantify ("It's like



asking how many drug dealers there are," says Robert Cahill, general counsel to Embassy Communications and Tandem Productions and a board member of National Subscription Television of Detroit), industry analyst Paul Kagan estimates that 15 percent of all STV viewers are signal pirates.

Ironically, by deregulating the sale of decoders, the FCC has increased the potential for piracy, says the Subscription Television Association. According to the STVA, decoders owned by subscribers are more likely to be tampered with and used illegally; there is no way to prevent a subscriber from taking his decoder with him to another city when he moves and from using it to receive—without authorization—another system's STV signal. The STVA also points out that the language contained in the FCC's deregulation order makes it legal for anyone to sell decoders, and not just STV operators, which does not serve the FCC's stated purpose of helping to endow STV operators with more capital.

Looming even larger than the problem of piracy is the competition STV faces from competing delivery systems, most notably MDS and cable. Though the relatively farther-reaching STV

signals sent out over UHF frequencies would seem to give the industry an advantage over the MDS industry, with its more limited-range signals, at the same time, an MDS system needs only 7,000 subscribers for breakeven operation, while an STV operator serving the same market would require 25,000. Also threatening STV operators is a potential FCC ruling that would allocate ITFS spectrum to MDS operators, thus giving them multichannel capability.

According to Paul Bortz of the Denver-based research firm Browne, Bortz & Coddington, the biggest threat to STV is cable. A study conducted by his company showed that when an STV station begins operating in a already-cabled market, the STV station can expect only 3% penetration. Alan Flaherty, western-region director for the telecommunications consulting firm of Kalba Bowen Associates and a former vice president and general manager of Golden West Broadcasters' STV subsidiary, states that an existing STV operation will lose up to half of its subscribers during the first year after cable enters the market, with further deterioration occurring after the first year. Indeed, Greg Liptak, executive vice president of Times Mirror Cable Television, reports a 60-80% conversion rate of STV subscribers to cable.

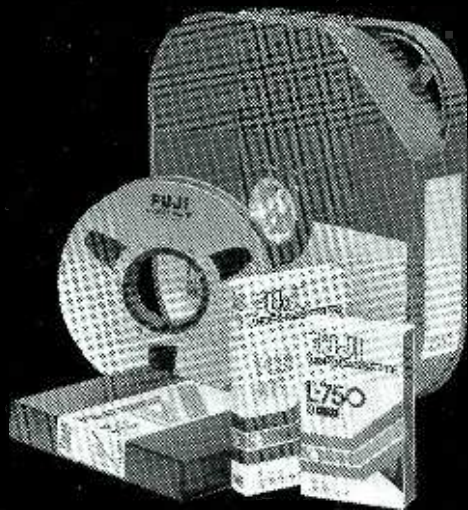
Last October, the STV industry suffered its first major casualty when Golden West Broadcasters' VEU STV operation in Oklahoma City—a system that once served some 20,000 subscribers—shut down as a result of cable penetration and an adverse economic environment.

Cable's multichannel offerings clearly give today's value-conscious consumers a great deal more for their money, and most STV subscribers readily switch to cable at the earliest opportunity. There is, however, one exception to this rule: An STV station that has special programming of some sort (e.g., local sports) will likely retain a large percentage of its subscribers even after cable comes into the market. A good example of this phenomenon is the ON TV system in Los Angeles. By supplementing its movies with Dodgers, Angels, Lakers, and Kings games—as well as a variety of other sport

*Continued on page 30*



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events—ON has managed not only to compete successfully with cable, but also with another STV system in the same market.

STV industry revenues are falling short of projections for another reason: the less-than-spectacular inroads being made by pay-per-view. While top boxing events do draw in the 50% range, a live Rolling Stones concert generated only about 20% PPV penetration and November's theatrical performance of *Sophisticated Ladies* attracted the attention (and extra bucks) of only 10.1% of the 624,000 subscribers to Oak's five ON TV systems.

The current prognosis for pay-per-view does not look good. Aside from some major sports events, there would not seem to be a great many other special events for which subscribers could be expected to shell out an additional \$10, \$15, or \$20—especially given the current economy. Moreover, there is evidence that PPV is already generating considerable subscriber backlash. After already having paid \$19.95 or \$24.95 for their month of STV programming, subscribers are not taking kindly to seeing a scrambled picture during PPV events.

A kissing cousin of PPV is tiering; and while tiering has enjoyed success on some systems, the same problems—high cost to the subscriber and subscriber displeasure over scrambling—potentially plague this intended source of extra STV revenue, too. Briefly, tiering involves the use of one channel for two or more program services, each of which costs the subscriber extra.

A new STV outlet in Minneapolis, operated by Home Entertainment Network, runs a three-tier system of movies, adult programming, and sports. Movies are shown from 3-11 p.m., adult programming from 11 p.m. to 1 a.m., and sports any time. Any single tier is priced at \$19.95, with each additional tier priced at \$9.95. If the subscriber does not purchase all three tiers, the picture will be scrambled at various times. HEN reports that a full 17% of its 25,000 subscribers are taking all three tiers for \$39.85 per month, and more than half of the subscriber base takes two tiers. While these numbers are indeed impressive, it is important to consider that only a very small portion of Minneapolis is cabled and that the STV channel is new. How long subscribers will continue satisfied and will-

ing (able) to pay such sums is a question that can be answered only by time.

Currently, the STV industry's 27 stations serve 18 markets and a total of 1.5 million subscribers. By 1986, estimates Kagan, there will be 1.9 million "primary" STV subscribers, with another 1 million "tiered" subscribers. This estimate of fewer than 3 million subscribers is revised from an earlier estimate of 6.4 million. Bortz puts the figure at 2 million STV subscribers in 1990, out of a universe of 9 to 14 million U.S. households receiving pay TV from systems other than cable.

Though the outlook for the over-the-air STV industry does not look rosy, it is by no means all gloom and doom, either. Several factors, in fact, may not only keep the STV industry alive, but could allow it to thrive. We'll look at the positive side in the next issue, with emphasis on multichannel capability, low-power television, and the uncabled markets. **BC**

*Ruth Macy, satellite editor, is founder and president of TeleWords, a Santa Monica-based editorial consulting firm serving the communications industry.*

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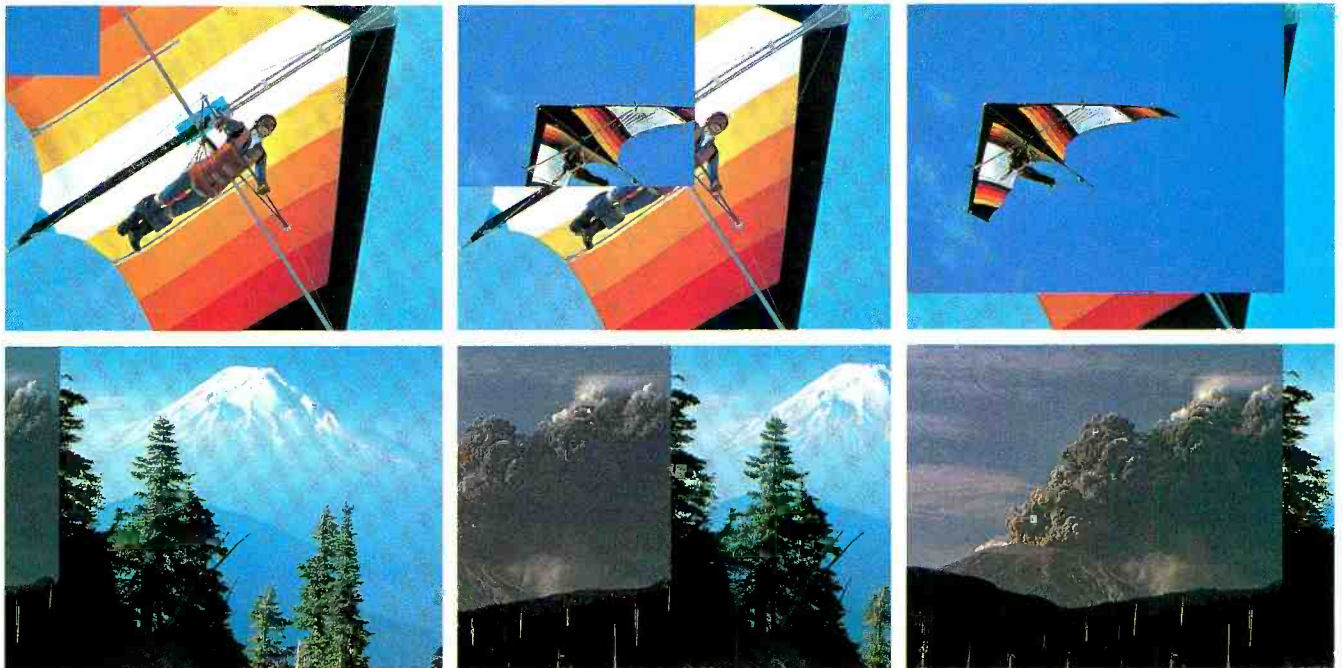
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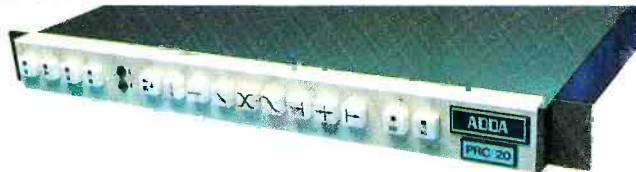
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The AC 20 gives you two channels of digital time base correction in just seven inches of rack height, saving space, maintenance, capital cost, cooling, and power. The Production Remote gives you digital switching effects at very little extra cost.

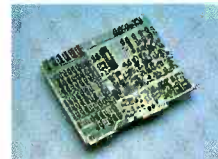


In fact two channels of time base correction with 2:1 digital effects are priced at only \$18,950.

Two of the effects are shown above: Corner Wipe, and Push Off. You also get Vertical Wipe, Vertical Interval Cut, Fade/Dissolve, Push On, and Pull Off, plus Reverse and Mid-Stop controls and a choice of four transition speeds. Not bad for a TBC.

This means that with three VTR's and an AC 20 (with the

Production Remote option) in an editing suite, your ENG post-production crew is ready for A/B-roll editing with digital effects, some of which have only been seen on upscale switchers until now. No need to tie up your production switcher. And you can remote the AC 20 to your editor, if you like.



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The AC 20 works with 3/4-inch and 1/2-inch V-locked, unsegmented VTR's that accept derived 3.58 MHz feedback. It uses a 16-line store, eight-bit technology, and fourth-harmonic sampling to produce a broadcast-standard output. Its digital circuitry assures that the output signal is the same quality as the video input signal. It is virtually transparent. And it is modular; you can start with a single correction channel and do cuts-only editing; you can add a second channel and move up to A/B rolls. You can add the Production Remote for digital transition effects. And that's just the beginning. The AC 20 TBC is the first of a new family of products that will have a significant influence on the future of broadcast production equipment.

The bottom line: Two TBC's plus 2:1 digital effects. At less than a fifth the cost of separate stand-alone production units.

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# NEWS DIRECTIONS

PHILLIP KEIRSTEAD

## Technology day is a success

A confession can now be made. I had some qualms when RTNDA president-elect Dean Mell called me early in 1982 to ask if I would organize an entire day of technology-related programs at the RTNDA International Conference, held recently in Las Vegas.

I'm pleased to report that it worked! According to a survey conducted for the RTNDA, respondents who proposed changes in the conference program ranked "more technology" third behind "more focus on radio news" and "more seminars on writing." This seems to be a reasonable order.

Thanks go to Richard Yoakam, Bill Avery, Doug Miller, Bob Priddy, and Ken Kurtz for heading the panels. If you ever need some outstanding help on a project, I can recommend these individuals!

Attendance was generally good at the sessions; and it was reported that delegates picked up a lot of useful information.

Caesars Palace was stuffed with devices which should interest newsmen.

The computer newsroom vendors got together and set up an excellent display on which delegates were able to call up biographies of the candidates for office and the resolutions which were voted on by the active members. In addition, one vendor set up an electronic message center.

One of the focal points of the exhibits was the combo-camera displays. JVC surprised some observers by showing an industrial-grade combination camera-recorder. Reportedly, the combo camera will be on the market this month. It's supposed to be a low-cost unit which uses a VHS cassette.

RCA brought the Hawkeye; Panasonic was there with Reacam; Sony had Betacam; and Ampex also showed up with a combo camera.

CBS's Joe Flaherty said we're going to continue to have problems with the camera/recorder systems until the industry adopts a standard. He also put some of the blame for the lack of a standard on newsmen, saying we must take an activist role by telling manufacturers what we need, rather than complaining about what they give us.

There was great interest in newsroom computer systems. A new vendor at the show, Terminal Systems Corporation of

Merrimack, N.H., has been building systems for newspapers, and now is trying to get in on the low-cost end of the broadcast newsroom computer field.

Other firms displaying newsroom computer systems included Basys, BEI, Integrated Technology, Jefferson Data, McInnis-Skinner, and Quanta. Integrated Technology is now developing a system for television, after building suc-



cessful radio systems.

The newsroom computer session attracted a big crowd. Bert Kennedy from KTSP-TV, Phoenix, told the group his station is currently keeping track of files on the company's BCS business computer. Kennedy also uses a Radio Shack TRS-80 model III to do what he calls "utility jobs" such as updating address lists.

Carl Twentier of KRON-TV, San Francisco, said his station decided to go for a big Basys system because they were being swamped with information from almost four hours a day of news scheduled over KRON. The current configuration calls for 27 terminals, but Twentier sees it growing to 65 to 70 terminals in order to effectively manage 23 crews and 35 reporters plus three large

bureaus. He said there are cost savings for materials and the operational benefits are "incredible."

Bob Inman of WBTV in Charlotte said their Jefferson Data system has made the newsroom much more efficient. He added that the quality of writing has improved with the installation of WBTV's 15-terminal system, which also serves remote bureaus.

Paul Davis of WGN-TV/AM encouraged news directors to (1) buy a system that can grow, (2) understand any licensing fees which may be included in the contract, and (3) make a thorough study of the vendor's service capabilities.

Out on the exhibit floor, a firm called Newslink was prompting a new satellite communications service in which they plan to drive a portable uplink to the site of breaking news stories. The firm's other offering is weekly transmission of public-relations materials—sort of a video PR wire.

Telesource Communications Service was showing an election reporting package. They are also working on a newsroom computer system.

Frank Beaman was nearly treed by the hoard of anxious radio newsmen who wanted to see if he had the Scribe cassette recorder ready to go. He did have a prototype, and was hopeful he would be in production by the time you read this column.

A great deal of worthwhile material was discussed during the workshops. Attention was particularly drawn toward a presentation by Dick Rudman, engineering manager at KFWB in Los Angeles. He talked about the problems involved in radio field coverage in built-up areas where there is a shortage of communication frequencies and an abundance of interference.

Rudman showed slides demonstrating some of the "bailing wire" rigs which were using the communications frequencies in California. He is very active in the communications frequency area; in fact, he is chairman of the Society of Broadcast Engineers National Frequency Coordinating Committee. If you need information to help you clean up your local communications channels, you might want to get in touch with him at (213) 462-KFWB.

*Continued on page 34*



# Editing For Starters

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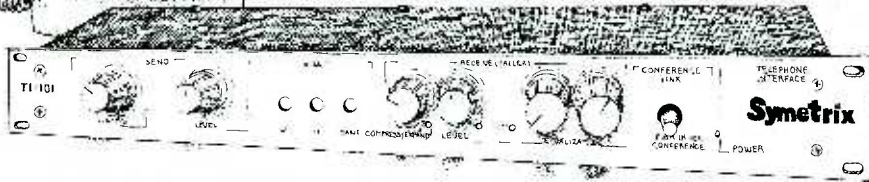
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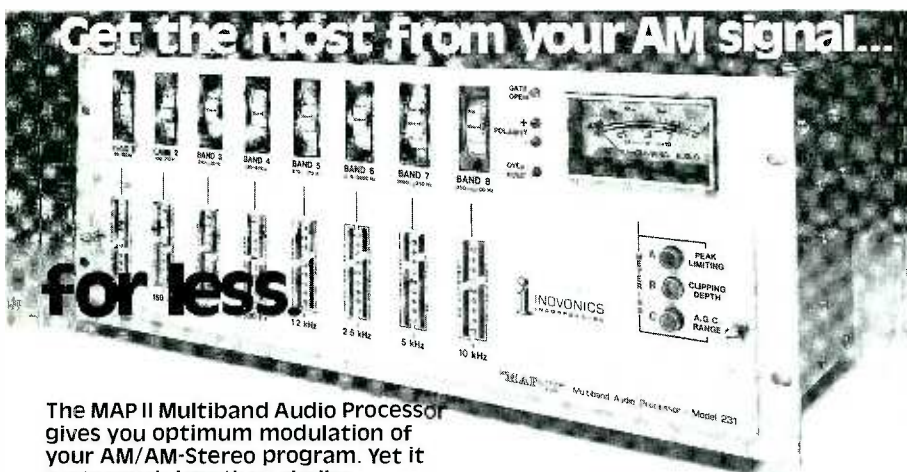


operation. If telephones are an important part of your operation then you know talk isn't cheap. So don't let yourself down. Call Symetrix or your favorite broadcast equipment supplier to get complete details and specifications on the Model TI-101 Telephone Interface.

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Program phase is silently "rotated" for maximum positive modulation.

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Circle (21) on Action Card

**"News people need to become more active in setting the technical standards for equipment and services..."**

In essence, Rudman said the same thing Flaherty said: news people need to become more active in setting the technical standards for equipment and services which affect their operations. It sounds like just one more problem. It is. Unfortunately, the problem will not go away if we ignore it.

A couple of notes: A recent column mentioned the satellite division of a Florida TV station, WCTV. In order to help our readers relate to the station, the call letters were used. It should also be pointed out that the satellite uplink and the 55-foot mobile fan are really part of a company subsidiary called Satellite & Production Services.

In regard to a recent story about satellite news gathering for Florida elections, there are a couple of updates. The mobile unit described in the November 1982 story ended up being driven right into the Tallahassee-Leon County Civic Center. It became a temporary control room and production facility right within the center.

Instead of two uplinks, the Florida TV stations used three. One was the above-mentioned installation located at WCTV in Tallahassee; the second belonged to Florida Public Broadcasting; and a third drive-up unit was added after the article was sent to the printer. That shows you how technology is booming: three uplinks for live election coverage—and the election wasn't that exciting! Also, CBS bowed out after it became clear the governor and a U.S. senator would not be in the same place on election eve.

Some of the candidates in last November's Florida election chose the most difficult locations for TV relays they could when they decided on where they would wait for returns on election eve.

It's a safe bet that they won't make that mistake again. **BC**

*Phillip Keirstead, news technology editor, will be out of the country for several months this year as a Fulbright lecturer in India. The column will continue, however, with some contributions from overseas. Keirstead's itinerary also includes stops in the United Kingdom, Pakistan, Jordan, Egypt, Israel, Sri Lanka, Malaysia, and possibly Thailand, Indonesia, and the Philippines.*



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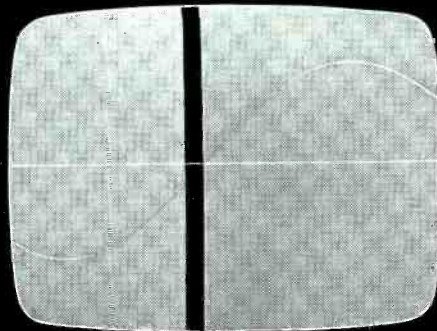
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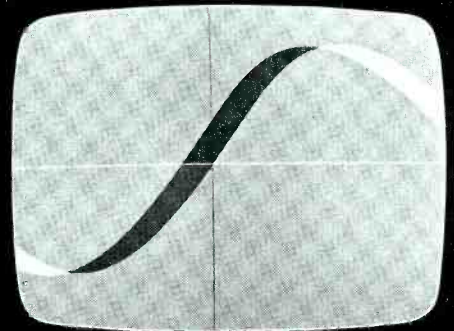


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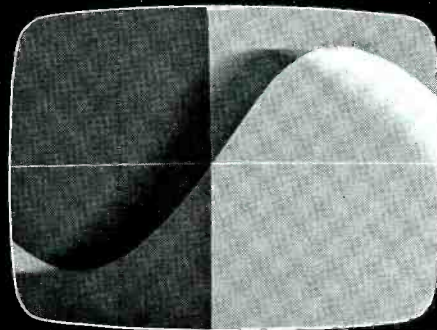


Set system timing.

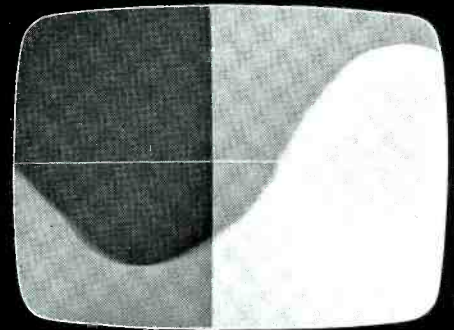


Match subcarrier phase.

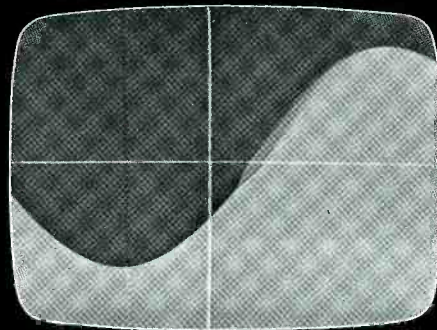
And four tough problems you'll never have to waste any time with again.



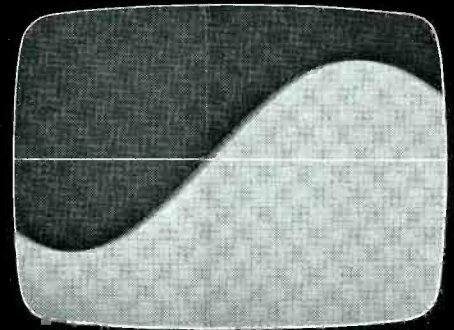
Set subcarrier frequency to network.



