

CPC

April 1973

# TV Communications

The Professional Journal of Cable Television

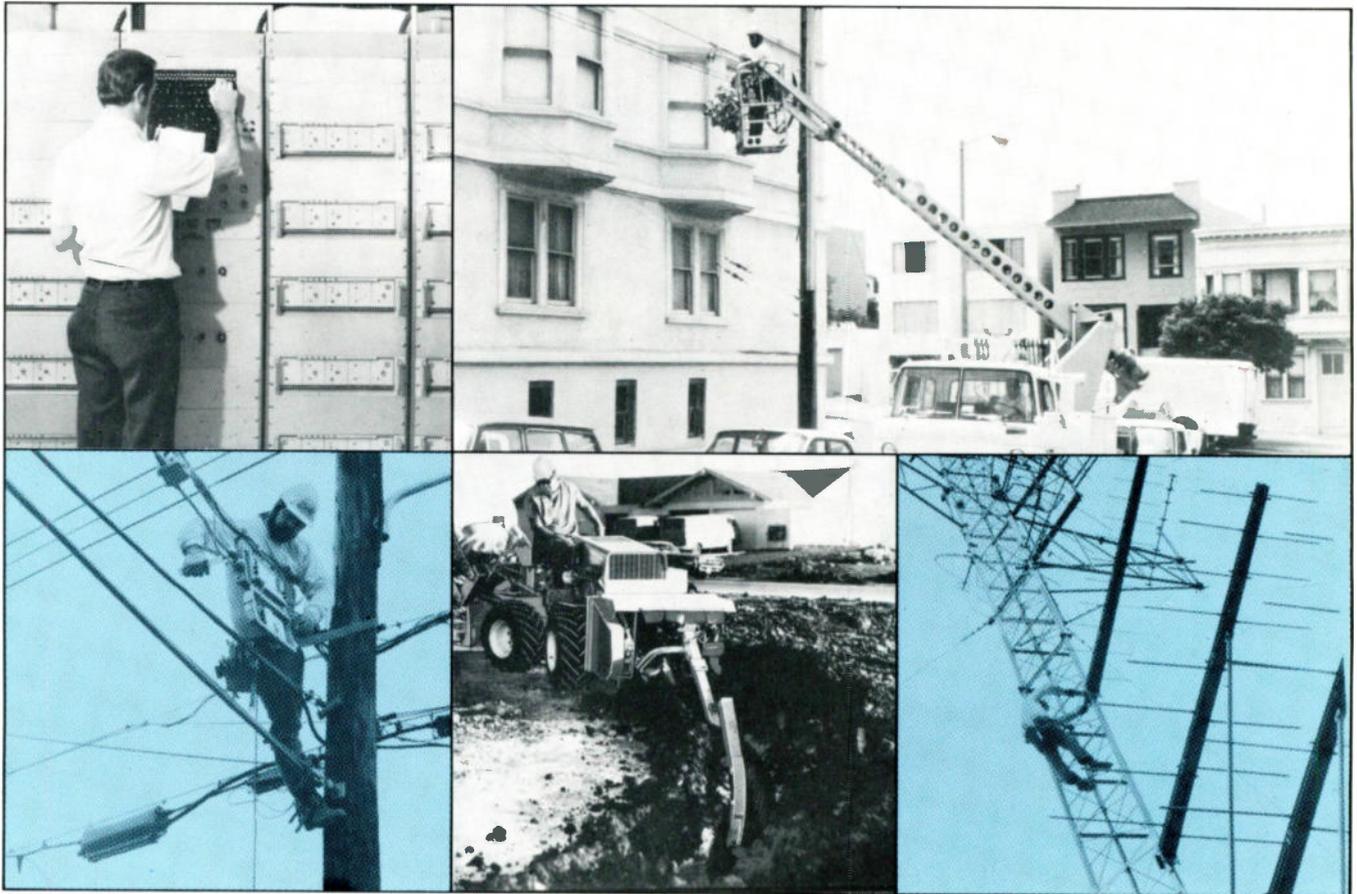
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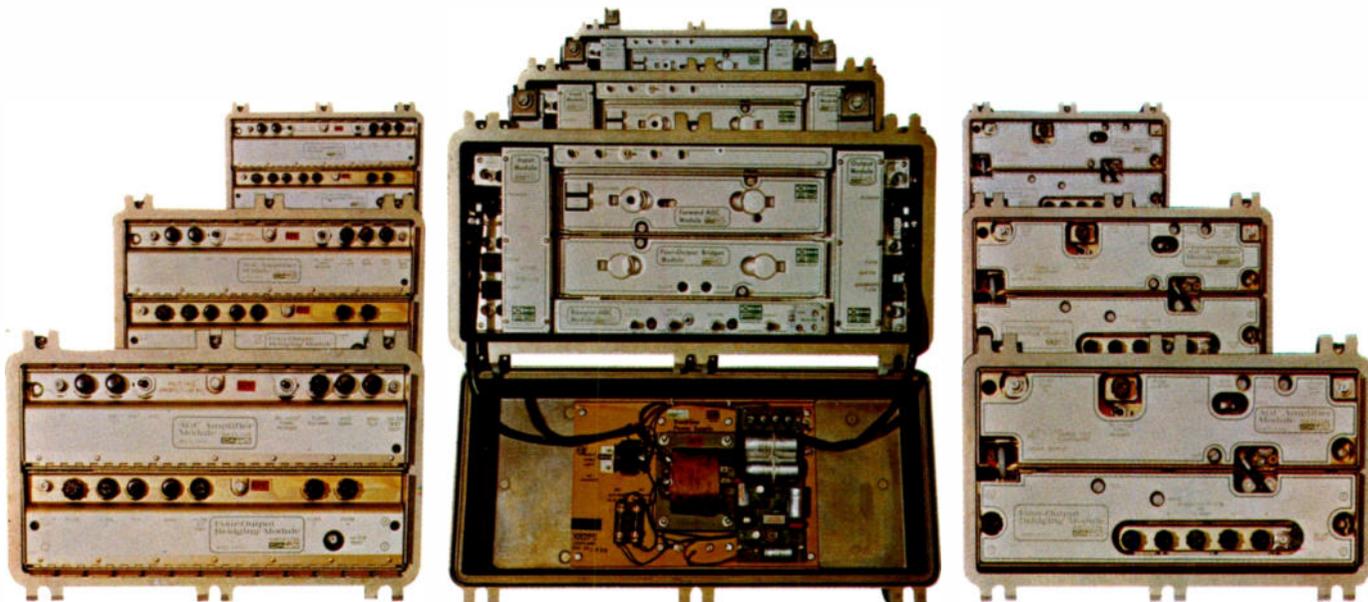