Find timebase error.



Pinpoint sync to subcarrier jitter.



Locate system cross-talk.



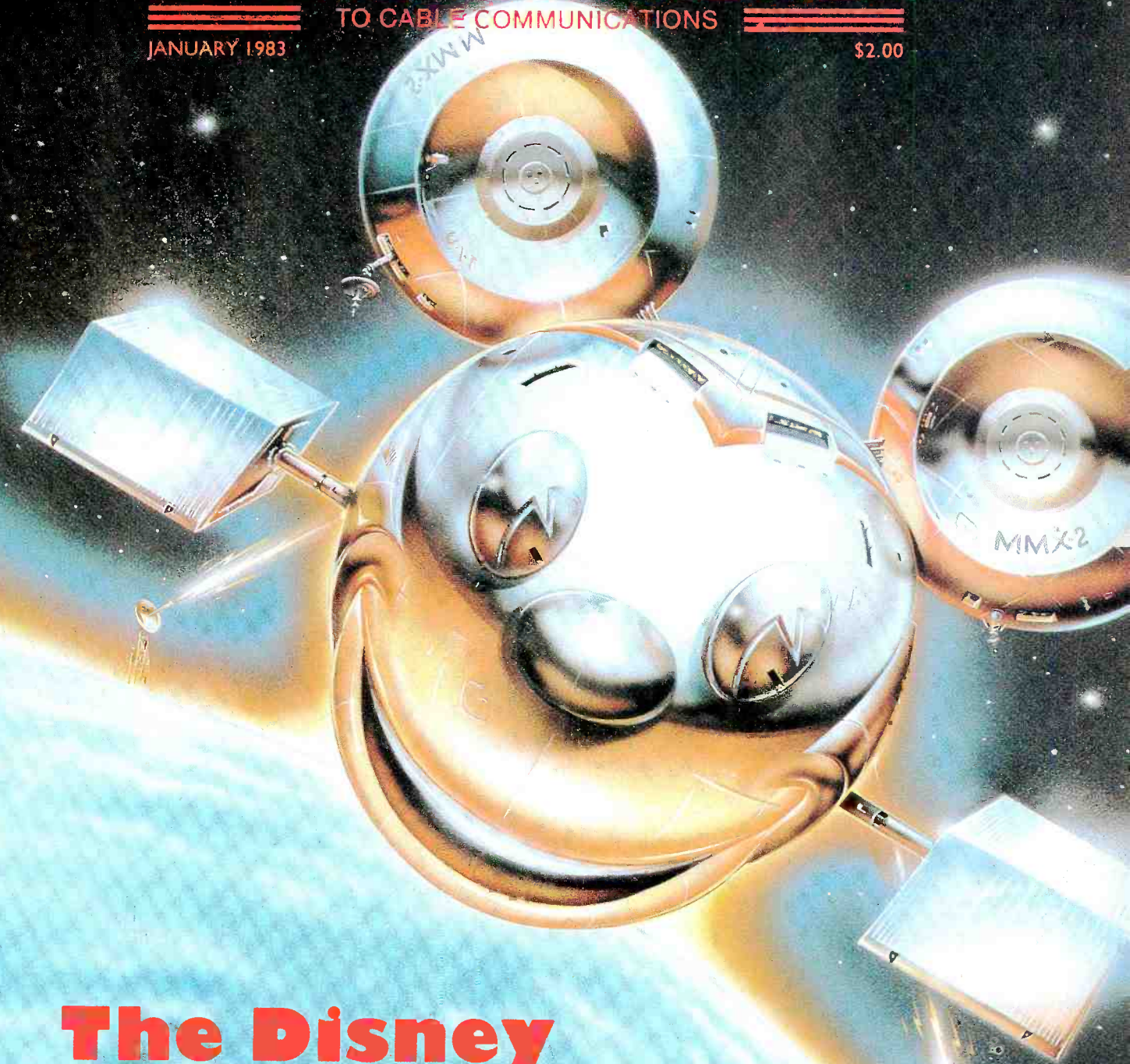


# ACCESS

TO CABLE COMMUNICATIONS

JANUARY 1983

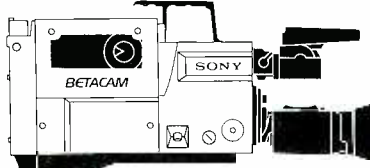
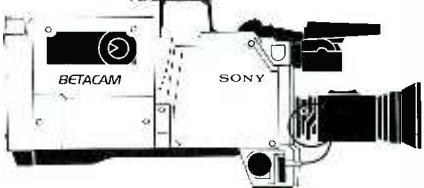
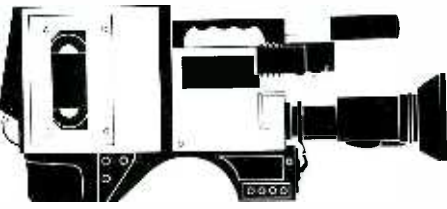
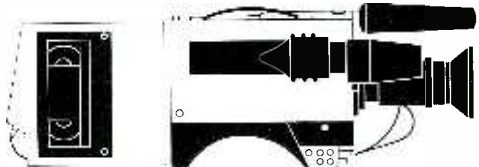
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brings a new  
dimension to cable



# VERY VITAL FOR PRUDENT

Camera/Recorder Drawn In Scale	Weight In Pounds*	Length In Inches†
One Tube 	<b>17.8</b>	<b>14.9</b>
Three Tube 	<b>21.9</b>	<b>17.1</b>
Three Tube 	<b>24.7</b>	<b>17.5</b>
Three tube 	<b>27.6</b>	<b>21.5</b>

\*Includes camera, lens, viewfinder, recorder, battery. †Lens excluded. \*\*Camera, lens, battery, battery charger, recorder, playback unit.

Logic dictates that before you invest in a camera and ½" recorder system you should shop around. Carefully comparing such criteria as size, weight, image-making capability and price.

So we arranged a little shopping guide based on specifications from our competitors' 1982 brochures and our own. The results are quite revealing.

For news-gathering, the Sony Betacam™ one-tube with 400 resolution lines has striking advantages over the

alternatives. While for field production the Sony Betacam three-tube with 650 resolution lines and 58dB signal-to-noise is superior to them all.

Of course, both Betacams have still more advantages that have not been included in the chart.

Physical advantages like the removal of most of the troublesome cables from the viewfinder, lens, mic to camera and camera to recorder.

Technical advantages like a recording format with both



# STATISTICS CAMERAMEN.

Power Consumption In Watts*	Signal To Noise Camera dB	Signal To Noise Recorder dB	Price**
<b>22</b>	<b>54</b>	Lum Chrom <b>48/50</b>	<b>\$38,500</b>
<b>31</b>	<b>58</b>	Lum Chrom <b>48/50</b>	<b>\$51,500</b>
<b>27</b>	<b>58</b>	Lum Chrom <b>47/48</b>	<b>\$62,000+</b>
<b>40</b>	<b>55</b>	Lum Chrom <b>47/48</b>	<b>\$70,000+</b>

timebase corrector, carrying case. Based on estimated suggested manufacturer's retail price. All figures based on Saticon\* Tubes.

a chrominance bandwidth and signal-to-noise performance greater than the competitions'; wideband chrominance components with no crosstalk or other artifacts; built-in Dolby® C noise reduction for high-quality audio; and most important, the playback unit has built-in TBC (an option on the competitions' units) providing full broadcast-quality output.

Betacam also offers major financial advantages beyond those shown. Namely, sparing you from having to

invest in a whole new editing suite. It interfaces perfectly with the Sony U-matic® and one-inch suites you use now.

Betacam was planned as the logical progression of the total Sony Broadcast system. To find out just how logical, contact your Sony representative in New York/New Jersey at (201) 368-5085; in Chicago at (312) 860-7800; in Los Angeles at (213) 841-8711; in Atlanta at (404) 451-7671; or in Dallas at (214) 659-3600.

**SONY**  
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# CAUTIONS IN THE WIND FOR CABLE PROGRAMMING

BY JACQUELYN BIEL

**N**CTA's 1982 National Cable Programming Conference began in the ornate Victorian splendor of Los Angeles' Biltmore Hotel and ended with the ACE Awards ceremony in the lavish gilt and burgundy of the Beverly Theatre in Beverly Hills. In between was an intense three days of discussion, self-examination, and some well-deserved praise.

The major concerns of those in attendance seemed to be how to profitably market cable programming, and how to compete effectively with network fare.

In a keynote address, delivered before a bank of 43 television monitors flashing clips of all the satellite programming available today, Thomas E. Wheeler, NCTA's president, pointed to the network's plummeting ratings in the face of increasing competition from cable as an indication of even rosier times ahead.

The reason for the drop in network ratings, said Time Inc.'s vice president, Gerald Levin, is that viewers are plain sick of the poor quality programming they've been getting. Cable offers them more choices and, in the process, is changing the way people use television. Instead of passively accepting whatever is doled out to them, viewers are taking more control over how they use television in a kind of "quintessential consumerism." And cable operators should recognize this and begin to market cable as "a means of consumer convenience and consumer control."

Of course, cable must be able to supply the kind of programming that can compete effectively with network shows. But so far the state of cable programming is "abysmal," according to Fred Silverman, former network head and now president of his own New York-based production company. Sports, news, and motion pictures have been cable's mainstay up to now, said Silverman; but if cable is to continue to compete effectively with the networks, it must develop much more than the "horrible" rehashed entertainment programming it has been offering. And one step in the right direction is MTV: Music Television.

Another would be local programming. If radio stations can grow on a steady diet of community news and affairs,

then cable TV ought to be able to also, said Silverman. In fact, he sees community programming as one of the great challenges of the next five to 10 years.

After the opening general meeting, the conference attendees separated for a number of smaller breakout sessions in which some of the general themes introduced earlier were discussed in their relationship to individual operations.

Frank Nuessle, executive vice president and general manager of Pacific Cable Systems in Portland, Oregon, said that the main problem facing his company was educating the subscriber about the services the cable company offers. Some subscribers, for instance, are confused by the different forms of pay TV available—STV and pay-per-view, for example. Some fear that if they subscribe to cable, they'll begin to watch more television and neglect other, "more valuable" activities. Nuessle proposed that both problems could be overcome by promoting local origination and educating consumers about cable through locally originated programming.

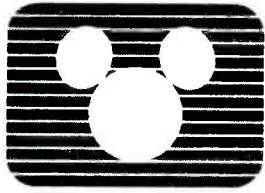
John Frazee, Jr., group vice president of Centel Video Services, thought, however, that operators can have more impact than programming; and that a professional, customer-oriented, face-to-face sales effort is the key to beating the competition. If the cable company provides both high-quality programming and personal service, said Frazee, there will be no competition, because no other delivery system can then compete with cable.

The same problems, from a slightly different perspective, were examined by Jack Clifford, president of Colony Communications in Rhode Island, and Bob Hosfeldt, executive vice president of Gill Cable. Both companies operate stand-alones. For Clifford, a standalone means lower operating costs and exclusivity in the marketplace—pluses in comparison to the higher costs and non-exclusivity of satellite-delivered programming.

Colony's channel produces three advertiser-supported services. The first is Movietime, a 24-hour, seven-days-a-week classic film service aimed at the 18- to 24-year-old col-

*Continued on page 44*





## THE DISNEY CHANNEL

# A familiar face is coming to cable

While some people express concern over the increase in poor quality cable programming, a major company is turning concern into commitment with a new family-oriented cable service. It's The Disney Channel, which will be offering innovative, educational family fare to cable viewers by April.

The Disney Channel will rely on a vast collection of films from the Disney library—one of the largest film libraries in the world. In addition to animated classics like *Dumbo* and *Alice in Wonderland*, subscribers will be treated to the full spectrum of Disney motion pictures: live-action movies, hundreds of classic cartoons, and Walt Disney's legendary "true life adventures." In addition, subscribers will see nearly 30 years of prime-time television programming, most of which has never been syndicated.

This source of quality family entertainment will be the foundation for The Disney Channel's 16 hours of programming each day. It also is the entertainment legacy that will set the tone for much of the innovative and imaginative new programming now in production for the new pay-TV venture.

Disney fans will have a chance to see the Disney Studio's popular live-action films during the three daily feature film showcases airing in morning, afternoon, and evening. These will range from Academy Award-winning titles such as *20,000 Leagues Under the Sea* and *Bedknobs and Broomsticks* to up-to-the-minute Disney releases such as *Tron* and *Tex*.

For subscribers who grew up with Disney, an exciting feature of the new channel will be the opportunity to reacquaint themselves with such favorites as *The Mickey Mouse Club*, *Davy Crockett*, and *Zorro*. At the same time, the channel will introduce these old friends to a new generation of Disney fans.

Disney's collection of over 250 educational films and numerous other short subjects will be liberally

used in channel programming either as whole series or as key elements in longer shows.

In addition to these Disney classics, several new productions are planned, including dramatic and comedy series, magazine shows for all ages, and special programs from Disneyland and the EPCOT Center. Here's a sampling:

- *Welcome to Pooh Corner*, a daily program for pre-schoolers. The show, which will feature state-of-the-art life-size puppet technology, centers around the adventures of Pooh and his friends. Each episode will encourage children to develop positive values and attitudes, while sharing in fun and laughter with the show's stars.

- *You and Me Kid*, featuring a studio host leading parents and children through a variety of activities, sing-alongs, and drama exercises using objects found in every living room.

- *Five Mile Creek*, a western adventure produced by Douglas Netter, whose production credits include *The Wild Geese*, a 1978 Richard Burton feature, as well as *Cherokee Trail* and *The Sacketts*.

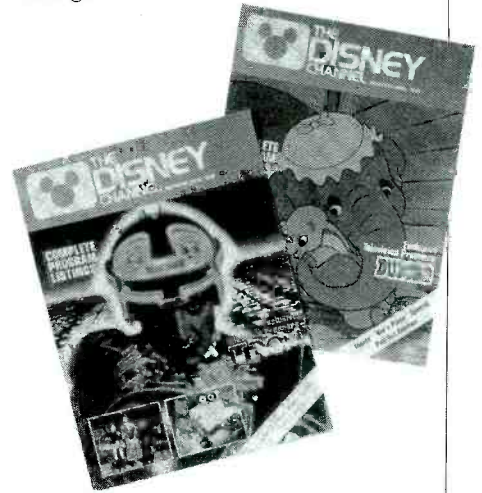
- *Wizards*, a daily, half-hour science program that will examine new technologies as well as ancient secrets, and look at everyday events as well as cosmic wonders.

- *Contraption*, a game show pitting youngsters against each other in a game based upon clips from classic Disney films, and played across a life-size board.

Complementing this new service will be a monthly magazine mailed to subscribers at no extra cost. *The Disney Channel Magazine* will contain a variety of fare in addition to colorful and convenient program listings: articles on the programs; background pieces on the channel's stars, both animated and live; and entertaining features.

Central to the magazine will be "Mickey's Clubhouse," an eight-page pull-out section designed for children up to 10 years of age. Here

they will discover games and puzzles, pen-pal exchanges, educational articles, and a variety of other activities centered around program offerings.



An important aspect of the magazine are the activities and involvement devices that will actually be part of certain programming. These activities will encourage viewer involvement in many of the shows and create in The Disney Channel a virtual interactive pay-TV service. For example, *Do-it-yourself Detective* will feature at-home clues so viewers can actually help solve the daily TV mystery, and *You and Me, Kid* will encourage parents and children to play, sing, and learn along with the help of the special *Disney Channel Magazine* section.

The Disney Channel is a major step forward in cable programming. James Jimirro, president of Walt Disney Telecommunications, recently said, "We will be reaching out not only to children, but also to young and mature adults whose interests demand entertaining and enriching TV fare." This is the type of programming philosophy that is good for everyone—cable and over-the-air television.

ACCESS cover art and above illustrations are copyright © 1982 by Walt Disney Productions.

# IF IT WERE YOUR JOB TO GET THIS ON TAPE, WHAT TAPE WOULD YOU GET IT ON?

It's a complete mismatch. A collection of college amateurs together for only a couple of months against the equivalent of the Russian professional all-stars, a team that has dominated world hockey for a decade or more, a team that has recently embarrassed the NHL All-Stars with a 7-2 exhibition victory. But in the end, the amateurs win in a dramatic showdown for all the world to see at a time in world politics when a victory really counts.

America, like most of the world, will see the game on tape, recorded and broadcast by ABC-TV. In fact, many of the events at Lake Placid will be broadcast and rebroadcast to the world on tape under the most demanding time and temperature conditions. It's a one-chance situation all the way and the stakes are always high.

That's why Scotch® Video Tape was there when the U.S.-Russia Hockey Game was first recorded. And again when the Moon Walk was first recorded. And again when the Space Shuttle Landing was first recorded.

The Papal Tour of America. The Return of the Hostages. The Eruption of Mount St. Helens. Whenever there was one chance to get it, chances are they got it on Scotch Video Tape.

So whether your production is important to the world or just important to you, why take chances? Get it on the one tape you know will get it right.

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3M hears you...

**3M**

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lege crowd. Advertising is handled in three-minute blocks, with one block scheduled at the mid-point of a film and another at the end.

Colony also produces JTV1 and JTV2, non-audio videotex programs showing news, sports, and feature stories in 20-minute cycles. Animated color advertisements intersperse the programs at the rate of about one "page" of advertising for every five of information.

One other interesting Colony offering is a Portuguese-language news program. News is cablecast first in English and then in Portuguese. Also advertiser-supported, this program sold out at the original rates and then sold out again when rates were raised. Such popularity seems to indicate that advertiser-supported programming can do very well indeed... if it meets the needs of its viewers.

Gill Cable's Hosfeldt discussed three of Gill's standalones: the G Channel, which offers G and PG films; Rendezvous, an adult service; and Gill's newest pay-per-view stand-alone, Hollywood Premiere. All are netting the company considerably more than comparable satellite-delivered programming would.

So what's the biggest problem that standalones should watch out for? Buying, agreed Clifford and Hosfeldt. If you're going to buy programming, be sure you know how to do it. And then monitor your viewers. Be sure you know exactly how they're responding to your programming.

In another session on the economics of programming a basic network, Bill Scott, president and CEO of Group W's Satellite News Channel, set forth three criteria for producing the right programming at the right price. First, stake out your territory; know the image you want to project to

your viewers. Second, don't stint on quality. The viewers are used to network productions and yours must compete. Third, produce your programming efficiently. The competitive cable environment does not provide the resources that the formerly monopolistic broadcast networks could rely on, and copying network production methods is too expensive.

But the necessary money is sure to come, according to Jeff Reiss, president of the Cable Health Network. Advertisers are warming up to cable, he said, in an effort to recapture audiences lost from the networks. And Bob Johnson of the Black Entertainment Network pointed out the huge advertising market in Black America, particularly in the cities.

The only pessimistic note was sounded by Bill Grimes, president of ESPN, who saw generating ad revenue as one of cable's most pressing problems.

In the closing general session, the focus returned to the problem of sustaining viewer interest in cable. "Cable has a long way to go," asserted Lee Rich, president of Lorimar Productions. None of the basic services is profitable right now from the producer's point of view, and pay services must invest the money to attract talent and quality if they want good programming.

Motion picture companies, however, are "clearly and definitely" the friends of cable, countered Michael Eisner, president and CEO of Paramount Pictures Corporation. He added that cable companies should be very vocal in helping to block the networks' exclusive rights to production talent and personnel.

Herb Granath of ABC Video Enterprises sees cable's challenge as an economic one. If quality is sacrificed to keep costs in line, viewers will not watch the result, he asserted.

And Jack Schneider, of Warner-Amex Satellite Entertainment Company, said the problem is one of identity and perceived value. Cable cannot be marketed as simply "more TV." It must develop an identity of its own—an identity based on quality.

"The bottom line," said Schneider, "comes every month when the viewer pays his bill. When he writes that check, he's got to feel good about what he's getting. And the only way that that will happen is if cable can offer him something other than what he can get free from the broadcast networks."

That cable programmers may be starting to realize this is evident in a number of new services. For the small, specialized audience there are such services as Ski Tip Productions, which produces half-hour skiing lessons. On the other end of the spectrum is The Playboy Channel, which began cablecasting innovative, high-quality adult entertainment in November.

And the newest entrant into the competition is The Disney Channel, offering 16 hours daily of family fare including old favorites as well as several new series. Educational games; fitness programs; series on science, the future, and social history; and a viewer participation program for parents and children to enjoy together, are just a sampling of what The Disney Channel plans to bring to cable in April of 1983.

After a quarter-century, cable is finally coming into its own as not only a medium of entertainment for odd leisure hours, but also as a real catalyst of activity for and among viewers. If the new cable programmers fulfill what seems to be some very exciting promises, subscribers should be more than satisfied as they write out their monthly checks. **BC**

*Jacquelyn Biel is programming editor of LPTV magazine and co-founder of Video-Ink, a consulting firm, located in Milwaukee, Wisconsin.*

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# The **SPORTS** **SIDE** of local origination

BY GREG VANDERVORT

**C**overing local sports action is a natural for cable television. By bringing subscribers a Saturday afternoon high-school football game, the cable operator gets a built-in audience and some valuable community-relations points. In most areas of the country, local sports have a strong following, and cable is cashing in.

To cover local sports you must have a two- or three-camera remote truck. Some cable systems have shot games with two single-camera systems, and then edited it together. This is a time-consuming process, and the results are usually not good. Your truck should have a TBC for tape roll-ins and replays, graphics capability, and a talk-back system so the director can talk to talent while they are on the air.

Usually, at the local level, your play-by-play man also acts as a producer. His responsibilities include contacting the schools or teams for advance clearance; surveying and obtaining clearances at the field or gym; and plotting out the game format with the director.