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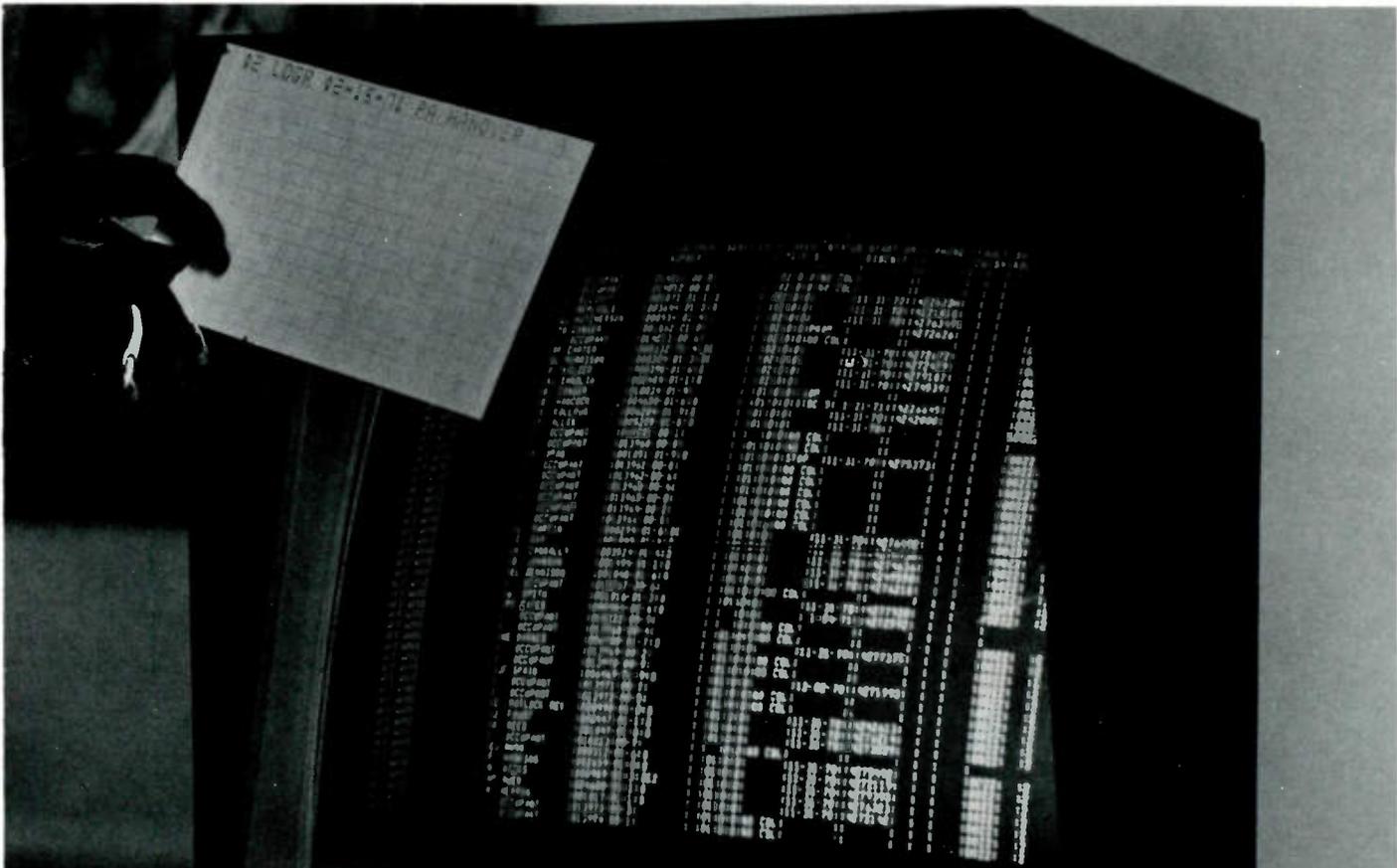
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April 1973, Volume 10, Number 4.

# TV Communications

The Professional Journal of Cable Television

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## This Month's Cover...

Associate Editor, Ruth Steinberg, took this shot while flying over (and through) Canyonlands National Park. Dick Smith's Canyonlands Aviation is one of the attractions in Grand Junction's L/O program, "On the Road." Camera-man is Doug Wilson from Comtronics Cable TV in Grand Junction.

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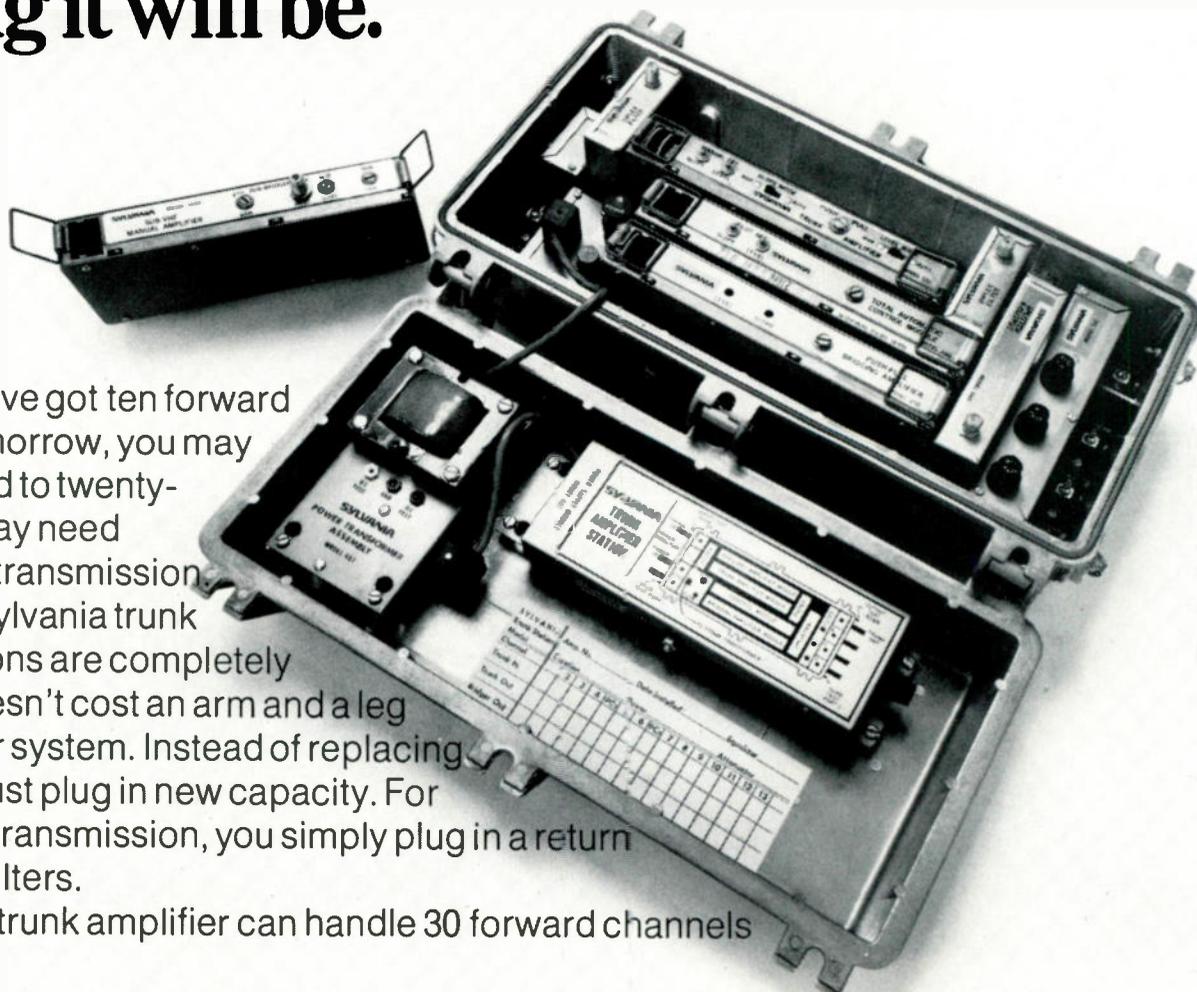
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# The TVC Viewpoint