Your on-air talent can make or break your coverage. At Suburban Cablevision, we use someone with radio play-by-

play experience. There are differences between calling a game for radio and announcing one for television, but it's much easier to work with someone with radio experience.

For color announcers, we use someone involved with the local sports scene: coaches, retired coaches, athletic directors, even officials. All can make great color commentators. For play-by-play you want someone who knows the sport and can handle the mechanics of the telecast. For color you want someone with a good personality who knows the players, coaches, and local background.

Your game coverage can be greatly enhanced if you have a time base corrector in your truck. If you have one, you can roll in a pre-produced open. You can tape coaches' interviews and roll them into the program. You can even roll in true-speed replays of the actions.

A true-speed replay isn't as good as slow motion, but it's better than none at all. For a slow-motion replay you would need a video disc, or a one-inch VTR with slow-motion capability, or Sony's new 820 3/4-inch VTR which is capable of stable playback in slow motion.

Costs range from around \$22,000 for a video disc, to upwards of \$60,000 for a one-inch machine or about \$25,000 for a Sony 820. If you can afford some sort of slow-motion system, it will add tremendously to your sports coverage. If you can't, then use true-speed replays.

A true-speed replay is available by having a 3/4-inch VTR on either your program feed or an isolated camera. After an important play, this VTR is re-wound and then rolled into your coverage through a TBC. If you have an editing controller in the truck, the cueing of your replay will be a lot easier.

If you are using replays in your coverage, you must have an IFB system in your truck. An IFB is an intercom system used by the director to talk to the announcers. This is essential for giving the announcers information about the replays.

Graphics is an area of local sports coverage that is often overlooked. You should have some sort of basic character generator in the truck, and you should use it often during a game. Watch broadcast sports coverage and take note of the use of graphics. Even an inexpensive unit will give you a more professional look.



A play-by-play announcer and color commentator can add professional quality to local sports coverage. (Photos by Greg Vandervort)

*Continued on page 46*



When using two cameras to cover baseball, position one up high behind the plate and the other down the first-base line.

Camera shot patterns for the sports you cover should be based upon standard broadcast coverage. They need to be adapted to a two- or three-camera situation, and to the smaller athletic facilities where most local events are played. Let's take a look at standard two- and three-camera patterns for some of the major sports.

For two-camera coverage of football, put both cameras up at the 50-yard line. Most football facilities have some sort of press box that the cameras can go in or on. If there isn't a press box, you will need to set up scaffolding to get the cameras elevated. With camera 1 on the left and camera



Local sports coverage can be greatly enhanced if your remote unit is equipped with a TBC, intercom system, and character generator.

2 on the right, use 1 as play-action (your main camera, it follows all the action of the play) and 2 as a tight and feature camera (it helps if 2 has a longer lens than 1).

A typical directing pattern would be:

*"Camera 2 is live—Wide both teams... Camera 1, tight on offensive huddle... Ready 1, take 1—1 bring them to the line and widen to play-action, follow the play (camera 2 follows it tight for replay)... Camera 2—Tight on man who just made play... Ready 2, take 2—Follow him back..."*

That's the framework from which you start. You can add to this basic pattern.

If you have three cameras for football (camera 3 a mini-cam), put your first two up at the 50 and put camera 3 at the near sideline. It should have enough cable to get behind one or both goals. It will help camera 3 if you have a production assistant carry a small box that your cameraman can stand on. This enables him to shoot over people on the sidelines.

A typical three-camera directing pattern would be:

*"Camera 2 is live—Wide both teams... Camera 3 tight on offensive huddle... Ready 3, take 3—Follow quarterback to the line... Camera 1 play-action... Ready 1, take 1—Follow the play (camera 3 or 2 tight to replay)... Camera 2—Tight on man who made play... Ready 2, take 2—Follow the man... Camera 3—Feature..."*

Basketball is a sport that can look good with two cameras, and great with three. For two cameras, put camera 1 at center court. Camera 2 should be on wheels, court level, at either corner of the court, one the same side as camera 1. Camera 2 can truck out along the base line under its basket, but you have to be careful that it does not cross an imaginary straight line between camera 1 and the action. If it does, your cuts will be disjunctive.

A typical two-camera directing pattern would be:

*"Camera 2 is live—Tight on jump ball... Camera 1—Wide for jump... Ready 1, take 1— Follow the action 1 (basket is made), 1 push to the man... Camera 2—Tight for the in-bounds..."*

When the action is at camera 2's end of the court, you have the option of cutting to it for play action.

With three cameras for basketball, put both 1 and 2 up at

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center court, and put 3 (could be a mini or studio camera) in the low corner position. The pattern is basically the same, except camera 1 doesn't have to push in to a man who makes a shot. Instead, camera 2 can now pick up that man tight. Camera 3 is used in the same way that 2 was used before, and makes for a great replay camera.

Baseball is probably the most difficult sport to cover. It's almost impossible to get good results with baseball if you've only got two cameras. The problem is that action can happen in many places simultaneously. The only way to show what's happening is by cutting. If you are forced to cover baseball with just two cameras, I suggest you put camera 1 up high behind the plate. Camera 1 must be able to get a shot that includes both pitcher and batter. Camera 2 would be three-quarters of the way down the first-base line. Camera 1 would primarily be responsible for the pitch and play action. Camera 2 would get close-ups of the pitcher, and the batter, and would have to follow the lead runner during play action.

With three cameras you can get some fairly realistic baseball coverage. Put camera 1 about halfway down the third-base line. Camera 2 should be about three-quarters of the way down the first-base line. Camera 3 could be either low behind the batter; or if you have a long enough lens, you could put it in the outfield. The idea is that 3 gives you a pitcher/batter shot that is used for the pitch. Camera 1 gives you shots of a lefty batter, the pitcher, and follows your lead runner. With baseball there are so many possible plays, it's a good idea to go over a variety of game situations and determine how you will cut it.

Soccer brings us back to a relatively easy sport to cover. With two cameras, put both up at the center of the field. Basically camera 1 is a wide play-action camera. Camera 2 follows the action tight and gives you cutaways. A third camera (a mini-cam is best) can be added to the near sideline for ground-level cutaways. I should note here that hockey is covered in a manner similar to soccer, except that a third camera can be more effective if it is placed behind one of the goals.

For two-camera coverage of tennis, put camera 1 up perpendicular to the net and slightly off center. Put camera 2 at ground level, at the net, on wheels. Camera 2 should be on the side that camera 1 is off center to. Basically, camera 2 gives you the serve, and camera 1 is play action. If you have a third camera, add it at the same end of the court as camera 1, but lower and more off to the side that camera 2 is on. A typical directing pattern with the far man serving would be:

*"Camera 3 is live—Tight on server...Ready 2 on receiver, take 2...Camera 3 a little wider for the serve...Ready 3, take 3... Camera 1—Set for play action...."*

All of the directing patterns that I have gone over are really just the basis of your coverage. In order to make your coverage interesting, you will need to add other shots to this framework. Again, it is helpful to watch broadcast coverage. See what they do with five or six cameras, and then figure out what your two or three cameras can do.

Local sports can be one of the best sources of programming for individual cable systems. The excitement and action that most sports offer lends itself to television... more so than many other local events. A successful local programming channel needs local sports coverage.

**BC**

*Greg Vandervort, cable production editor, is the director of local origination at Suburban Cablevision in East Orange, New Jersey.*

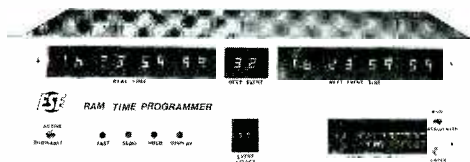
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# The Interconnect to increased advertising revenues

BY GLEN PENSINGER

Satellite program distribution, CARS band microwave, cooperation between cable operators, and an imaginative strategy that recognizes the realities of television advertising, are combining to reap profits from spot advertising on cable TV. The cooperative efforts are called "interconnects," and interconnection was one of the hottest topics at the recent NCTA show. Interconnection began with cooperation between three cable operators on a single channel service in Southern California's San Diego County. There are "soft" interconnects in Seattle and the greater New York City area which rely on bicycling tapes between systems. Cable operators in the state of Connecticut are interconnected. One of the largest and most successful of these interconnects stretches through the rolling hills that surrounds San Francisco Bay.

"Advertising is the only revenue source the cable operator has that doesn't come out of the subscriber's pocket," says Norm Andrus, general sales manager of the Bay Area Cable Interconnect. That's one of the keys to the strategy they've formulated for a successful assault on local television spot advertising dollars.

After four years of development by Gillcable of San Jose, the Interconnect has been spun off into a joint venture company owned equally by Gill Industries and Viacom International. Its roots go back to 1978 when Gill Industries sold KNTV, its VHF ABC affiliate, to concentrate attention on the large, local cable system it started in 1968. With that concentration came new management staff, all of whom had many years of commercial broadcast experience behind them.

Andrus had been selling time in the Bay Area since 1961. Bob Hosfeldt, Gillcable's vice president and general manager, had 20 years in the business and had been KNTV's GM. Jack Yearwood, the Interconnect's general manager, was instrumental in founding the Cable Advertising Bureau, and helped devise the methodology for the initial cable audience measurement study. This was a group of people knowledgeable about and comfortable with the ways of spot television advertising. They felt there was a limit to the amount cable subscribers could be asked to pay in order to defray the costs of operating a system. Advertising was the obvious answer.

The answer may have been obvious; making it work has taken skill and effort. Advertising needs a large audience

base. To build theirs, Gillcable started The SportsChannel in June of 1979 (before ESPN was available on the West Coast). It was a 12-hour, special-interest, advertiser-supported service that took pictures of everything that moved: college football, field hockey, beach volleyball, and tactical darts. Santa Clara County is very sports-minded. If it were a country, it would have come in third in the last Summer Olympics. In such fertile ground, the concept took off, and soon cable operators in nearby communities such as Santa Clara, Hayward, and San Francisco were getting calls from their subscribers wanting The SportsChannel. Numbers is the name of the game for successful time sales, so Gill offered to feed the neighboring cable operators the channel at no charge provided that Gill was able to retain the advertising time for itself.

When ESPN and CNN became available in 1980, Gill signed up. Both services charged cable systems a fee for carrying their programming. ESPN's were flexible; Ted Turner charged 20 cents a subscriber for CNN and 5 cents less if the system also carried SuperStation WTBS. To increase the size of the interconnect, Gill devised a strategy that encouraged nearby operators to put in their own TVRO for WTBS and take the feed for CNN and The SportsChannel from Gill. Gill would pay the Turner and ESPN fees and give each local system operator 5 cents per subscriber in return for the rights to the advertising time. Once the Interconnect got firmly in the black, there would also be a profit-sharing arrangement. Instead of paying Turner 15 cents for CNN and WTBS, the systems were getting those and The SportsChannel for only a dime. Today, there are 23 cable systems receiving the services with another 14 waiting in the wings.

To deliver the signals, Gill's microwave engineering personnel designed and installed a CARS band microwave system to serve the San Francisco peninsula and, in cooperation with the other cable companies, expanded the linkage to serve both the East and North Bay areas. The initial installation used Collins FM equipment on the backbone with a mix of FM and AM links on the drop-offs. Two channels are in operation now carrying sports and news. Construction permits have been applied for to increase the number of Interconnect channels to four. A fifth parallel channel is planned to carry pay-for-view programming to those systems who have addressable capability.

With 11 commercial stations, three PBS outlets, cable



systems everywhere, and MDS operators selling HBO directly to homes, San Francisco is a saturated market. If cable advertising sales can be made to work here, they will work anywhere. When over-the-air stations are selling \$25 and \$30 spots during the slow times, there must be heavy competition. For the Interconnect, the bright side is that advertisers are experiencing serious under-delivery in the major TV markets. Gone are the 30 and 40 shares of a few years ago. Monday night football now pulls a 27 in the San Francisco ADI whereas it used to get a 48 a few years ago. Not only are the rating numbers off, but the fragmentation of the viewing audience is felt in retail sales figures as well.

Says Andrus: "We're getting major food advertisers coming to us and saying, 'We're not getting the end results we're used to and we're going to buy you as part of a blanket strategy.'"

To participate in spot advertising, cable sales efforts must fit into an acceptable mold. "It's dangerous to think we can create and sell a new universe and make advertisers listen to that story," says Andrus. Not only TV ratings, but manufacturers' sales figures and whole marketing strategies are organized by those geographical groupings Arbitron calls Area of Dominant Influence and Nielsen calls Designated Marketing Areas. With that in mind, the Bay Area Interconnect is designed to cover the San Francisco ADI. It avoids offering a bit of this ADI and a large chunk of that DMA even though that might be technically or politically attractive. A mixed bag is not something that can be sold.

A typical special-interest satellite channel gives the cable operator 1.5 to 3 minutes an hour, and a typical commercial TV station has 10 to 16 minutes to sell each hour. Therefore, it takes 4 to 5 interconnected cable channels to equal one over-the-air channel in revenue-producing potential. With such finely balanced economics and multiple channels to be programmed, a flexible, efficient technical operation is

another key to success. Within the last few months, Interconnect has moved into the new master control pictured on these pages. Bob Martin, the Interconnect's chief engineer, noted that flexibility, redundancy, and automation were the major goals for the new control area.

Commercials for the various channels are edited into spot reels from the separate cassettes on which they are stored. An editing room has been established adjacent to the master control with four Sony BVU 800 machines for the commercial assembly process. A 60-minute cassette will usually hold one day's spots for a single channel. Two operators are kept busy on a single shift each day preparing these reel spots.

In master control, a 40 x 30 3M routing switcher provides both video and audio routing and machine control for the Interconnect's multi-channel operation. The combined switching/ machine-control system can be accessed from individual dedicated control panels and from computer terminals via its RS-232 ports. To enhance flexibility and provide for emergencies, Martin's engineers have installed complete patch-panel facilities for all audio and video sources, destinations, and DAs. Common elements such as sync generators and power supplies are redundant; and the switcher control is provided with back-up microprocessor and automatic changeover circuitry.

Feeding the switching matrix are 16 Sony 5850 industrial, front-loading U-Matics. Two Ampex VPR-2s are installed to originate pay-for-view programming on Gill's fully addressable San Jose system. Pay-for-view is expected to expand to other nearby systems as they upgrade to addressable subscriber equipment. At present, VTRs are assigned through the routing matrix to a bank of Microtime TBCs, which are then switched to air. Martin's plans ultimately call for "hot-switch" capable frame-stores which will process the output of all signals going to a channel, including the satellite feeds.

The control room in San Jose currently programs commercials for the two original interconnect channels, and for Warner's MTV: Music Television and Viacom's Cable Health Network, which are now on Gillcable only, but will soon be fed to the interconnect. Other Gillcable-only channels such as the "G" Channel (basic-service movies) and Rendezvous (adult movies) are also programmed from here.

All channels are currently operated manually, but Martin cites automation as a high priority. Standardization for the control tones used on the various satellite channels would be helpful; but until satellite-channel programmers apply the same care to the injection of their commercial control tones that broadcast networks give to program timing, serious automation will be impossible. At the present time, it is not at all uncommon for control tones on some channels to appear in the middle of program material.

Another of the keys to success is the nature and the promotion of the channels themselves. Early on, Gill decided that advertiser-supported channels should be 24-hour, special-interest services. They also thought it important that the names by which these channels would be promoted should clearly describe the service's nature. Thus, the channel that carries CNN is called The NewsChannel. The channel that carries MTV is called The MusicChannel, and so on. The generic labeling gives the Interconnect some measure of flexibility and independence from the satellite program suppliers. The news is now CNN, but it need not always be so. The SportsChannel is 95% ESPN, but that could also change; and if change were to occur, the Interconnect's generically-labelled channel would retain all of the subscriber identification and loyalty it had built up. Another benefit of a clear label on the channels is that it will



Bay Area Cable Interconnect master control console with VTRs, switcher, and other terminal equipment in the background. (Photo by Glen Pensinger)

*Continued on page 52*

aid recall if and when appropriate audience measurement techniques are applied to cable.

Andrus feels that current rating approaches are severely discriminatory against cable. How can a rating diary with spaces for only 15 channels and a requirement that channel number, call letters and program title must match in two out of three particulars ever accurately measure who's watching the set? Gill has 36 active channels carrying some 39 stations and other program sources. The SportsChannel appears on eight different channel positions on the 37 cable systems in the ADI that presently carry it. For a local station to show up in the Arbitron rating book it need only garner 3% of the audience during any day part. The local cable system is treated as an "outside signal" and must pull 20% net weekly circulation in any day part. Andrus noted that, of 211 Arbitron markets, only 10 cable services show up in something like 13 markets. He says that if the 3% criteria were applied to local cable as it is to local broadcasters, at least one cable service would have made the book in 201 of those 211 markets.

Despite the discrimination of rating services and the tribulations of serving a coalition of 37 otherwise competitive cable operators, there is a spirit of excitement in both engineering and management at The Bay Area Cable Interconnect. There were three months of solid black ink in 1982. Gill's advertising revenues for the year reached \$2 million. About half of that will be from the time sales on the Interconnect. The Interconnect advertising mix is about 65% national and 35% local. Expansion is definitely in the air.

Allen Gilliland, president of Gill Industries, has stated he

expects cable operators to capture between 5-8% of spot television revenue in the Bay Area. Andrus notes that most cable operators, particularly small ones, don't look on advertising as an important source of revenue. The percentage for a 2,000-home system doesn't look like much. "If you look at our 10-year projections, their 1-1.5% becomes a substantial amount of money for which they don't have to do anything except accept the signal from us instead of from satellite. Then it comes down to found money."

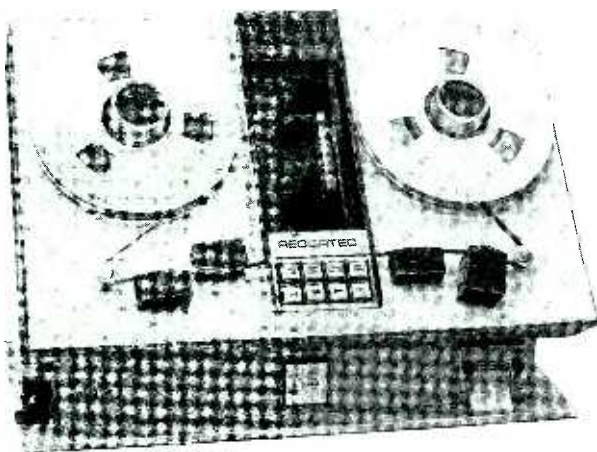
The next project for the Interconnect will be putting together a system for the Salinas-Monterey ADI. With four interconnected cable channels competing with only three over-the-air channels, they feel this should be an outstanding interconnect market. True, this adjacent ADI is a small market, but it has 60 to 70% cable penetration.

Although realization of this project is two to three years away and depends on major rebuilding of several of the cable systems in Santa Cruz County, microwave planning is already under way and the Interconnect's San Jose master control has plenty of capacity to independently program the new venture.

The attitude at The Bay Area Cable Interconnect is definitely upbeat. They see a great future for spot sales on cable and think they've pioneered the formula that makes it work. Andrus sums it up when he says, "Everybody's energetic and we enjoy our new venture. I'm having more fun than I've had in 25 years of broadcasting." **BC**

*Glen Pensinger, video production editor, is television engineer for San Jose State University and an independent television systems consultant in the San Francisco Bay area.*

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# JOINING FORCES

## Cable-radio joint ventures offer new profit opportunities to broadcasters and cable operators alike.

BY DENNIS WATERS

**D**uring times of rapid technological innovation, managers of traditional businesses face the troubling question of whether to get involved in the new technology. The questions ricochet inside their skulls. Should we participate? If so, what will we do? If so, what will it cost? If so, *will it really make a difference* five or ten years down the pike? This last is a surefire prescription for sleepless nights, for if the traditional market changes quickly and substantially, a trivial decision today can make a large difference in a decade.

The 1980s are a period of rapid technological change in mass media, and radio broadcasters operate traditional media businesses. Of all the new technologies, radio broadcasters are probably most acutely sensitive to cable television. Cable has a big competitive arsenal, most of which has yet to be deployed. Video services that mimic radio formats, thousands of \$30 spots to sell, and enough bandwidth to provide dozens of cable radio stations, contribute to the uneasiness radio operators feel about cable.

Some radio broadcasters have already made the decision to participate in this new technology by forming joint ventures with local cable companies. These experiments take many forms, and were reviewed in the July issue of BROADCAST COMMUNICATIONS. The big question still remains: will it make a difference for these stations in the long run? Or will they find they would have been better off investing in their traditional business—in sales, in programming, in facilities? There are no certain answers, but it is not unreasonable to think that the radio broadcaster with dollars to invest in the future of his business should at least consider in-

vesting them in nontraditional ways, i.e., in a cable joint venture.

Where does the radio broadcaster begin when he decides to decide? The opportunities for cable joint ventures—as well as the extent of the cable threat—vary widely from market to market. Some markets have had cable for decades; in others it is years away. Some suffer corroding 12-channel systems; others expect Buck Rogers at any moment. Here are some questions the radio broadcaster can ask about his own market to evaluate the local cable potential/threat:

- *What is the cable penetration in your ADI?* If the number of subscribers is large (e.g., over 35 percent), then you are above the national average. Whatever effects cable will ultimately have on radio will probably happen to you before they happen elsewhere. Like it or not, you are in the vanguard.

- *Who is the corporate parent of your local system?* If it is owned by one of the large multiple system operators, it might be worthwhile to check on how they operate in other markets, on whether they have existing joint ventures with radio or TV stations or with newspapers. Some MSOs are developing elaborate national advertising sales and marketing plans which they may implement elsewhere first.

- *What is the channel capacity of your local system?* A mature 12-channel system is unlikely to have any video capacity left, and may not carry enough advertiser-supported services to make local ad sales worthwhile. A 35-channel system might be reluctant to part with one of its few remaining empty channels, but is a good candidate for advertising sales. A 54-channel or larger system might be willing to part with excess video capacity.