EDITORIAL



*Robert A. Searle*  
*Publisher*

## **“...and we believe that a press must be absolutely free from governmental controls...”**

I would like to echo NCTA President David Foster's remarks to Representative Robert Kastenmeier's (Democrat-Wisconsin) Judiciary Subcommittee Number 3: Any governmental control of the press in America is UnAmerican!

This is becoming an increasingly important consideration for the cable communications system operation. As more and more local systems are carrying local news on their origination channels, more and more system operators are faced with the threat of governmental interference with their news coverage. I realize that it is a long way from the White House to Ponca City, Oklahoma... but pressure on the networks by this Administration (the Vice Presidential “nattering nabob” attacks; the Dr. Whitehead five-year revision plans) are easily translated into attacks by local city councilmen.

As Mr. Foster said, “news and public-affairs events not now adequately covered because of the single-channel and time constraints on network and broadcast television” will be covered by cable. And, as the Administration has so clearly pointed out, all the news is not good.

The possibility exists that, because of coverage of a debate at a city council meeting, the debate-losing city councilman will blame the cable systems' coverage for his losing face.

As CBS anchorman Walter Cronkite said during a round-table interview with his peers at ABC and NBC and editors of the *New York Times*, “This Administration, through what I believe to be a considered and concerted campaign, has managed to politicize the issue of the press versus the administration... (and that) to defend the right of the people to know – that is, to defend freedom of speech and press – is to somehow or other be antiadministration.”

It sometimes seems that way to us... we supported President Nixon in 1972... yet the moment we criticized Dr. Whitehead we were somehow branded as anti-Nixon.

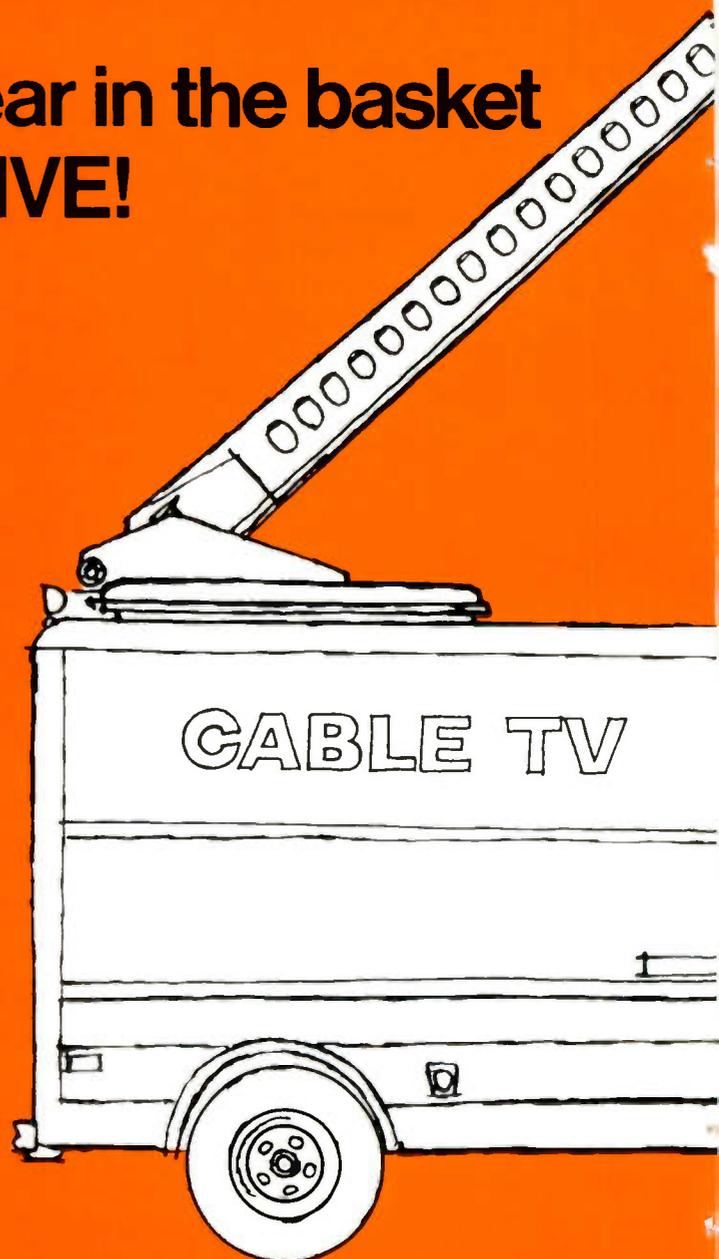
I suggest that the courts, the Congress, all state assemblies, all county and city governments... and this Administration... read the First Amendment:

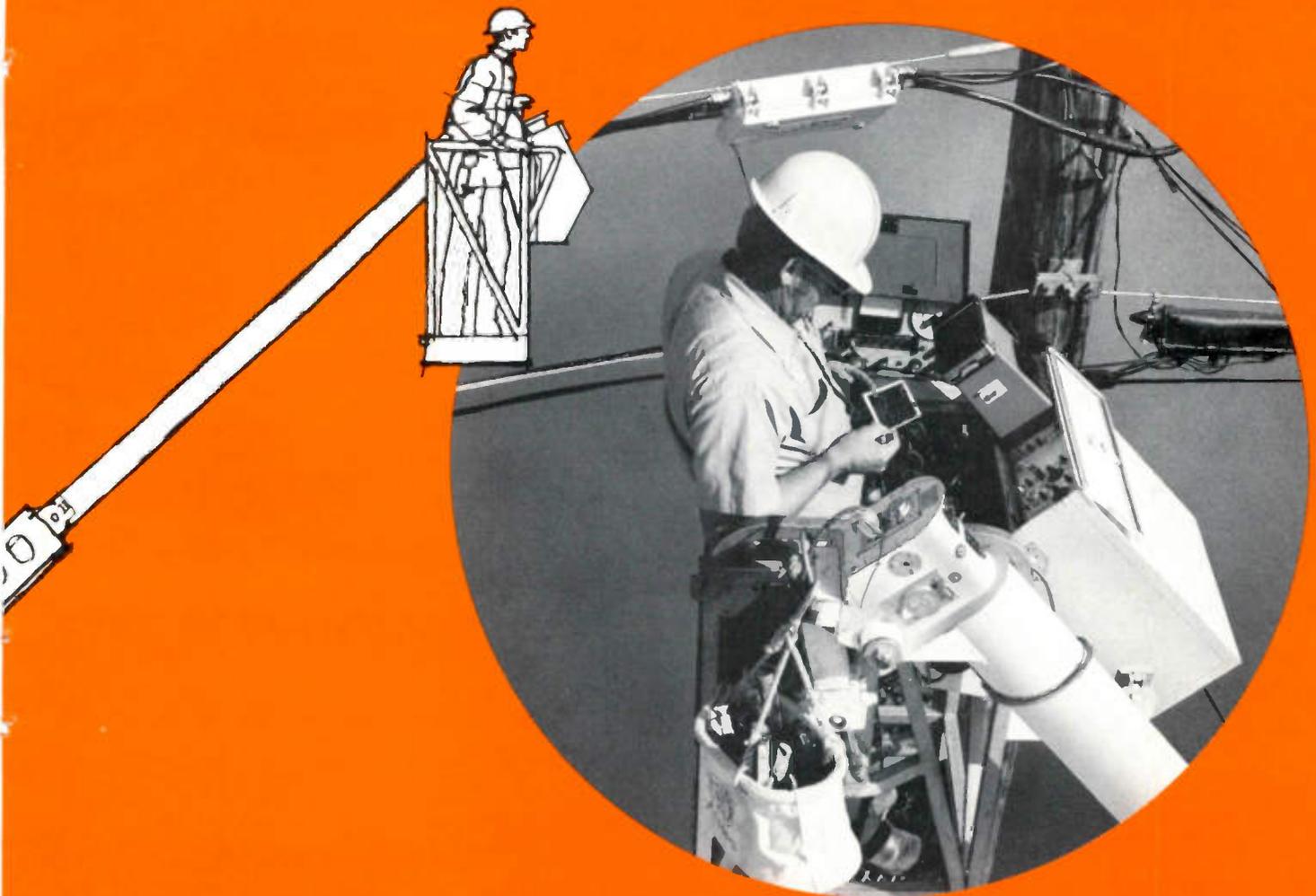
“Congress shall make no law... abridging the freedom of speech or of the press...”