- *What national program services are carried?* The largest that carry advertising are USA Network, ESPN, Cable News Network, and MTV: Music Television. If your local operator carries three or more of these, then he has upwards of 100,000 local 30-second avails to sell each year.

- *What is the local political atmosphere?* If franchising or refranchising is under way, cable operators are likely to be on best behavior. If they are looking for a rate increase, they are also looking for ways to win brownie points with the city council.

- *How are franchises distributed within your ADI?* Do you have one or two large systems or dozens of little fiefdoms? The fewer the systems, the easier to assemble a workable deal. But if there are many little systems, they could be cooking up an interconnect.

**T**hese questions are a starting point, a sample of the sort of homework a radio broadcaster should do when deciding whether to pursue a cable joint venture. The ideal situation is a single large system penetrating 50 percent or more of the homes, owned by a progressive MSO, and with 35 or more channels. This is also the most dangerous situation.

If you believe your market holds promise for early development of a cable joint venture, the obvious second step is to sit down with your local system manager for an exploratory chat. To make the first meeting go as smoothly as possible, here are some hints.

- *Bring your chief engineer.* Most cable systems are run by engineers, and engineers in general are more esteemed in the cable business than they are in radio. Never say something like, "Oh, that's a detail we can leave for the engineers."

- *Think retail.* Cable operators are neighborhood retailers. Every single subscriber is a monthly cash sale. Imagine what it would be like if you had to sell your radio station for cash each month to every single listener!

- *Think video.* Few cable operators think radio is any big deal.

- *Think capital-intensive.* While at first glance it might appear that you and the cable operator are in similar businesses, he spends more time and money on his physical plant than you ever will on yours. But it is not a good idea to refer to cable companies as "public utilities."

- *Don't talk advertising.* Do not assume that the cable company manager knows anything about the local agency scene or the radio ratings. To



him, "sales" means *subscriber* sales, not advertising sales.

What do you want to find out at your first meeting? You want to know what sorts of things he is interested in doing on the local level that he is not doing now. Most likely these will be video or audio programming, or advertising sales. Get his views on local news or sports programming. Learn his timetable for developing a spot sales presence in the market. Find out if he recognizes the potential of the empty channels on his FM band.

Reviewing the local cable market and picking the brain of the cable operator are the easy parts. The final step in deciding whether to pursue a cable joint venture is to evaluate the capabilities of the radio station—and an honest evaluation is tough.

The imagination can create many possible cable-radio joint ventures, but perhaps the most straightforward is the line extension: building upon the radio station's existing strengths. If the station has a strong local news image, then local news programming is an obvious possibility. Local sports is also logical if the radio station is known for it. If programming is weak, but the sales force is a killer, then turning the cable company's unused avails into dollars makes sense.

Part of the evaluation is also a people evaluation. Which department heads can afford the time and effort to supervise a cable joint venture? Do they have the maturity to avoid being carried away by it all? A common problem at radio stations that have entrepreneured cable joint ventures is loss of perspective; the joint venture—the new and exciting toy—takes over the radio station, and the basic business suffers as a result.

These three steps—reviewing the cable market, debriefing the cable operator, and evaluating the radio station's capabilities—should give the radio broadcaster enough background to decide if a cable joint venture is for him. The decision to divert even a few investment dollars away from the traditional business and into something new is laden with uncomfortable implications. The first step may be small, but it could make a big difference later on.

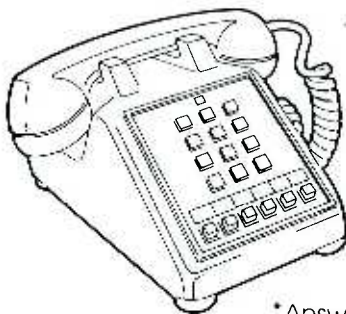
The experience of the Sony Corporation is a useful example. In the early '50s they made a small decision: to invest the modest sum of \$25,000 for the rights to something called a transistor. A small decision, but a big difference.

*Dennis Waters is president of Waters & Company, a consulting firm located in Binghamton, New York. He is also editor and publisher of New Radio.*

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# It doesn't always pay to sell RADIO SPECIALS

BY BRIAN BATTLES

It's January... the logs are so light that you could get by with just one page for the whole day; the traffic and affidavit ladies are doing their nails; the production director has his feet up on the desk; the sales staff is contemplating opening up Amway franchises; and the general manager is tearing out his few remaining wisps of hair.

The sales manager keeps muttering that if he could only fill the logs in the first quarter, he'd be guaranteed to meet this year's sales quota with his hands tied behind his back (as they usually seem to be). Between now and the next ratings sweep, the program director is whiling away his time reading the trades and planning the exciting Spring Book promotions.

Where have all the clients gone, and what are you doing about it? Probably the same thing you've always done: sending the sales crew out with their Arbitron books and sales kits to scrape up a little retail business, until the nationals start with their spring push. Why not get something going now that can boost your sales all year long, ratings or no ratings?

Ever since the first live remote broadcast from a department store, radio has used station-originated special shows to sell air time. While the radio networks long ago quit producing programs like *The General Foods Hour* or the *Lux Mystery Theater*, local stations have continued to generate revenue in this manner. Most radio stations put together their own news, public-affairs, or entertainment shows, often with the intent of selling the entire show as a package to one single sponsor.

A special can be a nice source of in-

come, particularly for a program that can be produced on a relatively low budget, and where the sponsor will commit to a long-term contract. But this practice can lead to serious problems. For example, production costs may rise, creating a smaller profit margin; talent can quit or run out of ideas; ratings for the specific show can drop to the point where the sponsor wants out; the sponsor could try to dictate the program's content to the point where its quality suffers; or the sponsor may be convinced that buying an entire show is the *only* way to use his advertising dollar, leaving him reluctant to purchase spots to air at other times.

You should not interpret this to mean that your station shouldn't be bothered with putting together your own productions or specials—the excitement and immediacy of radio has always been rooted in locally-originated radio.

Consider instead an alternative: your sales pitch on the image you portray as “the station that's going places.” Convince sales prospects that your station is the one that's involved and alive; that your station regularly features special shows as a part of its overall sound; and that your unique image will make the listener perceive the advertiser as a part of a technologically-advanced, forward-thinking station.

If a client agrees that he belongs on a station that has produced many highly-visible and memorable programs, he should be happy to be on the air at any time, regardless of what the station is airing when his ad comes on. If you've done any shows that have gotten you outside publicity, awards, listener letters, etc., use copies of these accolades

in your sales kit. If your effort is to get the account to buy spots scattered all over your log, bombard him with as much of this type of information as you can, about your “going places” programming. Convince the client that he's joining forces with your station to provide additional information. Commercials do contain useful information, much of which is vital to your audience (e.g., concert spots on a rock station, ski resort ads on a station in a mountainous community, etc.).

If you already have the contract signed, but the client starts to mention sponsoring a specific program, newscast, series, or feature, explain that a simple “. . . brought to you by . . .” doesn't necessarily increase the number of people who will pay attention to his spots.

Your station should, by all means, attempt to produce a number of your own special programs. The technology required is normally not prohibitively expensive, and the results can give the impression that your station can do *anything* (including delivering customers to your advertisers). This makes the acquisition of new equipment designed to help you produce better local shows more cost-effective.

WBAB on Long Island presents the only nightly talk show on an FM AOR station in the country. *The Joel Martin Show* is a highly identifiable part of the station's sound. His topics deal with anything from psychic phenomena to industrial pollution, and from governmental corruption to exposing the Amityville Horror hoax (for which he garnered national publicity).

**M**artin's guests include politicians, local and national celebrities, authors, religious and anti-religious figures, porno movie stars, astrologers, local and national newsmakers, local personalities, and spokespersons for well-known organizations.

His program is produced in a conference room-type studio, and it's equipped to handle live phone calls from listeners. The only significant expense is his and his producer's salaries because the equipment necessary to put the show together doesn't require much that a reasonably well-equipped station wouldn't already have.

WBAB also airs a weekly rock music magazine of the air called *The Sampler*, in which a deejay previews newly-released records and throws in a bit of music news and other information. This show can be done live in the main air studio, or pre-taped in one of the regular production rooms.



The same is true of WBAB's music special, aired weekly, entitled *Ralph's Rare Room*, during which listeners are treated to airplay and comments on unusual recordings, imported records, "authorized" bootleg recordings, rare versions of well-known songs, and recordings with special guest appearances by major artists. These rarities come from the host's own extensive personal library of oddities, or are loaned from collectors. The cost, once again, is kept to a minimum, especially since the host, WBAB's music director Ralph Tortora airs the show once a week during his regularly scheduled midday airshift.

Last October WBAB joined forces with sister station WGGB-AM to present a Long Island exclusive, a debate between Democratic New York state gubernatorial primary candidates Lt. Governor Mario Cuomo and New York City mayor Edward Koch. Costs were limited to paying the announcers conducting the interview, engineering and production personnel, taking out some newspaper ads, and the price of a couple of reels of good tape.

WBAB and WGGB also co-produce a regular show called *Shoreham Forum* which deals with the controversy surrounding the Shoreham, Long Island, nuclear plant, being built (against the wishes of many citizens and politicians) by the powerful Long Island Lighting Company. WBAB originated live coverage of the monumental Who concerts at Shea Stadium in November, by putting deejays into the press box at the stadium and airing their live commentary against the background of the live concert proceeding in the background (which was not permitted to be broadcast per se).

WBAB aided Billy Joel's Charity Begins At Home organization which funds local charities by keeping a two-man deejay team on the air for 102.3 consecutive hours requesting financial pledges from listeners. Guests during the marathon included Billy Joel and members of his band; members of the rock groups Spys, Novo Combo, Translator, Zebra, Stray Cats, and Blotto; recording artist John Waite; heavyweight boxer Gerry Cooney; and on-air phone pleas by actress/singer Patti Lupone, and many others, plus numerous pre-taped messages by other celebrities.

If your station boasts a complement of sophisticated, high-technology devices, or if your management's foresight will allow a budget for such equipment, obviously your special programs can be of greater quality and

complexity. By utilizing microwave or equalized phone feeds, you can supply audio originating at concert halls, the local mayor or governor's office, a weather or traffic report facility, or from one of your announcers in the field at any special location.

The on-air quality of the sound can be doctored by using compressor/limiters, equalizers, noise reduction units, special amplifiers, and other gadgets that are on the market. If you want to sound like the "big guys" in your market, you can, regardless of ratings or format, by consistently providing a widely varied, active-sounding schedule of programs.

Many radio stations have become "jukeboxes," providing mainly music,

they're joining a team of professionals committed to attracting a more interested and *active* audience (who, dollar for dollar, are much more valuable, because they are more likely to patronize your sponsor's establishments or use their products). These listeners are preferable to a mass of casual "button-pushers" because they are more loyal, and are actually *paying attention* to your station.

WBAB, while currently enjoying a favorable three-year ratings trend, has an audience largely composed of these "active" listeners, who attend more events, purchase more products, and respond to more promotions proportionately than any other station in the market. This fact alone can make your



WBAB late-night talk-show host (left) Joel Martin interviews psychic medium "George."

with a few obligatory newscasts, furnishing very little in the way of excitement or service to the listener.

Your ratings could improve if you remember that while the cost of records and tapes is rising, most listeners still consider radio *entertainment*. You can't sit on the fence. The "music freaks" in your listening area will either listen to records or tapes, or tune to that "jukebox" station down the dial, while individuals who expect more from radio will be forced to sample the non-commercial public FM stations below 92 MHz, or go to an all-talk station.

You can get both types of people, as well as the casual radio listener, by presenting a well-balanced mixture of appropriate music, news, public affairs, comedy, information (weather, ski conditions, traffic reports, etc.), and whatever your imagination, creativity, and budget allows. Not only will this bring you increased ratings, but it also will give your sponsors the feeling that

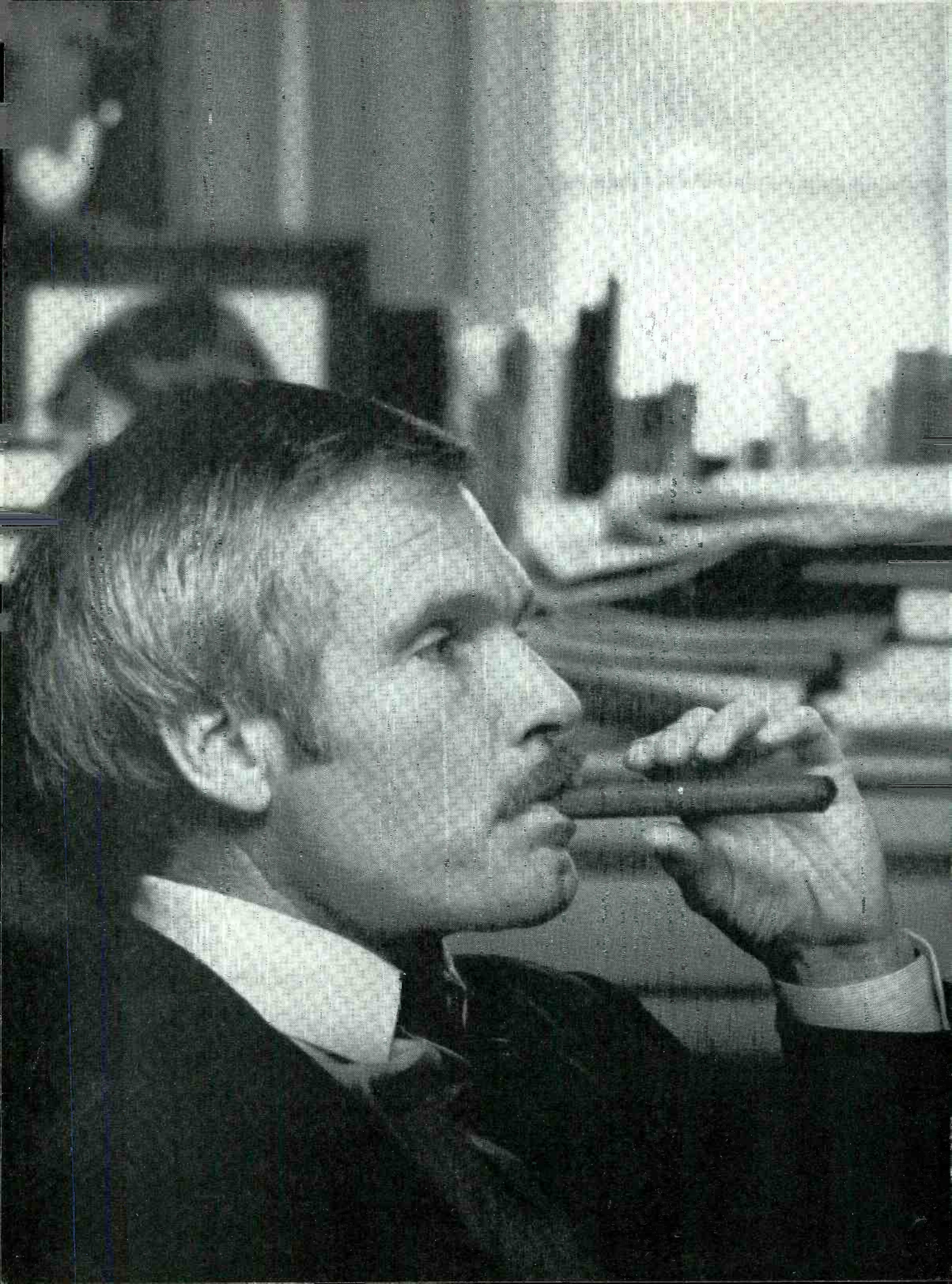
sales prospects' "cost per thousand" concerns a minor factor in making a sale. Build up a strong locally-oriented image; explain to clients how your listeners may be outnumbered by other stations, but still out-spend these nebulous masses of dial-spinners. By doing this, you can sell your station as a whole without having to rely on sponsorship of the specific shows your station puts together. And those sponsors are likely to stay with you throughout the year, even in the lean months.

The key to remember is that if you sell basically just against your specials, how will you sell the other hours of your broadcast day. However, if you sell against your overall locally-oriented programming and your technical excellence, advertisers will benefit and so will the station. When you're "going places," sell it.

**BC**

Brian Battles is the production director for station WBAB, Babylon, New York.







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# AN INTERVIEW WITH TED TURNER

BY JOHN KOMPAS

**H**is tombstone will read, "You can't interview me here." Robert Edward (Ted) Turner dislikes interviews and shuns photographers, but loves the results of media exposure. You would be hard pressed to find a person in America who hasn't heard of SuperStation WTBS; CNN, the Cable News Network; CNN Headline News; or the actions of Ted Turner as he takes on baseball, the NFL, the networks, or anyone else that gets in the way of his ultimate goal: making American television "worth watching" once again.

When he isn't talking about improving America, he's sounding out the various benefits of cable.

"You guys who bought CBS this year with their new rate increase might as well have bought CBS Cable before it folded," said Turner during his keynote address to participants at the third Turner Broadcasting Cable Advertising Seminar held recently in Atlanta. "That rate increase is just their way of writing off the bath they took on CBS Cable, and they're passing it on to you, the advertisers. They're like a hospital that runs its own morgue: they've got you coming and going."

Turner's next major accomplishment just might be the inauguration of a new, over-the-air, fourth network. This new network would be a partnership arrangement with several major production studios, and would contain a much larger profit percentage for the studios than they now receive from other networks.

Ted Turner—whether you chuckle at his antics or cheer for his continued suc-

cess—is a man at the forefront of the new-technologies revolution in America. Because of his influence on the communications scene, BROADCAST COMMUNICATIONS traveled to Atlanta for an exclusive interview, looking for responses to questions broadcasters would like to ask if they had the chance. That interview follows.

**BC:** *You've been quoted as saying that the networks have not lived up to their mission of serving the public interest and that because of this failure, they should be stripped of their licenses. Could you expand on that statement.*

**Turner:** Sure. They were given the licenses by the Federal Communications Commission with the proviso that they would serve the public interest. But they've been running anti-American, stupid, materialistic, anti-family, anti-religion, anti-government programming. No, I don't think their programming has served the public interest, particularly in the last 10 years; and they should be stripped of their licenses and the licenses should be given to somebody who will fill their obligation to the public using the public's airways.

**BC:** *Is that you?*

**Turner:** Not necessarily. The FCC should put them up for grabs.

**BC:** *Many people think that WTBS carries only old reruns of Father Knows Best, Leave It To Beaver, and old movies. But now you are adding several new series and specials such as Portrait of America, Jacques Cousteau, and The Professions. How do you plan to change WTBS's rerun image?*

**Turner:** I don't think we have a rerun image. Who says that? Broadcasters? They're competitors of ours. I don't think we have a rerun image. We do carry a lot of old programming, but I don't think that gives us a rerun image. We're carrying more original programming all the time.

**BC:** *Your statements regarding the effect of network television's sex and violence on American society are so fervid, they almost sound evangelical. Have you been approached for support by any of the conservative religious leaders who have been concerned with the same issues? Are you supportive?*

**Turner:** Absolutely. I've stated repeatedly that I had tremendous respect for Bella; and I've met with Jerry Falwell and agree with all of his ideas. I generally support anyone who is doing what they can to improve the quality of network television programming.

**BC:** *According to the Nielsen Prime-Time Statistics, in the fourth quarter of 1979 the three networks combined commanded 92.1% of total TV viewing during peak hours. This dropped to 88.2% in 1980 and 84.8% in 1981. Furthermore, in Columbus, Ohio, which carries Warner-Amex's QUBE system, the network's share is down to 60%.*

*In other words, cable seems to be making remarkable inroads into the network's market. The networks are trying to reassure their affiliates that their main concern is, and always will be, over-the-air free television. At the same time, however, the networks are investing heavily in the future of cable*

*Continued on page 60*



## Turner Broadcasting: A technical showplace

"Good morning, Mr. chief engineer. Your assignment today is to construct a 24-hour-a-day, 365-days-per-year, network-quality facility in Atlanta, Georgia."

This now famous assignment was given to Jim Kitchell, then vice president of operations for Turner Broadcasting, in September of 1979. By June 1980, the Cable News Network was on the air.

Coordinating this project not only involved Atlanta, but also required interfacing news bureaus in Washington, D.C.; New York City; Dallas; Chicago; Los Angeles; San Francisco; London; Rome; and Tel Aviv, as well as allowing for the capability to interface additional news bureaus as they came on line. Two of these bureaus, Washington

and New York, have complete studio facilities—including graphics—and they carry assigned origination responsibilities during the broadcast day in addition to news reporting. Both bureaus are connected by direct video telco lines to the Atlanta headquarters.

Ted Turner now owns one of the most well-thought-out and innovative television facilities in America.

The imagination that Kitchell and his crew used in designing and engineering this TV production complex is apparent to those who tour the facility.