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# Perspective

---

## on the news



*Paul Maxwell*  
*Executive Editor*

That bantam battler from the Motion Picture Association of America and his finger-pointing accusation that "cable TV didn't keep its word" have persuaded most Capitol Hill observers that cable is losing the moral issue on copyright payments. Senator McClellan and his office's "without further delay" has finally acted . . . finally simply introduced an act — but its not a law yet. The Senator has finally allowed the copyright on his "Procrastination Promenade?" . . . his "Tardy Twist?" . . . his "Lindy Loiter?" . . . and his same old "Arkansas Shuffleback Two Step?" to lapse.

But the new bill turned out to be same song, second chorus . . . not even second verse. It's merely the same thing McClellan introduced in the 92nd Congress.

NCTA, understandably, expressed pleasure at the bill's submission . . . and hopes to be joined by other parties in working for speedy enactment of copyright legislation — though not necessarily McClellan's bill. Stuart Feldstein, NCTA general counsel, said that the NCTA would most likely attempt to demonstrate the impact of the proposed fee schedule (a sliding one to five percent of gross formula) on the cable industry and work to reduce the fees.

Feldstein and Tom Brennan, counsel to the Subcommittee on Patents, Trademarks and Copyright, were pessimistic about early passage . . . they expect eventual enactment some time between the spring of 1974 and 1975.

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# LETTERS

Dear Sirs:

The cover picture on the October, 1972 issue of *TV Communications* has been drawn to my attention. Could you send me 10 copies of your journal at your earliest convenience?

You may be interested to know some biographical data of the girl whose picture was on the cover. Her name is Saswati Datta, and she is one of the artists on the team of Mrs. Uma Sen Gupta who is the chief architect, producer and organizer of these programs for TelePrompTer Manhattan Cable TV.

Miss Saswati Datta performs on these programs as a hobby, and in the program from which the picture came, she acted as a commentator giving details of the signifi-

cance of instrumental music played on the program and its relationship to western music. Besides acting on TV, her other hobby is painting. She is interested in Indian and Western music, although academic pursuit as a full time student at Barnard (Columbia University), where she is now a senior, is her primary objective.

Amiya Datta

Editor:

In response to your memo of February 16, 1973, your article depicts OSHA as minor things that people should do. This is exactly the method the Government has been instructed to use right now, since there are already over 100 and some bills in the Senate and House waiting to amend this law. The thought by the Department of Labor at the present time is to nit pick and use small items, and in general establish a code of criminal and civil misconduct on an employer, so that when they do move in with a big hammer and the big citation on the employers,

they will have a prior conviction record. In other words, the objective of the Department of Labor in the next eighteen months is not to vigorously enforce this law but to keep a low profile until all the bills in the hopper in the Senate and House have diminished.

I hope this will give a deep insight into why this particular type of law enforcement is being carried out at this time, but please bear in mind that at any time the employers are subject to the civil and criminal fines as imposed by the law.

Lewis C. Barbe  
NCTA Consultant on OSHA

Editor:

I just wanted to drop you a line to express my appreciation for the excellent treatment you gave Russell Anderson's article in your February issue. It's a very clean presentation and I think it is a good lead article for the CATV Technician Section.