The business end of CNN is a large, open, and well-utilized space in a building that was once an Atlanta country club. At one end of the

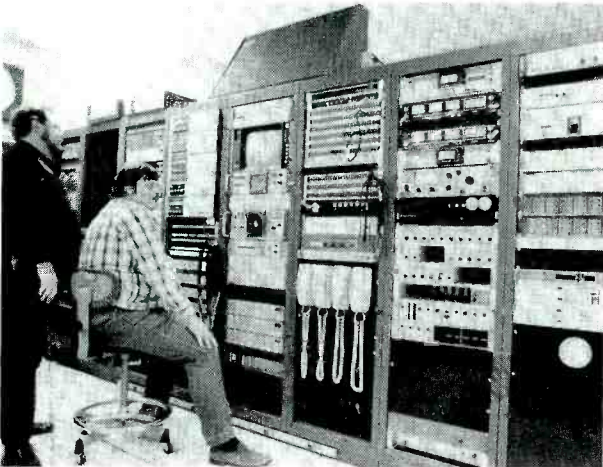
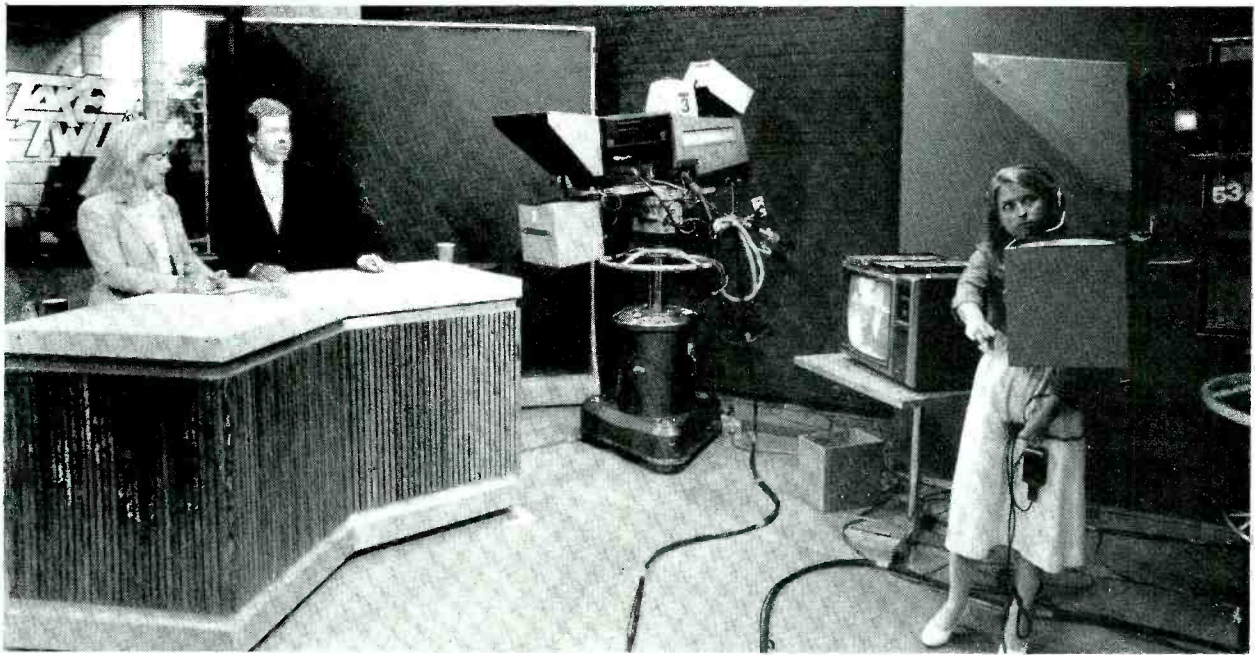
space is a raised seating area which faces a studio used for panel interviews and other audience participation programming. The studio set is actually mounted on a turntable that carries three permanent sets and rotates for the show in progress.

To the left of the turntable is "A control," which is master switching for CNN. Because it is recessed below floor level, this space is also referred to as "The Pit."

The electronic end of CNN includes four RCA TK-47 automatic color cameras that are used for news and program production. Twenty-one RCA TK-76C portable cameras, along with Sony BVU-110 ¾-inch VTRs, are used by the domestic CNN bureaus.

According to Jack Ormand, chief





(Photos by Dan Helms)

(At top) On the set of CNN's popular program, *Take Two*.

"The Rack," (at left), located in part of CNN's master control, houses Tektronix test equipment and Grass Valley DAs.

(At right) Inside CNN's computerized newsroom.

*Opposite page*

"The Pit," (at top) or A control, is the main switching center for CNN. (Photos by Dan Helms)

(Bottom left) CNN's switching is performed on a Grass Valley 1600-7F system. CNN also uses Grass Valley's machine control system.

(Bottom right) RCA TK-47s, Q-TV Teleprompters, and ITE pedestals are part of the business end of CNN programming.

engineer for CNN, the RCA TK-47 cameras are rarely turned off. Even so, maintenance has not been a problem, although it is handled on a when-available basis between program blocks, or while the New York or Washington bureaus are on the air. The camera RCUs are located in master control and give CNN's engineers an easy way of remotely checking registration and set-ups. All switching out of master and sub control rooms is handled by Grass Valley 1600 switchers, and reportedly, the reliability of these units is also extremely high.

The ability to route signals around the plant is essential to CNN's operation. Therefore three routing systems are used in the technical facility.

The first routing system is a 32 X 32 which is used for incoming sig-

nals. It handles routing for 20 satellite channels, four off-air tuners (the three commercial networks plus WTBS in Atlanta), and one telco line plus a spare.

Routing system #2 is a 32 X 48 switcher which makes any signal available anywhere in the building. Its inputs include VTRs plus A and B control.

Routing system #3 is a 16 X 8 switcher which is used for additional systems flexibility.

CNN made a large commitment to 3/4-inch, as is evidenced by the eight videotape editing rooms located along one wall of the main facility.

The amazing part of all this is that it is only one-third of the whole picture. There are also control rooms and sets for SuperStation WTBS and for CNN Headline News.



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**Ted Turner**

with alternative programming such as CBS' cultural channel, ABC's daytime channel, and the ABC/Group W Satellite News Channel. Do you feel that the networks are misleading the affiliates? If so, what do you think are the real intentions of the three major networks?

**Turner:** Each of the three networks is doing something; CBS tried the cable network and has already cancelled it; RCA, which owns NBC, has a half interest in the Entertainment Channel; ABC has been by far the most aggressive in the field. So I'd say basically all three of them are marching to a different tune as far as their cable and alternate delivery systems are concerned. And I feel that their eggs are still all in the same basket and that they are committed to broadcast.

**BC:** If you were chairman of the board of CBS, what would you do to maintain both CBS' ranking and its profits?

**Turner:** The main thing I would do is to try to get more efficient. They're a very inefficient distributor.

**BC:** How so?

**Turner:** Because of their overhead. They take over 50% of the handle in gross advertising dollars and return less than 50% to the programmers, and I think that is ridiculous.

**BC:** You've indicated that you want to start a fourth network, and you've been negotiating with several production companies for programming. Since this is an interview with a broadcast magazine whose audience includes your potential affiliates (the UHF stations and the dissatisfied network affiliates that you hope to lure to your new network) what would you say to these prospective affiliates?

**Turner:** First of all, all we've had is the most exploratory of conversations. But if we are successful in getting it off the ground, what we would be offering the stations of America—because we're into a market similar to the other three networks—is approximately twice the number of the available minutes for local spot sales that the current networks have. And it would certainly be our intent to offer them more uplifting programming than they are currently being offered by the other three networks.

**BC:** Why should a network station drop their affiliation to join you?

**Turner:** Because they would make more money. Twice the avails... they'd have twice as much time to sell... that's the main reason, because we would be a more efficient distributor. Our whole plan is that if you cannot do something better or cheaper than someone else,

then it's crazy to go into competition with them. Right?

**BC:** Les Brown of Channels magazine has said the only thing preventing program producers today from circumventing the networks is the stations' slowness to invest in satellite receiving dishes (downlinks); and that as soon as there are enough of them to cover the country, television will change radically as a business. Do you agree and, if so, when can we expect this to happen?

**Turner:** It's happening now. We have 110 television stations already affiliated with CNN Headline News, and all of them are installing their own earth stations; and already Paramount is feeding out *Entertainment Tonight* via satellite to their affiliate crew. But when we start talking about preempting networks on the part of individual stations on a piece-meal basis, it is something that is going to be very difficult to do.

**BC:** When do you think the majority of stations will have their own downlinks?

**Turner:** Well, I think that if you were to do a survey, you would find that all the stations will have downlinks very soon.

**BC:** Will traditional stations survive? If so, what form will they take?

**Turner:** Sure. I think they will be doing more programming on their own. More local sports, more news.

**BC:** Should they be looking at uplinks?

**Turner:** Yes. But not on a national basis; there are too many cable networks now.

**BC:** What will it take to get the broadcast stations to cut the umbilical cord and drop their network affiliation?

**Turner:** Simple. All it would take is a better deal—a better cut—the potential to make more money.

**BC:** You've shown your disdain for network broadcasting. Does that disdain extend to the public broadcasting network?

**Turner:** Absolutely not. I think public broadcasting is excellent.

**BC:** Do you see a future for PBS?

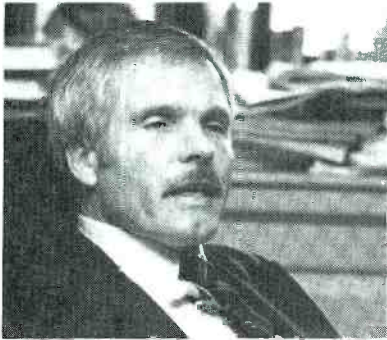
**Turner:** I certainly hope so. I don't know about their cable plans, but I'm pulling for public broadcasting. I'd like to see its funding continued.

**BC:** With so many excellent programs coming along, why do we need PBS?

**Turner:** Well, it's a question of delivery system, and not everybody has cable available and some people can't afford cable. PBS gives them an alternative.

**BC:** According to a recent study by the University of Michigan, 40% of





“We have 100 television stations already affiliated with CNN Headline News, and all of them are installing their own earth stations. . . . But when we start talking about preempting networks. . . it is something that is going to be very difficult to do.”

*cable subscribers thought that broadcast television was more believable than CNN news. Only 20% of non-subscribers thought CNN was more believable. Why?*

**Turner:** Non-subscribers. . . how could somebody that is a non-subscriber make a judgment?

**BC:** *Of course, that's right. But what about the 40% that are subscribers that feel the networks are more reliable?*

**Turner:** I saw that same report, and I say that considering they've been there 30 years and we've been there 24 months. . . to me that means that almost half of the people picked CNN after only two years as more believable than the networks. I think that is terrific.

**BC:** *Dan Ritchie, head of the*

*Satellite News Channel, your competitor, has said that he is not in a life-and-death struggle with you. And he feels there is room for both services. According to a recent Home Video article, you see the situation differently. Why?*

**Turner:** Sure. I certainly do. First of all, Dan Ritchie doesn't own his company. He's an employee. And when I talked to him, I found out that he owns almost no stock in Westinghouse; so of course he's not in a life-and-death struggle because he doesn't own the company. But he and ABC said at the onset when they announced the service, they intended to put us out of business with their deep pockets.

**BC:** *Do you feel there is room for two news services?*

**Turner:** Absolutely not.

**BC:** *Why not?*

**Turner:** Look. CBS Cable couldn't make it. In order to be a first-class operation, it takes a lot of money. And I just don't feel both services can survive.

**BC:** *How do you assess the development of cable in other countries?*

**Turner:** That just depends. There's not a whole lot of cable development in other countries with the exception of Canada. But I think that there certainly is the potential, particularly for cable development in western nations.

**BC:** *You recently signed an agreement between CNN and top cable operators in Japan to offer CNN there. It has also been reported that you have some*

*Continued on page 62*

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dealings in Australia.

**Turner:** I just spoke in Edinburgh, Scotland, a couple of months ago, and I was recently in Toronto for a similar meeting with the Canadians. We made it clear that we are going to be looking for joint ventures all over the world to make cable news available both to broadcasters and cable systems as they get rolling.

**BC:** *As you've said, you were recently to Edinburgh and you have had representatives at the Cannes Film Festival to find programming for your fourth network. Will that kind of programming sell?*

**Turner:** Well, we accept a lot of foreign programming now. A lot of the movies are produced overseas. BBC programming ran for years on public broadcasting. Now we have bought some series from overseas.

**BC:** *Like what?*

**Turner:** We bought *Sare Dane* from Australia, and cartoons have been produced in Japan. As a matter of fact, that's where Hanna Barbera does most of their stuff.

**BC:** *What kind of U.S. programming are foreign markets looking for? What are you doing to fill those desires?*

**Turner:** We have just gotten into program production. We've already syndicated *Jacques Cousteau* in several instances overseas, and that would be our first international syndication effort. We also intend to syndicate *Portrait of America* internationally as well. Foreign companies are limited to the amount of foreign programming they can carry and so that poses a problem, but not an insurmountable one.

**BC:** *Can you tell us more about the reported \$31 million movie and TV production facilities that you plan to build in Atlanta?*

**Turner:** That's on hold for the current time.

**BC:** *Some radio stations have begun broadcasting the audio portion of CNN. Do you plan to expand that market?*

**Turner:** We have 40 stations already, and we are going to continue expanding. We're adding more each week.

**BC:** *What do you see as the future relationship between cable and radio?*

**Turner:** Well, cable is going to be competitive with radio in certain instances. There is one station in New Haven, Connecticut, that is doing the local cut-ins for CNN on the cable.

**BC:** *CNN Headline News has made several inroads into CNN's financial picture. So much so, that Time magazine reports that many industry leaders predict that you have only three options for the future of CNN: take a*

*partner, sell, or go bankrupt. What do you have to say to these doomsayers?*

**Turner:** We're doing better and better, and the outlook is excellent not for any of those three things to occur.

**BC:** *Will cable systems become merely carriers of satellite-delivered programming, or will local origination become more important in the future?*

**Turner:** Well, you have the problem of LO budgets, but I think basically that cable will provide both. Modern cable has plenty of channels available, and I think it will have LO, satellite-delivered networks, and maybe regional networks and local sports teams. Cable has unlimited potential for programming.

**BC:** *Should local cable systems get involved with news-origination programming and, if so, how would this affect CNN and other national news networks?*

**Turner:** With CNN news we make five minutes available every half-hour for local news cut-ins; and quite a few cable systems in conjunction with newspapers, radio stations, or TV stations are planning to program those news slots. I don't know of any cable system as yet that is doing their own newscasts; they've chosen to pick local people in the business. But I definitely feel there will be more local news on cable in the future.

**BC:** *Do you see that happening with CNN?*

**Turner:** CNN Headlines News for sure, although some people have used CNN minutes to make available one minute of news.

**BC:** *In your opinion, where does low-power television fit into the future?*

**Turner:** I don't know what the future holds for low-power television. I'm not too optimistic about it personally, but I really don't know.

**BC:** *Some people say that what they see is a recurrence of history: when TV first came on the market and networks started leading the way, we had the radio stations out in the marketplace that had to do something, so they went to LO programming basically; and low-power TV is possibly the rebirth of that same idea. TV stations are going to have to be responsive to smaller communities.*

**Turner:** That's where the rub comes in. It's very, very expensive. The most expensive kind of programming to do is LO programming.

**BC:** *Should cable operators be required to carry low-power television signals?*

**Turner:** I don't believe in the "must carry" rule at all, I don't believe they ought to be required to carry anything.



“Quite a few of the largest cable operators are also broadcasters. . . . Even in the most heavily cabled markets, broadcasters enjoy record sales and profits. If they do a good job, I don't think they have anything significantly to fear from cable.”



**BC:** *By most current industry estimates, DBS service is still 3½ years away. This amount of time will be needed to develop equipment. When DBS does come, will it be a threat to cable? Could it be the salvation of the networks?*

**Turner:** No. Because it doesn't have the capability that cable does, for both local and national programs. All it'll carry is national programming. It might have as many choices. Basically all that DBS will do if and when it gets off the ground is make programs available to people in outlying areas that are not in economically feasible areas to warrant programming alternatives.

**BC:** *Could it be the salvation of the networks?*

**Turner:** I don't really see DBS as being that big a deal. I don't think it will help the networks at all.

**BC:** *What do you perceive as the attitude among broadcasters toward the future of cable and other upcoming technologies?*

**Turner:** Quite a few of the largest cable operators are also broadcasters. Storer and Cox Cable are large group broadcasters, so there are quite a few people in the TV and cable business. Even in the most heavily cabled markets, broadcasters enjoy record sales and profits. If they do a good job, I don't think they have anything significantly to fear from cable.

**BC:** *How do you see the broadcaster working with cable?*

**Turner:** There are a number of ways, one being to provide local news to the cable system.

**BC:** *You've said that as soon as you've earned your first billion dollars, you are going to buy a network. Which one are you planning to buy, and what are you going to do with it after you buy it?*

**Turner:** I don't know. And I'm not sure that I'm going to do that. I'd rather start a network. If that fails, and I've said this before, it doesn't really matter which one. But that's in the hazy future at the present time.

**BC**

*John Kompas is president of Video-Ink, a cable and low-power television consulting firm in Milwaukee, Wisconsin.*

**SPECIAL UPDATE:**

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## LOCAL PROGRAMMING:

# The profitable option

BY RUTH MACY

*This article is a continuation of the series, "Plucking the Birds for Programs and Profits," appearing in the September and November 1982 issues of BC. This final part focuses on examples of stations winning ratings and improving profits through local origination.*

**T**elevision programs are kind of like clothes. The networks, they specialize in the ready-made variety—off the rack, one size fits all. Now sometimes the programs fit the local affiliates, but a lot of the time they don't; and we need to have ours custom made. Some of us need petite, and some extra large. Viewers don't want to watch programs that are not germane to them—or that offend them—and mass-appeal network programming is just too much of a hit or miss proposition in the local markets."

This situation, as described so eloquently by a programming manager at an ABC affiliate, is the reason why many programming executives at network affiliates all over the country anticipate many changes to occur in traditional network-affiliate relationships in the coming years.

"More and more," the same programming manager continued, "the affiliates will be doing their own thing, and the networks will have to adapt." In fact, she thinks that the networks are already adapting—by becoming more and more involved in the new technologies. And indeed, both CBS and ABC are heavily involved in cable programming. ABC also is testing its new Home View Network subscription television service; CBS has filed for authority to operate multichannel MDS systems; and both CBS and NBC (through its parent, RCA) have received FCC authorization to construct DBS systems.

In large part, what will enable network affiliates to do their own thing are the satellite receive dishes sitting in their parking lots. Increasingly, these dishes are bringing in programs from an ever-growing variety of sources: programs that the affiliates have been finding so attractive that they have been willing to preempt their networks in order to carry them.

While the first two articles in this series focused on the many syndicated programs now available to stations via satellite, the programs described were those produced and syndicated by established names in the production community—names such as Paramount Television Distribution, Metromedia Producers Corporation, and Multimedia Program Productions.

But there is another source of high-quality syndicated product: the local station. And increasingly, both network affiliates and independent stations are producing programs—sometimes alone and sometimes in conjunction with other stations—for regional and national distribution.

"I think we'll see more and more of it," says Chuck Snyder, program manager of NBC affiliate KRON-TV, San Francisco. "The technology exists, and it represents a new profit center."

In 1979, KRON became one of the first TV stations in the country to produce a program for national syndication and to distribute it via satellite. *In Celebration of Tutankhamun*, transmitted in part live from Egypt, coincided with the San Francisco opening of the King Tut exhibition, on loan to the U.S. from the Egyptian government. A total of 50 stations from coast to coast received the KRON program via a combination of satellite facilities and landlines.

**M**ore recently, in May 1982, KRON produced and syndicated the *72nd Annual Bay to Breakers Race*, the largest (60,000 runners) and oldest continuously held sporting event in the U.S., according to Snyder. No simple matter, the live, hour-long production involved more than a dozen cameras, a helicopter, an airplane, 70 station personnel, and three months of planning.

"Three microwave hops were needed just to get the picture back to the studio from the lead truck," says Snyder. "From the lead truck, the signal was microwaved up to the helicopter, which hovered over the lead truck at all times. From the helicopter, the signal was re-microwaved to the Clay-Jones Building (a tall San Francisco structure) and then microwaved again back to KRON."

Since KRON also was using video from the helicopter's camera from time to time, and since the helicopter could send only one signal to Clay-Jones, a means had to be found to ensure continuous audio. Enter the airplane. "As soon as we cut to video from the helicopter, we'd lose the signal from the truck. Therefore, so that we'd get continuous audio, we microwaved the audio up from the lead truck to a fixed-wing craft, then on over to KRON," says Snyder.

KRON sold the *Bay to Breakers Race* on a cash basis to five commercial stations and 100 PBS stations. The program was delayed for a quick edit prior to satellite distribution.

"You can make money and it makes you feel like a network," says Snyder. "It brings out the best in everybody. It's win, win, win."

As Snyder points out, "In almost every market of any size, there are at least one or two events every year of in-



terest beyond the local market." It's his contention that such events offer stations ideal program-syndication opportunities.

Typically, such events break down into five categories: sports, cultural, news/public affairs, religious, and parades. Thus far, parades seem especially popular among local stations seeking production/syndication opportunities, with, for example, KATU-TV, Portland, doing the annual *Portland Rose Festival Parade* each June; and KTLA-TV, Los Angeles, doing both the star-studded *Hollywood Christmas Parade* and, about four weeks later, the *Tournament of Roses Parade*, on January 1.

This past June, for the third consecutive year, ABC affiliate KATU produced and syndicated the *Portland Rose Festival Parade*, this time to a nationwide lineup of some 40 stations. "The number of stations taking the program increases every year," says Steve Smith, KATU programming operations manager. Smith also notes an increase in the number of stations taking the program live by satellite, rather than on tape. "This year, only six stations out of

the 40 took the parade on tape," says Smith. "Over the three years that we've been doing this, there's been a dramatic increase in the number of stations that have gained the capability to get the program live."

While KATU handles production of the parade itself, it subcontracts the syndication and distribution functions to the Robert Wold Company. The program is sold to sponsors (in 1982, there were three: General Foods, Georgia Pacific, and the State of Oregon), and stations are allotted a 93-second mid-program break for local sale. This year, for the first time, the parade was transmitted via KATU's own, newly installed satellite uplink.

**A**s for the production itself, Smith states the various negotiations and technical preparations required to make the project virtually a year-round activity, involving at one time or another the station's entire personnel roster of 60. A total of eight cameras are used: KATU's own three plus four aboard a 40-foot remote production van hired for the event, as well as a camera aloft in the Goodyear

blimp. To avoid audio problems, all hosts and interviewers are double-miked. According to KATU engineering maintenance supervisor Tom Barnett, the station relies entirely on its own ENG system to get the signal back to the studio; no telco facilities are used. From the studio, the signal is transmitted via microwave 18 miles to KATU's uplink.