Stephen B. Witmer  
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# FOCUS

... On People

## Systems

Arthur C. Hutzler has joined Hawkeye Communications, Inc. as vice president-engineering. Hutzler, who was graduated from Duke University with honors and received a masters degree in electrical engineering from the University of Florida, brings more than four years of cable engineering experience to Hawkeye.

Paul W. Lancaster has been named director of cable TV engineering for Goldmark Communications Corp. Lancaster, who holds a B.Sc. degree in electrical engineering from England's Bristol University, was formerly manager of design and cable TV product engineering for Cascade Electronics, Ltd., British Columbia.

Jack D. Cox has been named to the position of manager of the cable system in Morganton, North Carolina, according to an announcement made by Suburban Cablevision, Inc., the system's operators.

R. Wayne Wilson has been appointed TelePrompter Corporation's Northwest regional community development director. Wilson, a former director of advertising and public relations of American Television & Communication Corp., is responsible for coordinating TPT's franchising and community affairs activities in ten northwestern states.

Tom LaFourcade has been named general manager of Peninsula TV Power, Inc., operators of the cable system serving Sunnyvale, Ca. LaFourcade served for the past year as manager of Pueblo (Colo.) Cablevision.

TV Communications

William M. Trust has been appointed controller of Tele-Prompter Corp. Trust was formerly vice president of American Securities Corp.

## Suppliers

John D. Albee has been named manager of the Midwest district for Anaconda Wire and Cable Company, Telecommunications Division. Albee, a graduate of the State University of New York, has been with Anaconda for 14 years.

William H. Edmondson, Jr. has been appointed sales manager at Comsonics, Inc. Edmondson was previously principal engineer for Warren Braun, consulting engineers.

Charles G. Perry III has joined Jerrold Electronics Corp. as manager applications engineering.

Paul E. Saulnier has been appointed area communications manager for General Corporation's northeastern sales territory. Saulnier has been a member of the General staff since 1956.

The Magnavox Company, CATV division has announced the creation of a three-pronged organizational structure. Under the new structure, Chris W. Boschen will head the systems sales group; Robert J. Greiner will direct the passive group; Caywood C. Cooley will have responsibility for the terminal access group.

Barry Dobbert has been appointed general operations manager for Midwest Relay Company. Dobbert was formerly technical operations manager for the Wisconsin division. 

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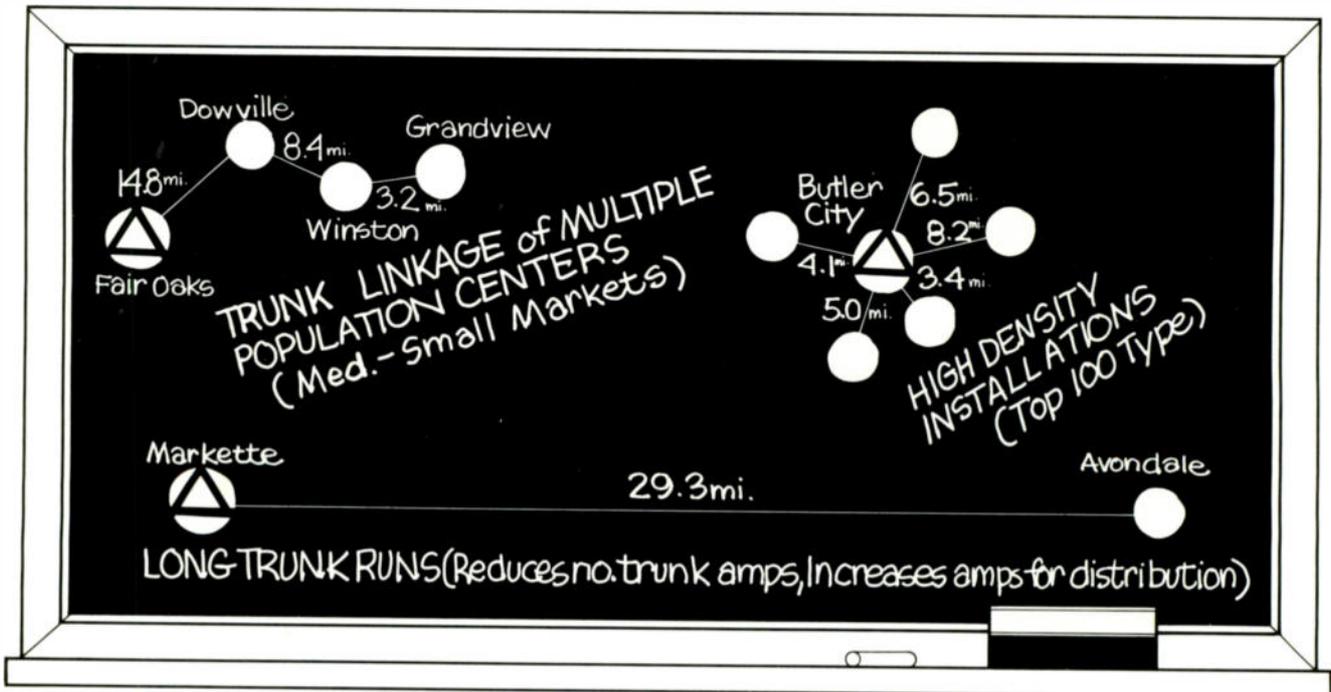
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# CATV News Briefs