This year, as in each past year, it rained on the day of the parade. But, "miraculously," according to Smith, it stopped just in time. Well, almost in time. "Everything worked great the day before in rehearsal," recalls Barnett, "but then on the day of the show, with all the rain and the fog, we couldn't get the blimp off the ground."

Undaunted, Smith looks forward to next year's parade, and to producing other live events for national distribution as well. "This really is the way of the future—stations producing programs for other stations," says Smith. "The management here (Fisher Broadcasting) is firmly committed to this idea."

Continuing along the parade route, independent KTLA-TV, Los Angeles,

*Continued on page 66*

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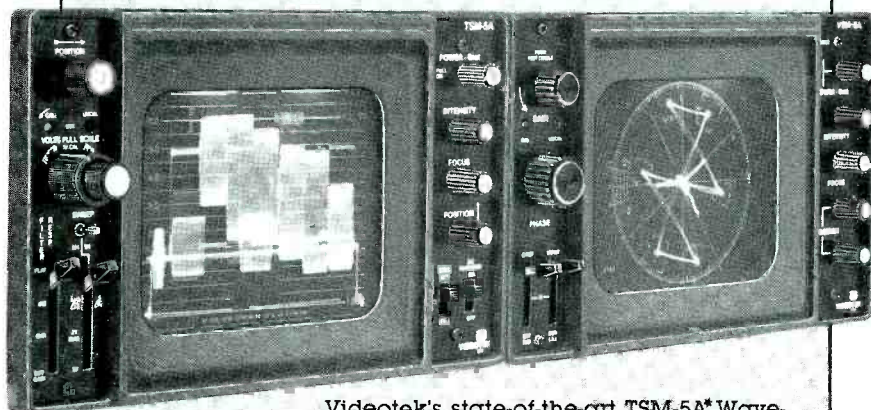
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## The profitable option

each year produces for syndication "the most glamorous parade in the world," according to executive producer Johnny Grant. The star-studded *Hollywood Christmas Parade*, which draws more than a million to the streets of Hollywood, is an elaborate seven-camera (including one aboard the Goodyear blimp) production involving some three months of preparations and a total of 80 KTLA personnel.

Since the parade is held at night, lighting is one of the most critical production elements. According to parade producer and director Joe Quasarano, three days are required to erect scaffolding and light (to 150 footcandles) the one side of the street along one block of Sunset Boulevard that is used for KTLA's parade coverage. Along the other side of the street, decorations are hung; and this side serves as the back-drop.

Another crucial element is communications, says Quasarano. Since floats and bands never seem to line up in the order expected, seven people with headsets line the parade route and keep the on-camera TV hosts posted as to what's coming up next. In addition, throughout the parade these seven people distribute, in round-robin fashion, six RF mikes among the 60-odd celebrities, so that the celebrities can be interviewed by the TV hosts as they pass before the cameras. Tight communications are essential, so that the hosts know who is miked and ready to be interviewed. ("So, Steve Allen, what is your Christmas wish?")

Also an integral part of the production is the person on the ground who walks slowly along the parade route continuously pointing a two-foot microwave dish at the blimp, in order to get the aerial camera coverage.

KTLA is a Golden West station, and syndication is handled by Golden West Television, which also syndicates such shows as *Couples* and *The Richard Simmons Show*. The 1982 parade was cleared by a total of 151 stations and 149 markets covering 94% of the country. The syndication task was accomplished by one person working full-time over six months. "Each year, the quality of the clearances is extraordinary," reports Bruce Johansen, director of TV distribution for Golden West Television. According to Johansen, of the 151 stations taking the parade, nearly three-fourths were network affiliates.

The parade aired live on November 28 in 12 markets, with the rest of the stations in the lineup airing it over the course of the four weeks prior to Christmas. It was transmitted via



satellite by the Hughes Television Network, and, according to Johansen, "the overwhelming majority of stations took it off the bird." In the LA market, where the parade aired live from 6-8 p.m., the program took first place in the Nielsens from 6-7 p.m. with an 18 rating and a 28 share, and was nudged into second place from 7-8 by *60 Minutes*.

Virtually dwarfing KTLA's production of the *Hollywood Christmas Parade* is its production just four weeks later of the *Tournament of Roses Parade* on New Year's Day. Faced with parade coverage competition from CBS, NBC, and Metromedia, KTLA pulls out all the stops, using 14 cameras, three trucks, and 150 people. KTLA's consistently high Rose Parade ratings in the LA market (it usually beats out both the CBS and NBC affiliates plus Metromedia's KTTV) this year enabled it to syndicate its live coverage outside the western U.S., to WPIX-TV, New York; KAUT-TV, Oklahoma City; superstation WGN-TV, Chicago; as well as about a dozen countries around the world.

Each Christmas Eve, in the true spirit of the holiday, independent WPIX-TV, New York, makes available at no charge to "any station in the country that can take it off the satellite" live coverage of midnight Mass from St. Patrick's Cathedral. With a budget of just \$15,000—plus a lot of contributed time and facilities—WPIX does what NBC used to do, before the network decided instead to cover the Mass at the Vatican. Because WPIX has been producing its live coverage of the Mass since 1976 (nationwide distribution began in 1978), only about one-and-a-half months of preparation are now required, according to Don Carney, WPIX vice president in charge of sports and special-events broadcasts. "You can't really change much in the production because they've been doing the Mass in the same way for a lot of years," he says.

Two days are required to lay the video, audio, and communications cables; and the monumental task of lighting the giant cathedral begins on December 23. In all, about 25 people, four cameras, and a 27-foot production truck are used. Because WPIX serves as the originating station for the nightly Independent Network News feed, transmission logistics are no problem. The signal is brought from the cathedral back to WPIX's INN switcher via telco. The switcher is permanently wired into Western Union, which simply relays the signal up to Westar V.

*Continued on page 68*

# ENG



News team at UN Headquarters, NY.

# or EFP.



On Location with "The Scarlet Letter"

Photo: Richard Howard

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"If you're only attuned to your local market, you're overlooking a lot of opportunities," says Tim Duncan, formerly marketing director of BBI Productions, Boston, and now with Metromedia Producers Corporation, in- to which BBI Productions was recently merged. BBI Productions was the entity charged with nationally syndicating the productions of WCVB-TV, Boston, an ABC affiliate especially active in local production.

"It takes a lot of people and a lot of money, but stations surely can do it and they should do it," says WCVB program director Cliff Curley. According to Curley, to distribute a local station production outside the local market requires two separate groups of people: "production people to initiate a production that is creative and dynamic and that has more than local interest, and a sales force to get the clearances and the advertiser support."

Curley suggests that stations form cooperative alliances, to share both the work and the expenses. These alliances, he points out, can be between as few as two stations; and the program produced can simply be for the use of the two stations involved. Curley is especially proud of just such an arrangement that he worked out last year between his station and WTTG-TV in Washington, D.C., for a special Fourth of July program.

For its part, WCVB put together a one-hour tape featuring historical landmarks in Boston and Washington. The Washington vignettes were contributed by WTTG, which also covered the live Fourth of July fireworks display in the nation's capital. Both WCVB and WTTG aired the hour-long taped program from 8-9 p.m. on July 4, and followed it immediately with WTTG's live fireworks coverage from 9-9:45 p.m.

"We received 87 calls that night tel-

ing us how terrific the program was," recalls Curley. "Not only that, but we were completely sold out and we made money. So we hit all the bases. Two local stations did it. All it may take sometimes is a phone call—and a vision."

**A**n example of a collaborative venture on a somewhat larger scale is that of the Eighth Decade Consortium, an alliance of five ABC affiliates "committed to exceptional, locally produced, quality prime-time programming on important social issues." Each year for the past three years, the five stations (KOMO-TV, Seattle; KSTP-TV, Minneapolis/St. Paul; WCVB-TV, Boston; WRAL-TV, Raleigh/Durham; and WJLA-TV, Washington, D.C.) have jointly produced a one-hour program on a social issue of national importance. Each Consortium member station produces a locally oriented segment of the program; and each year a different station is assigned responsibility for overall production coordination and integration of the five segments into a single cohesive program. The stations simultaneously preempt their network's programming in order to air the one-hour special.

The Consortium's 1982 production, *Seen But Not Heard*, aired September 15 and focused on many of the problems experienced by today's children. Individual segments dealt with sexual abuse, fears associated with nuclear holocaust, legal rights of children, juvenile delinquency, and the unmet needs of "gifted" students.

Although the three programs aired only on the five stations making up the Consortium, plans are under way for nationwide syndication and satellite distribution of the 1983 program to additional stations around the country. Says Jay Giesa, corporate vice president and general manager of member station

KOMO, "The Eighth Decade Consortium has produced three high-quality programs that address important social issues. The Consortium members believe that because of the overwhelming success of these programs, they are indeed prime candidates for national syndication. A concerted effort will be made to syndicate future programs produced by the Consortium." And notes KOMO executive producer Barbara Groce, "We even have our own satellite uplink."

With satellite receive dishes in place at almost 400 commercial TV stations, and a growing number of uplinks going in as well, it is not hard to foresee the future of the commercial TV broadcasting industry. Affiliates are no longer limited to the programming sent them by their networks along the AT&T pipeline. The umbilical cord has been severed. With both independent stations and network affiliates vying for the same programs, increasingly the distinction between the two types of stations will become blurred.

The key to success is programming; and to help insure their success, all stations can follow the lead of those stations discussed here and can create for themselves—and for a nationwide ad hoc network of other stations—the kind of programming they haven't been getting elsewhere.

*Editor's Note:* Stations interested in distributing their local productions to regional and national ad hoc networks can contact the following companies for consultation and transmission services: Hughes Television Network, 212-563-8900; Netcom Enterprises, 213-841-8855; and Wold Communications, 213-474-3500. **BC**

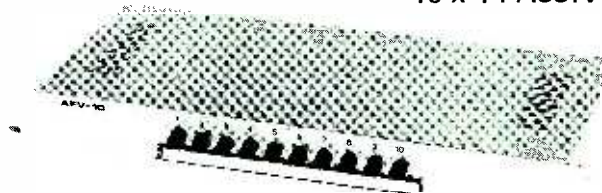
Ruth Macy, satellite editor, is founder and president of TeleWords, a Santa Monica-based editorial consulting firm serving the communications industry.

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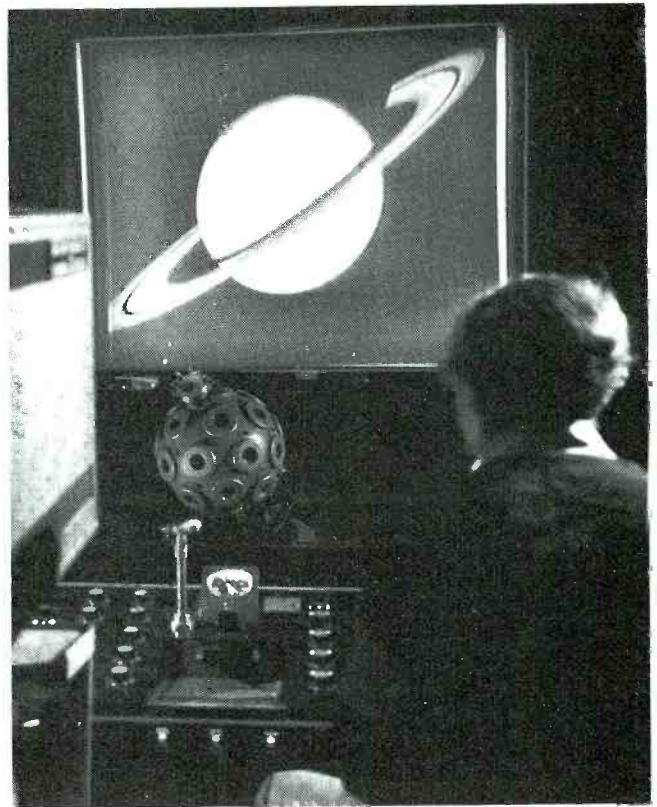
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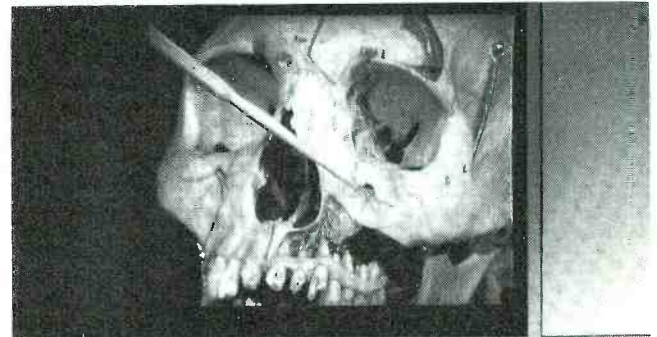
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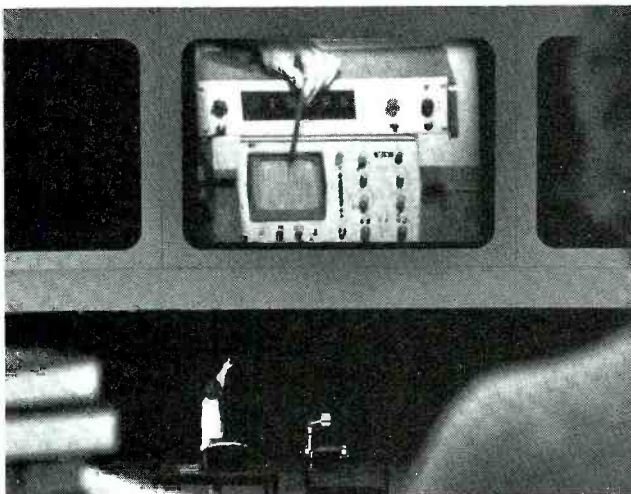
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# LOOK

**O**n November 29, WNEV-TV, Boston's CBS affiliate, unveiled *LOOK*, one of the most ambitious and innovative local programming efforts in the country. The live program, which airs in the early fringe time period (4:00-6:00 p.m.) every weekday afternoon is manned by a staff of 75; and is a potpourri of information, combining feature stories, news, interviews, advice from columnists, and considerable audience participation.

*LOOK*, a long time in the making, is the brainchild of Winthrop Baker, president and general manager of WNEV, which bought Boston's Channel 7 after RKO General lost the station in a licensing dispute last May. In 1979, while WNEV was still competing with RKO for the license, Baker, the broadcast executive responsible for the *PM* and *Evening Magazine* concepts, came up with the idea.

"I thought that if we were going to start a new television station, it would probably be the last, big network-affiliated station that would ever have the opportunity to do something on such a large scale," Baker says.

WNEV is owned by New England Television Corporation, a local company. Because it was not tied to any conglomerates or to long-term contracts for syndicated programming in the lucrative 4-6 p.m. slot, station management decided to do something creative. "We wanted to control our own destiny," says *LOOK* executive producer Jeff Schiffman.

For starters, WNEV invested more than \$3 million and six months of planning into the high-risk, pioneering venture. Management also purchased the *LOOK* name from the New



Co-hosts Kim Prince and Ann Butler on the *LOOK* set.

Sound organization in Europe, publishers of *Paris-Match* magazine and the second and last version of *LOOK* magazine. Then they began a search for staff members.

Literally thousands of people applied for the *LOOK* staff positions; and when management finally sorted through the applications, they came up with a strong mix of talents.

Schiffman was hired as WNEV-TV's vice president of programming and executive producer of *LOOK*. Schiffman is a television broadcaster with more than 20 years' experience, including a few years as director of broadcasting at WCBS-TV (the network flagship station in New York) and vice president, program operations, for Group W Television.

Hired as *LOOK* producer was Raysa Bonow, a veteran television producer who had worked for CBS, NBC, and PBS. Bonow was also named director of creative development for the station.

Ann Butler and Kim Prince were selected as co-hosts for *LOOK*. Butler, a former Emmy-award winning reporter/anchor, is a trim woman who lends a solid, but dynamic presence to the screen. Prince, previously a reporter for WGBH, Boston's PBS affiliate, is a Harvard graduate who projects enthusiasm and wit.

Says Prince about his impressions of the show, "*LOOK* is not make-believe television. It is not Hollywood. Instead we're holding a mirror up to the audience." Other staffers describe the show as a "living companion" to the viewer.

"*LOOK* is designed to offer viewers helpful, useful information in an entertaining, often participatory way," adds producer Bonow.

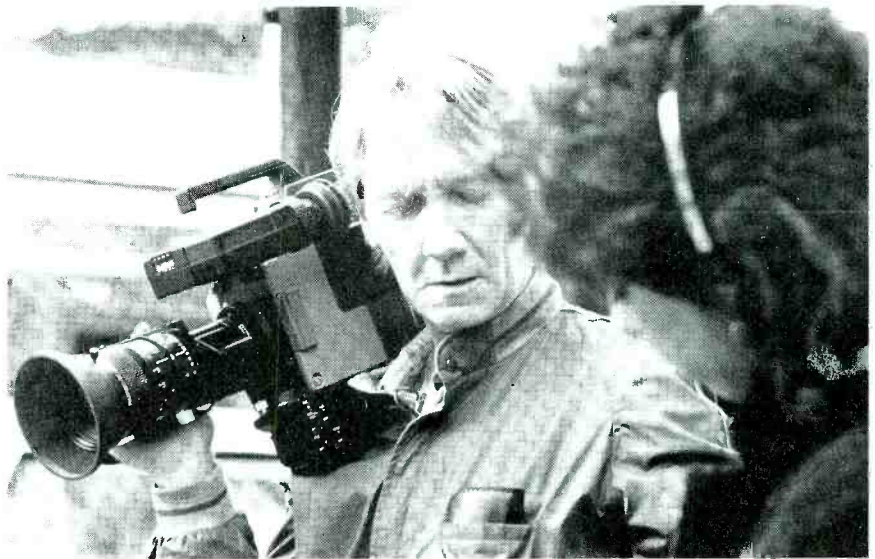
## Local programming gets a new

# "LOOK"

BY MIMI GOSS



WNEV's *LOOK* will be primarily telecast live each weekday from the station's downtown Boston studios. However, some segments will be shot in advance. Pictured above are cameraman Tom Reinhard and production assistant Myra Model during an on-location assignment. Reinhard is shooting with an Ikegami HL-83 camera/recording unit with a 14:1 Fujinon lens.



Part of the excitement of the show is that it is live, and that the frenetic energy generated by so many multi-talented individuals is channeled into a program that is electric, yet cohesive.

The show combines many aspects of a newspaper. It features such daily special sections as relationships (Monday); health and science (Tuesday); food and nutrition (Wednesday); weekend (Thursday); and fashion, beauty, and style (Friday).

A cover story drawn from subjects suggested by that day's special section is explored throughout the program's two hours by a different guest host each day.

Monday, the guest host varies; Tuesday, physician Dr. Richard Pingree and Harvard physicist Richard Land host health and science; Wednesday, Rosalie Harrington, owner of a restaurant on Boston's North Shore, presides over food and cooking segments; Thursday, radio anchor/report Lisa Karlin previews weekend events and entertainment; and Friday, there is a "lifestyle board" composed of Robin Manna, Grant Winsor, and Robert L. Green, who host segments on fashion, beauty, and style respectively.

In addition to the "vertical" weekday themes, *LOOK* includes daily features that are "horizontally" scheduled across the week. Each day it offers news and sports inserts, consumer reports, a feature on the preparation of a "meal of the day," and fashion updates. There are also daily live discussions with *LOOK* viewers watching the show from their homes, workplaces, or places of leisure. And the program includes daily "celebrity" interviews; segments on outdoor activities; veterinary advice; and a syndicated feature on soap operas.

Adding extra flavor to *LOOK* is a rich blend of columnists who offer opinions, advice, and their own brands of humor. Norma Nathan, of the *Boston Herald-American*, serves up Boston gossip she considers "very hot"; radio personality Jess Cain tracks down

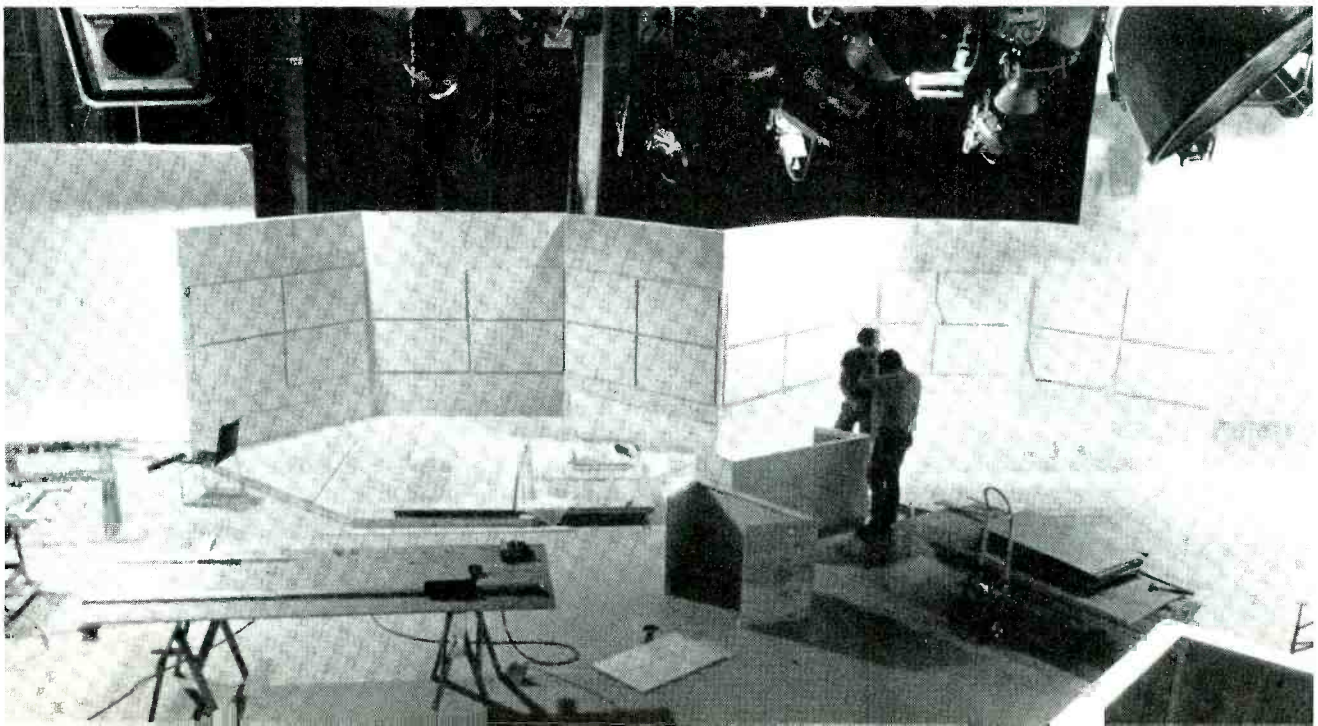
fascinating people in the Boston area; Alan Lupo, a *Boston Phoenix* reporter, pokes around Boston's neighborhoods; auto expert Brad Sears test drives cars and offers advice on repairs; and David Damkoehler explores the special world of Cape Cod.

Commenting daily on consumer affairs is Edgar Nathaniel Merrill Dworsky, "the cheapest man in Boston," who offers consumer tips with a comic flourish of a young Woody Allen.

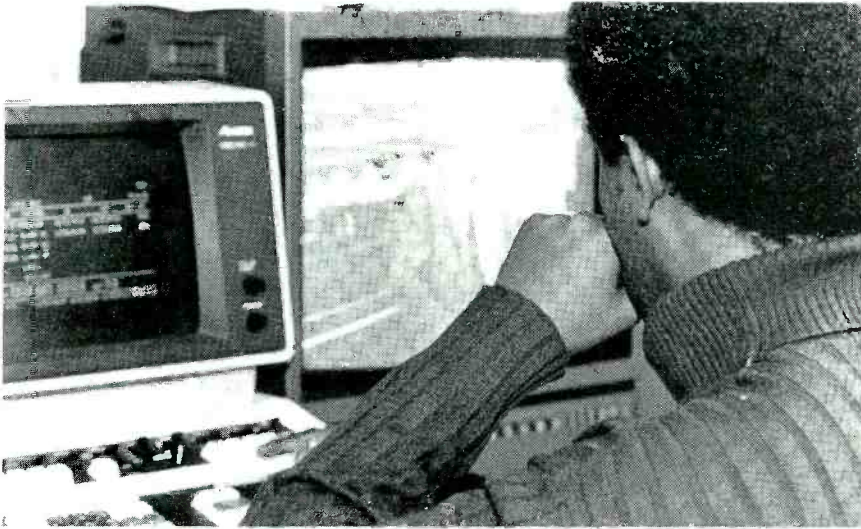
Segments during *LOOK*'s premiere week include a "story of the week" about a man who had endured a heart

*Continued on page 72*

The *LOOK* set was designed by award-winning set designer Ken Philo, whose credits include *The Mike Douglas Show*. The actual set is one of the nation's largest for a locally-produced television program.







All video production for *LOOK* will be shot and edited entirely on half-inch equipment. Here, a technician utilizes the Convergence Corporation ECS-103B editing system.

attack, subsequent open-heart surgery, and the effects his debilitation had on his family. Also in premiere week were profiles of Barry Manilow and Frank Perdue; an interview with actor Michael Landon about his alliance with Pharmacists Against Drug Abuse; a backstage look at the opening night of the play *Snoopy*; a discussion of "instant face lifts" by Grant Winsor; and a tour through Boston's produce center, The Haymarket, conducted by Dworsky.

In many segments there was audience feedback. Hosts got live feedback from audiences watching *LOOK* at home, work, or other places where people normally view television.

"It's really two-way television," says Schiffman. "To the best of my knowledge, there's no one using remote locations in the same programmatic way that we are."

Visually, *LOOK* is a delight. The interior set, which is housed in WNEV's Studio One, was designed by Philadelphia-based designer Ken Philo. The *LOOK* set compares to the sets of major network and syndicated talk shows; although it differs from the "living room" format of talk shows, and instead encompasses four smaller sets. One includes a kitchen; the other three are multi-purpose and serve many functions, depending on the topics covered by the show on a particular day. In addition, there are three "staging areas," also multi-purpose.

Connecting the sets are rainbow-colored "headers," long panels usually found at the tops of newsroom sets. *LOOK*'s headers are highlighted by the famous *LOOK* magazine logo.

One of the most outstanding contributions to the entire *LOOK* package is

Daily producer Vickie Jones uses the Panasonic AU-300 half-inch VCR during a staff training session.

the innovative half-inch technology in which the show is produced. WNEV made a more than two million dollar capital investment in state-of-the-art technology, including its new half-inch equipment. This makes the Boston station the first major broadcaster in the U.S. to put a system of such magnitude on line. *LOOK* is also the first major broadcasting project in the country produced totally in the half-inch format.

Executives at the Boston television station have made the considerable purchase because they believe that half-inch is significantly better, both in terms of video and audio, than  $\frac{3}{4}$ -inch tape, the tape most widely used by broadcasters. Karl Renwanz, WNEV's director of engineering, estimates that "half-inch is the best." And, he adds, "Not only is it near one-inch quality,

but it allows for a 20-pound package in the field, which includes both camera and recorder. To have that portability and that quality is fantastic."

The lightness of the package also helps on staffing. *LOOK* producers can send a one-person crew into the field for a shoot, instead of the usual two. Also, says Renwanz, "*LOOK* producers wanted a lot of moving shots, a lot of people walking. With the half-inch cameras, those shots are easier. We used very little tripod."

Because plans for the format of the show were so ambitious, the half-inch technology made sense. "The editing had to be sophisticated," says Renwanz, "so we thought it would be a waste to go with  $\frac{3}{4}$ -inch. We wanted to go beyond simple cuts. We wanted to be able to do dissolves and freeze frames. The way that most people are doing that type of work is in one-inch, but portable one-inch machines are very expensive and pretty bulky.

"With half-inch," he says, "you have high quality, and the time code is integrated into the format from the beginning and not added on, the way it was in  $\frac{3}{4}$ -inch."

WNEV management knew that *LOOK* staffers would have varying levels of technical sophistication, so the station purchased user-friendly editors.

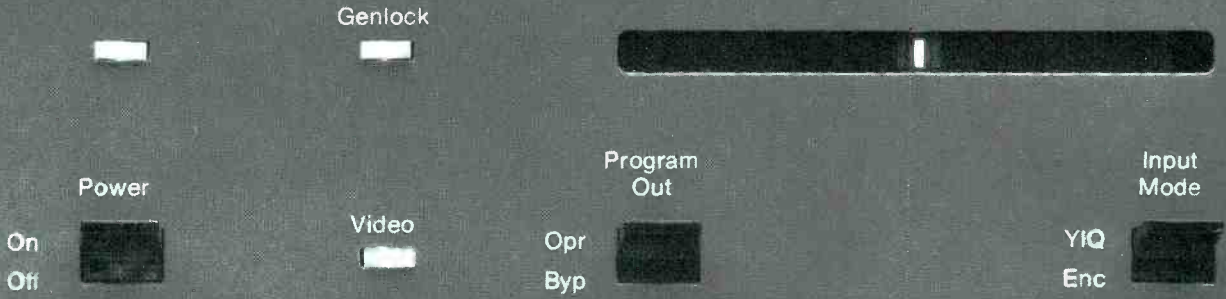
*Continued on page 74*





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Bob Halper, *LOOK*'s production manager, explains the Panasonic AU-300 half-inch VCR machine during a production meeting. Raysa Bonow, *LOOK*'s producer, is seated near Halper.



"They can be as sophisticated or as easy to understand as the person operating them," says Renwanz. "Someone who is non-technical can use them with only a few minutes of instruction."

Besides the Convergence editors purchased (six Convergence 103Bs and one Convergence 103A), WNEV-TV purchased 12 portable Ikegami HM-100 bolt-on half-inch VCRs, 14 Ikegami HL-83 cameras, and 31 Panasonic AU-200 studio VCRs. The cameras and VCRs were bought from Landy Associates in Cherry Hill, New Jersey; the Convergence editors were purchased from Lake Systems in Newton, Massachusetts.

Equipment for *LOOK* also includes nine field units in the half-inch format and seven edit suites with three machines each. Items added to each editing room are reel-to-reel audio deck, a turntable, and a frame synchronizer for freeze frames.

The size of the project, Renwanz

says, "rivals that of many new operations." Because all the equipment used for the project is new, he says, "*LOOK* is as close to the cutting edge of technology as any program in television today."

Currently there are two formats for half-inch technology. One is based on the Beta format; the other on VHS. WNEV bought M format equipment which uses VHS tape. Renwanz said,

"Right now Beta is designed to interface with a 3/4-inch recorder. They're married to 3/4-inch recorders in the edit suites. That leaves us in a 3/4-inch mode for airing, which is not state-of-the-art. M format completely keeps us in the half-inch world and maintains the quality closer to that of the one-inch technology." WNEV-TV is the first major broadcaster in the country to have half-inch machinery interfacing with editors.

Renwanz also explains that WNEV bought time base correctors from the Fortel Corporation in Georgia, because "Fortel utilizes the YIQ format. During the edit process, their TBCs keep the signal in the YIQ format until the final playback for air. That keeps the noise down."

WNEV was able to purchase the half-inch technology because *LOOK* didn't have to interface with any other systems. "It's local," Renwanz says, "and it was set up as separate from the rest of the station. The *LOOK* staff is not unionized, so we set the standard. We didn't care if there was a standard. We just cared that it worked."

Regarding equipment costs, he remarks, "System-wide, the investment is less than 10% greater than that of 3/4-inch; and with the quality difference, there's simply no comparison."

Is a *LOOK*-type project feasible for other stations? According to WNEV executives, the answer depends on how much a station values local programming, and what kinds of financial and personnel resources are at hand. And, says Schiffman, planners of similar projects should remember that a show such as *LOOK* cannot be static.

"*LOOK* is a living organism," Schiffman says. "It's a show that must grow continuously."

*Mimi Goss is with WNEV-TV, Boston.*

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# TBCs enter the world of multichannel

BY GLEN PENSINGER

**T**here is a trend toward special-purpose frame-stores and time base correctors, and away from "everything boxes" that would accommodate any signal a user could come up with. While the "everything box" still has many applications, manufacturers have taken note of the fact that, in many installations, those switches provided to choose between modes of operation and types of input signal were flipped once and left that way for the life of an individual box.

If user needs can be categorized precisely, lower-cost boxes can be designed. It appears that industry needs for signal processing, time base correction, and frame storage can be subdivided into groups, any one of which provides a market large enough for a special-purpose product.

One of the products generated by this line of reasoning is the multichannel TBC/FX unit. At the NAB in Dallas, John Lowery was testing the water by showing a prototype of the DPS-104, a two-channel TBC which featured fade and dissolve transitions under manual or edit system control. On the other side of the lower exhibit floor, ADDA Corporation was showing three pre-production models of its AC-20, a two-channel box with fade, dissolve, wipe, and horizontal digital effects transitions.

A two-channel TBC is not the result of a recent technological breakthrough. To be sure, availability of byte-wide

rams and some of the new support chips made it easier to fit 10 pounds of processing and effects in a five-pound box. There was also some fancy engineering needed to fit various analog and digital circuits into tight spaces in such a way that they wouldn't interfere with each other. But, the real technological breakthrough that made smaller TBCs possible came three years ago with TRW's introduction of LSI A/D and D/A converter chips. These chips didn't affect cost much; and they still don't. A designer could probably build a codec from discrete components for the price of TRW's LSI converters, but the new chips made possible space and power savings that couldn't be approached with discrete designs.

Once smaller TBCs were technologically possible, the question of two or more TBCs in a single box came up again and again in engineering discussions.

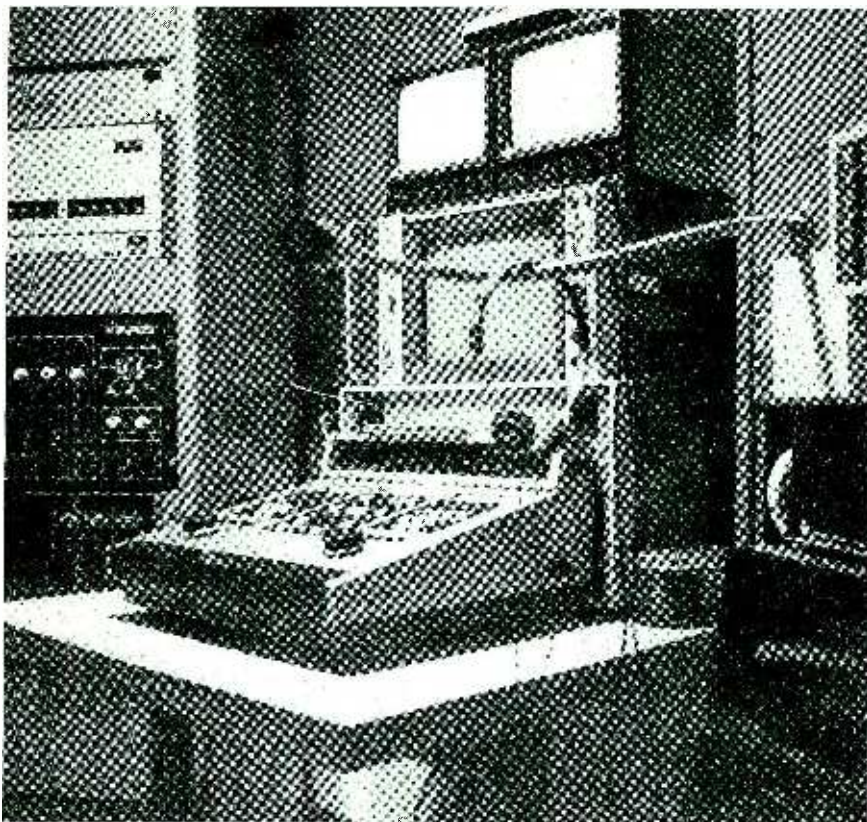
By the summer of 1981, local commercial spot time was being offered to cable operators by a large number of satellite programming services. That should mean local, low-cost commercial production in places that never had production facilities. New editing machines such as the BVU-800 were bringing up the quality of lower-cost production approaches. A look at a number of existing production facilities unearthed racks of expensive TBCs and switchers being used in off-line computer editing systems. All these indicators pointed to

a greatly increased need for low-cost, but high-quality editing systems. A marketing survey confirmed the suspicions that the low-cost, multichannel TBCs time had come.

**A**bove one of the work benches in ADDA's research and development lab is a picture of Albert Einstein, white hair in disarray with eyes searching upward to a caption that reads, "Things should be made simple. But not too simple." Mike Tallent, ADDA's vice president for advanced research, is of the opinion that if you're going to put a component in a product you should get the maximum use out of that component. What would be the maximum that could be gotten out of this new box? It was obvious that this new and potentially large part of the industry would require a product which could work successfully in environments which lacked the technical expertise commonly found in broadcast stations and large production houses.

It was time for choices. What was essentially a packaging job got under way. If the new box was to work in a less technical environment, board-swap maintenance would be important. A single TBC would therefore have to be designed on one board so that alignment could be done at the factory before shipment. With two TBCs in one box, how much could they be made to

*Continued on page 76*



Boston's WLVI edits its new news program with a pair of RCA HR-2 M-format VCRs, and an AC-20 dual-channel TBC with built-in special-effects transitions. (Photo by Glen Pensinger)

do? Cut, fade, and dissolve transitions were obvious. With some fancy manipulation, a 16-line window could also be used to position pictures horizontally, yielding a limited range of "digital effects."

Since subcarrier feedback can simplify TBC design and is the dominant mode of operation for most U-Matic/TBC combinations, that would be the only mode offered. Horizontal blanking width would have an internal pot for adjustment, and vertical blanking would be limited to jumper selection of either 18 lines or 9 lines. The panel controls would be all "logic lows." No matter what control configuration is wanted (remote, local, computer), it would use the same connector on the back of the box.

Four months after engineering began there were three PC board units going through their paces on the NAB floor; and in May, less than six months after the panic began, the first units were shipped. On June 1st production was in high gear.

Now that the two-channel TBC/FX is in the field, how are they being used? At stations such as KHJ in Los Angeles and KPIX and KTVU in San Francisco, new editing rooms are being built for news and production operations which will take advantage of the A/B roll and

effects capabilities of the AC-20. These are effects which have required a control room, if they could be done at all.

For WLVI, the Field station in Boston, the TBC/FX was part of a return to news production after a 10-year hiatus. In October, Field's stations in Detroit, Chicago, Philadelphia, and Boston began new local news programs built around the CNN-2 satellite news service. Seven to eight minutes of local news tailors the half-hour CNN program for local audiences. "We think we latched onto a good news organization" says Gunnar Rieger, Channel 56's engineering manager. "It's revitalizing the station." Field opted for the RCA/Matsushita M-format, 1/2-inch cassette for its news operations. WLVI has been very pleased with the TBC/FX's ability to process the higher picture quality inherent to the M format. WLVI's present M-format editing system has only two machines. The AC-20's FX capability is used only for the occasional fade to black, and to route signals from the two machines in the edit booth to a TCR, 2-inch cart machine in master control from which all stories are aired. Rieger looks forward to an additional M-format editing machine so that the full effects potential of the TBC/FX can be realized.

Six dual-channel units are teamed

with pairs of BVU-800s in both off-line and on-line editing suites at Metromedia's Metrotape facility in Hollywood. In the off-line CMX room, they function simply as TBCs. Price and convenient packaging were the important factors. For shows such as *PM Magazine*, which is shot on 3/4-inch, Metrotape has an on-line suite in which two BVU-800s edit up to 1-inch Type C using the full effects capability of the AC-20 under CMX control.

In a top-of-the-line post-production environment, fade and dissolve capabilities aren't quite as important as they might be in a broadcast news operation. Here a switcher is always available. However, even though the AC-20's range of horizontal digital effects is limited, Metrotape's Tony Ciesniewski feels that it can satisfy some clients "...without having to go to my four-channel SqueezeZoom at the appropriate hourly rate."

An entirely new facility is under construction at Metrotape with four BVU-800s and two AC-20s as the primary tools for a one-hour, six day-a-week syndicated cable show beginning this month. Program elements from 3/4-inch, 1-inch, still-store, and the like will be edited into 3/4-inch show reels which will then be combined with live studio segments using the digital effects capabilities of the TBC/FX as well as conventional studio switcher effects.

At WTEN in Albany, New York, size, price, and performance were of importance in selecting the two-channel TBCs. Their assistant chief engineer, Skeeter Lansing, notes that 3/4-inch has come to play an important role in the stations news, public-affairs, and syndicated programming. He feels that the quality of some of the syndicated programming they've been receiving on 3/4-inch is much better than they were used to on 16mm film. The four U-Matic machines currently involved in daily air operations run at least 18 hours of programming a week.

The new TBC's compact size has allowed WTEN to mount two BVU-800s, TBCs, and monitoring in a single rack. As the number of 1-, 2-, and 3/4-inch machines grows in the next few months, the switching capability of the TBC/FX will be used as a preselector to reduce the number of tape ports needed on WTEN's air switcher.

As in the case of WLVI, Vermont Educational Television is using their TBC/FX in a two-machine configuration. The principal use of the AC-20's effects at the moment is for fades to black, although a few A/B roll productions have been edited up to 2-inch. Prior to acquisition of two BVU-800s



and the TBC/FX, all editing had been accomplished on a 2-inch quad format. Not only has Vermont ETV's editing capacity been doubled, but director of engineering, Wayne Rosberg, says that "just about anybody can edit with the new system."

Some users of the TBC/FX thought that one of its shortcomings was an inability to do effects with signals other than those from tape. Rosberg says Vermont ETV has successfully performed effects transitions between tape and house video sources through the TBC/FX. He notes that "the timing is a bit tricky"; but with the box locked to house black and with a little care, they've been able to do it.

Yet another perspective on the advantages of an integrated two-channel switching and effects system comes from Allan Leon at Adcom Communications in New York. Adcom specializes in systems for industrial and commercial applications. Leon has long sympathized with the client who asks, "How did I jump from a simple \$15,000, two machine, cuts system to \$140,000 all of a sudden to get A/B rolls?" The cost drops by about 50 percent with the dramatic reduction in system complexity and cabling made possible by the single-box TBC/FX unit and a low-cost, three-transport edit control system that will trigger the ADDA's effects.

Not only does the price drop, but installation, adjustment, and operating complexity are reduced to a level that the less technical system user can handle. Just the reduction in system phasing requirements between a single-box approach and the previous TBCs-sync generator-switcher approach has made A/B roll editing practical in situations where it would have been totally out of the question before.

The digital effects possible with 16 lines of memory are pretty well exploited in the current product, but there might be multiple-channel field or frame-stores in the future.

In looking at the evolution of time base correction from his perspective (he was on the design team for the CVS 500 and 504), Mike Tallent is mildly surprised that the stand-alone TBC had not yet been superseded by VTRs with built-in TBCs, particularly VTRs in the broadcast U-Matic class. He predicts that the stand-alone TBC will exist for a while in the future, but will blur into the realm of switchers and enhancers.

*Glen Pensinger, video production editor, is television engineer for San Jose State University and an independent television systems consultant in the San Francisco Bay area.*

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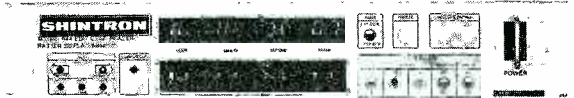
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# Fisher gets the jump on Station automation

BY MICHAEL EGUCHI

**A**utomated information systems, now combining both data and word processing into one common system, are becoming established as a resource in all industries, and broadcasting is no exception. With the introduction of computing to broadcasting, a relatively young and very dynamic industry was suddenly merged with an also dynamic, volatile, fast-track technology. This synthesis, today, has literally exploded the potential and unlimited future of overall automation in the broadcast administrative arena, as well as in the broadcast operations arena. Indeed, there are few broadcast functions that cannot be improved via the new computer technologies. Information processing equipment if used properly can truly help in managing tremendous volumes of rapidly changing data from which timely, crucial decisions must be made.

## The beginning

In 1974, Fisher Broadcasting entered the world of broadcast computing with an automated sales, traffic, and accounting system provided by a very successful computer "service bureau" which was headquartered in Memphis,

Tennessee. By 1977, the Fisher Broadcasting stations, KOMO-TV and KOMO-AM, Seattle, Washington, and KATU-TV, Portland, Oregon, were "on-line" to Memphis, communicating in a real-time environment to large mainframe computers located there. Our experiences and our expertise in the automated services provided became the catalyst for an awareness of further extensions of computing to our industry.

In 1979, other possible computer applications began to surface throughout our company as potential jobs which might be accomplished by automation. A survey of computer hardware and software vendors, as well as word-processing vendors, was initiated in order to further research and develop these *other* applications.

After the hardware selection and the identification, definition, and prioritization of the custom software applications to be developed occurred, the actual task of analyzing, designing, programming, and implementing the various software projects was initiated. Our evolution to in-house computing had most definitely begun.

Following two parallel developmen-

tal paths in this evolution were our further developing of word processing and also an investigation of in-house radio and television traffic, sales, and accounting software which could compatibly run on IBM equipment. We decided early in this evolution that we would not try to develop our own traffic software system. The complexities involved were evaluated and found to be too great and overwhelming to undertake. Therefore, the appropriate traffic "package" was selected after much research and study. Columbine Systems of Golden, Colorado, became our traffic software vendor.

Where our strategy might have been to *first* find software packages to accomplish a given task and *then* select the computer hardware on which the software would run, our situation dictated the reverse because of my desire to select the hardware best suited to our needs in terms of software packages and our custom approach to software applications.

IBM was also selected for word processing, using the same criteria as for the computer hardware selection. It is important to note here that the same "family" of computer and word proc-



(At left) Patti Wallace (left), KOMO-TV traffic manager, and Kelly Dowell, traffic assistant, operate IBM 5251 display stations. "Ergonomic" terminal stands provided by Wright Line facilitate the use and keying of input data.

essing hardware were selected for obvious compatibility reasons. Furthermore, the newest generation of desk-top IBM word processors were acquired for present and future applications with compatibility always an underlying consideration.

### Software applications: Custom and packages

By July 1980, hardware systems were in place and software systems were quick to follow. Our attempt to automate what other broadcasters were only thinking of doing became a reality. From October 1980 to the present, a total conversion to in-house traffic systems developed by Columbine Systems, as well as the custom development and successful implementation of other software applications, became a reality.

Custom applications were developed to aid our administrative, accounting, engineering, radio and television news, program standards, and TV sales departments. Furthermore, personnel department and market department applications were developed using the sophisticated IBM Displaywriter word processor with laser-beam printing from an IBM 6670 laser printer. Also, an IBM OS5/430 word processor was incorporated in the development of these later applications. A further extension of the use of the Displaywriter was to utilize it as a very fast communicating terminal by Arbitron so that AID inquiries could be more efficiently requested and received.

The accounting computer applications developed are comprised of a custom accounts payable system and general ledger system. Engineering applications included a time-card analysis system, as well as a capital project tracking system. By using the computer, engineering personnel time could be tracked, accrued, and distributed to the proper department for cost-accounting purposes every pay period. The capital project program enabled engineering "work-in-process" projects to be accurately accounted for to the invoice.

Radio and television news, as well as program standards applications, included an archive-retrieval system for news stories, video, subject topics, and FCC-related material for common

reporting purposes. Also, in TV news, an automated assignment desk and news "stacking" system were developed whereby news producers and directors could electronically build or "stack" a news show with back-timing and a printed director's cue sheet as the final output. TV sales applications included a demographic availability presentation system whereby sales proposals are created by the computer, using ARB and NSI demographics (as well as demographic projections), and printed by either a serial computer or laser printer. All in all, it has been a very busy, all-encompassing but worthwhile undertaking.

### Hardware

What does it take to have all of these systems running? With respect to hardware, our initial computer system was very small and limited. But, as applications were developed and implemented, the hardware was expanded and upgraded. Today, there are two IBM System/34 computers with 256K memory, 128 megabyte discs in Seattle at KOMO-AM/TV, and two similar machines in Portland, Oregon, at KATU-TV. Eighteen IBM 5251 display-station CRTs at KOMO-AM/TV and 10 at

KATU are distributed throughout the three broadcast facilities. There are two 300-line-per-minute 5225 matrix printers at KOMO-AM/TV, and one at KATU. Both KOMO and KATU also have one 300-line-per-minute 5211 line printer as well as three 120-character-per-second 5256 matrix printers at KOMO and three at KATU. Finally, at KOMO, an IBM OS6/430 word processor and an IBM 6670 laser printer have been integrated into the computer system architecture. As previously mentioned, our newest word-processing acquisitions have five IBM Displaywriters at KOMO-AM/TV and three at KATU. Currently, these pieces of equipment are stand-alone units with the capability of future integration into our existing hardware systems if and when deemed appropriate and necessary.

### Conclusion

With all of our equipment and software applications, we are still some  
*Continued on page 80*

Teresa Woon, KOMO-TV traffic assistant, examines printed output from an IBM 5225 300-line-per-minute matrix printer. TV traffic software is provided by Columbine Systems.







Patsy Harrah, program standards manager, uses an IBM 5251 display station to archive and retrieve FCC-related program material for KOMO-AM/TV.

distance away from the totally automated station and office of the future. However, with the existing information systems in place, we have

most definitely taken a giant step toward the future. Careful planning and evaluation of company goals and objectives, and having the information

systems to support attaining those objectives and goals, is critical to the success and survival of the company. With thought, foresight, planning, and commitment, it is amazing how cost effective the above systems are to be developed and how quickly the pay-back.

Recurring monthly costs can be staggering for automated systems. One-time-only costs for development of well-planned information systems pay back rapidly in relations to those on-going recurring costs. Broadcasting can no longer remain aloof from nor ignorant about automation on all fronts. Powerful, low-cost mini-computers, as well as user-friendly hardware and software, can only indicate the necessity for the integration of the two technologies for the benefit of both.

This synthesis must occur in order for better control, timely decision making, and survival in an uncertain future. We at Fisher Broadcasting are confident and assured that the direction which we have taken is in our best interest now, and most definitely tomorrow. **BC**

*Michael Eguchi is the manager of information systems for Fisher Broadcasting.*

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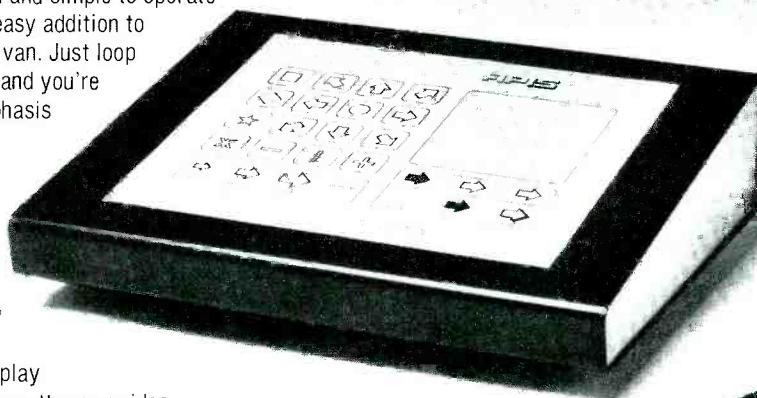
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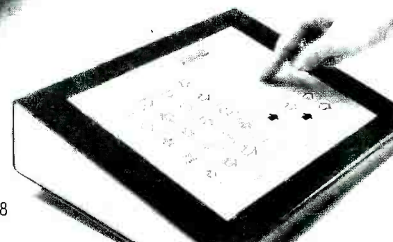
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Most people associate the coveted Emmy Award with television writers, producers, entertainers and musicians. However, since 1956, RCA engineers have been awarded seven Emmy's by the National Academy of Television Arts and Sciences for their contributions to picture perfect programming. The most recent Emmy was presented in recognition of the development of the TK-47 automatic color television camera.

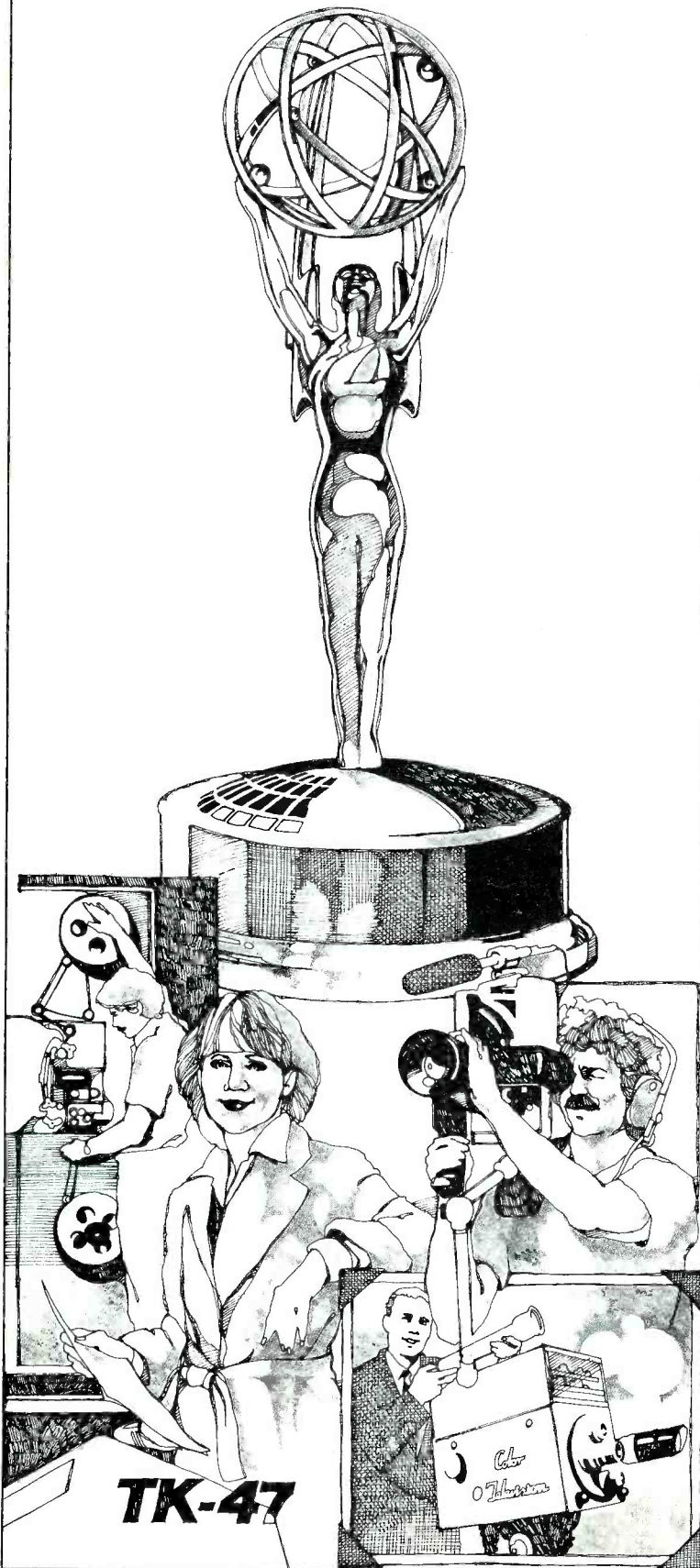
Virtually any picture you encounter on your home screen has been touched by RCA engineering. As America's largest supplier of commercial video equipment, we are involved in every step: studio cameras, portable cameras, video recorders, editing equipment, telecine equipment, transmitters, and broadcast antennas. As you read this, we are moving ahead with advanced development programs in digital video equipment and the creation of a completely solid state color television camera.

Our commitment is to continue to set the pace for the industry we pioneered. **If you are an engineer who is interested in furthering the development of advanced broadcast technology, we invite you to share this adventure with us.** For engineering career details, please write to: **RCA Broadcast Systems Division, Joy K. McCabe, Dept. PR-1, Front & Cooper Sts., Building 3-2, Camden, New Jersey 08102.**

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# RCA



# PRODUCT PREMIERE

## Video pointer (Circle 112)

APIS CORPORATION—APIS announces immediate availability of the APIS 1 Video Pointer, a valuable production tool that has been used effectively for instructional programming and is making a resurgence in the television newsroom.

The Video Pointer positions arrows and other commonly used symbols by way of an X-Y controller contained within a membrane control panel.

Additional features include small-, medium-, and large-size selections of eight arrows and eight other useful symbols. Each symbol may be shown with solid, full-borderline, or transparent attributes in white or black matte over video. An uncommonly forgiving circuit design allows for locking to the most unstable of video sources.

According to Roy Romijn, chief executive of APIS, "The economy of 'no moving parts' and straightforward circuit design allows us to offer the Video Pointer at an unusually low price with the best feature—a three-year parts and labor warranty. The X-Y controller is making its practical use debut in the Video Pointer, and we have such confidence in its reliability that it will be used in future APIS product designs."

## Remote broadcast mixer (Circle 111)

RCI—The MX-84 is a high-quality remote broadcast mixer featuring an 8 x 12 mix via pan pots and two 8 x 1 utility mixes for "IFB," "mix minus," or local PA.

All main mix inputs and outputs are transformer balanced with XLR connectors, and allow 20 dB of headroom. Line outputs and telco inputs also have binding posts for easy connection to phone lines. The intercom and talent IFB system is built-in for party-line communication with the studio phone line, engineer, producer, director, and talent.

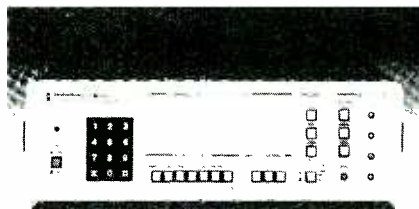
The three-headphone output sections each have 2-watt power amplifiers. Each output for talent, producer, and engineer (stereo) is switch selectable to any of four main outputs with IFB interrupt for checking program levels. Up to four hours of continuous operation is

possible on internal battery power, and there is no interruption of programs when the unit switches silently from AC to battery.

The internal cue speaker is muted when headset is used. The MX-84E version features 100 Hz and 10 kHz equalization on each input. Units may be combined for full-functioning expansion to 16 or 24 inputs.

## Character/test generator (Circle 109)

ASACA—This test signal generator contains all the necessary signals: SMPTE color bars, Y reference bars, full-field red, black burst, multi burst, cross match, and dots. The unit also contains a character generator with a capacity of 31 spaces on two lines. The message is held in an electrical-erasable-programmable read-only memory (EEPROM). The message is retained even when the power is shut off.



The RF signal can be obtained through test channel 3, 4, and 6(USA) as well as a direct video output. Audio signals of 400 Hz and 1 kHz may be obtained with a range of +8 dBm to -50 dBm.

The CB53A1 is completely digital and also features a switchable gen-lock function, black-burst out, and is AC/DC operational.

## Distribution equipment (Circle 104)

KNOX VIDEO PRODUCTS—Best known for their low-cost line of character generators, Knox Video has introduced a line of Knox distribution and signal-processing equipment.

The model K700 Video Corrector is a unique proc amp, chroma corrector, noise reducer, and image enhancer in a 1¼-inch-high rackmount unit. The unit is designed to provide the user with correction of both luminescence and chroma without the use of expensive waveform monitors or oscilloscopes. Up to 6 dB of noise reduction and continuously variable image enhancement are also front-panel controlled. The automatic wide-window genlock proc amp provides completely regenerated sync, burst, and blanking on the output

signal. The Knox Video Corrector can be used to correct most errors that are commonly thought to require more expensive time base correctors.

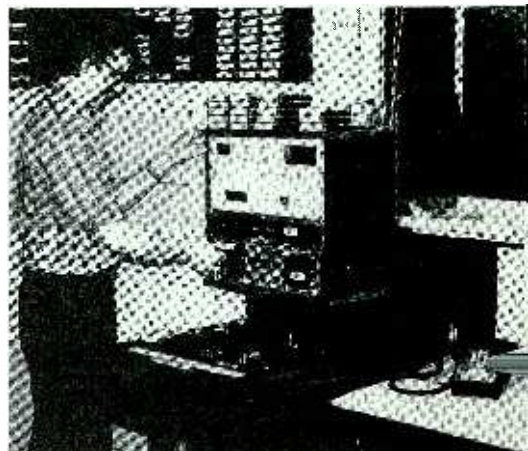
The model K500 Audio Enhancer is a useful new tool for cleaning up TV audio. It combines a dynamic noise reducer and two parametric equalizers that can be used to reduce hum, restore lost highs, and remove unwanted frequencies from the audio track. Operation is simple, requiring no special skills or test equipment. The Audio Enhancer can restore multiple-generation audio to intelligibility and near noise-free condition.

## Tape recorder/reproducers (Circle 106)

TASCAM—TASCAM has just introduced two new audio tape recorder/reproducers: the 2-track ¼-inch model 52, and 8-track ½-inch model 58. These capable production machines accommodate up to 10½-inch reels, operate at 15 ips, and the 52 also operates at 7.5 ips with NAB or IEC EQ. Full sync recording is standard on both machines, and there is a choice of optional remote controllers.

## Editing console (Circle 107)

RUSLANG CORPORATION—Ruslang, manufacturer of broadcast studio furniture, is offering a compact console which houses all the editing equipment and controls in one easy-to-reach unit.



The console base holds the tape transport for reel-to-reel while the variable height overbridge complete with mounting rails holds the electronics necessary for editing. These can include any combination of noise reduction units, cart machines, cassette players, mixers, and even a clock. The overbridge can even be ordered with built-in cartridge storage.

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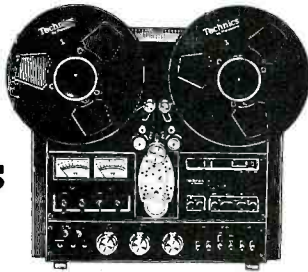
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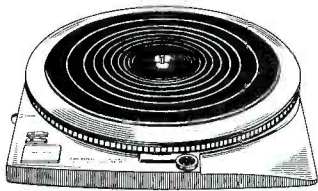
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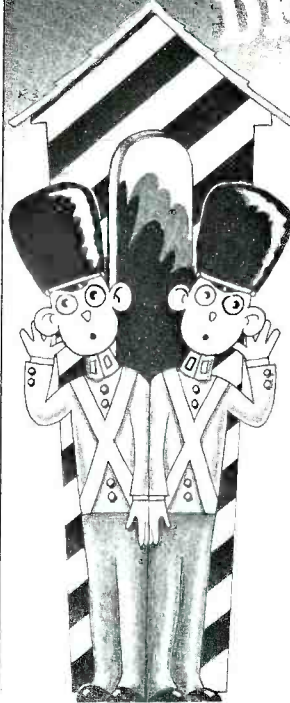


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**Put a Comad Dual Audio Sentry on duty.**

Lost audio is something you'd like to know about right away — before all the phones start ringing.

The Comad Audio Sentry can simultaneously monitor two separate channels and alert you immediately if audio disappears from either one.

Monitor stereo left and right, AM and FM programming, AM and TV audio or simply audio in and audio out.

You can also use the Sentry to create an automation system to control up to three program sources. Balanced inputs and audio filters are standard.

Put a Comad Sentry on duty to watch over your audio. And rest easy.

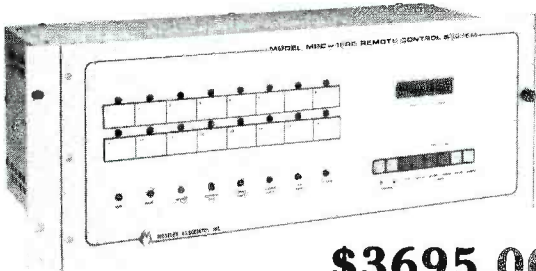


**Comad, Inc.**  
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Circle (48) on Action Card

## New from Moseley

### MRC-1600



**\$3695.00**

The MRC-1600 Microprocessor Remote Control offers microprocessor flexibility and sophistication in an economical and dependable package for general AM-FM remote control applications. It comes equipped with 16 status inputs, 16 telemetry inputs, 16 raise command outputs and 16 lower command outputs. Each command output is relay-isolated. Adapting the MRC-1600 to current system interconnections is easy. Plug-in modules can be ordered to accommodate almost any interconnection system, from standard 2-wire or 4-wire telephone lines to FM subcarriers, subaudible telemetry, or a custom combination of any of these.

The MRC-1600 front panel is simple to operate and easy to understand. All status channels are displayed simultaneously on a set of 16 LEDs. Alphanumeric LEDs give readouts of selected channel number and telemetry data while 8 color-keyed LEDs indicate system operation mode, alarms, etc.

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## This is the Comad VS-2 video switcher.



### The \$225 choice.

The Comad VS-2 is the passive video switcher designed to let you choose economy with confidence.

Choose your input, push the button. The red flag in the shadow type selector button will tell you which of the 10 inputs to the VS-2 is being fed to the single output.

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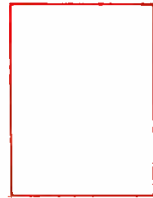
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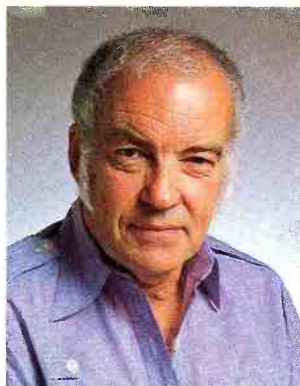
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