A Summary of News from CATV, the Newsweekly of Cable Television

**Senate Communications Sub talks cable with Whitehead, FCC:** Although OTP director Clay T. Whitehead's appearance before Senate Subcommittee on Communications elicited only two questions on cable (on Whitehead's charge that FCC had "frozen" cable, and on "adult" movies on cable), cable was more popular subject during next day's FCC oversight hearing. In case of Whitehead, senators were more interested in Indianapolis speech (CATV 2/26 p3). During course of FCC hearing, Rhode Island's John Pastore, chairman of the subcommittee told Chairman Burch that it was past time that the Commission "put its foot down" on "dirty" pay-cable movies. In answer to other Pastore questions, Burch told subcommittee that he feels that it is unfair that cable systems can carry sports programs into otherwise blacked-out areas, conceded presence of certificate backlog (although adding that rate is "appropriate"), and defended 15-year length of certificates because of capital-intense nature of CATV. (CATV 3/5 p10)

**Court rules cable liable for distant signal copyright:** In deciding appeal brought by CBS in its copyright suit against TelePrompTer, the Second Circuit Court of Appeals has ruled that cable systems are liable for distant signal copyright. Appeals Court upheld other facets of lower courts decision on case (basically, that local reception services, program origination, and interconnection of systems do not, in and of themselves establish a basis for copyright liability). Court remanded decision on actual damages to lower court. Decision of Appeals Court also expressed hope that the copyright situation would be clarified shortly by Congressional action. (CATV 3/19 p7)

**Cable, Common Carrier Bureaus find United "anti-competitive":** In their "proposed finding of law and fact," the FCC's Cable and Common Carrier Bureaus have agreed that United Utilities and affiliated companies acted in an "anti-competitive and monopolistic" manner in Warrensburg, Missouri to keep an independent CATV operator off the poles in favor of a leaseback system. Cable Bureau reported that United should be subject to more stringent sanctions than the dismissal of two 214 applications, but also that Warrensburg Cable, Inc., injured party, had not shown damages adequate to support recovery claims. (CATV 12/26 p7)

**NCTA charges that FCC fees are "neither uniform, fair nor equitable":** Charging that revised fee schedule would overcharge the cable industry by \$1,000,000, the NCTA again protested the proposed FCC fee schedule. NCTA reminded commission that the fee computations that the association submitted in 1971 were ignored, and that consequently the cable industry paid almost 300% of cable-regulation budget allocations. "Commission errors . . . must not be repeated," warned NCTA. (CATV 3/19 p3) NCTA filing followed receipt of "some but not all" of the information that had been sought from the Commission in order to submit full comments on the fee schedule. Letter from John Torbet, FCC executive director, directed the association to sources of some of the information that NCTA had been seeking, and which, NCTA charged, Torbet was withholding. (CATV 2/26 p3)

**NCTA advertising campaign pay off in Columbia, Missouri rejection of municipally-owned system:** Campaign of newspaper and radio ads, sponsored by NCTA, may have had some effect on Columbia, Missouri voters, who, on Feb. 27, rejected municipal bond issue for the construction of city-owned cable system. (CATV 3/5 p3, 3/12 p31)

**Major market franchises pose problems:** A franchise granted to Arlington Telecommunications Corporation by the board of Arlington County, Va., and a recommended franchise award to TelePrompTer by Newark, N.J., may cause problems when applications for certificates reach FCC. Arlington franchise requires 4 per-

# CATV News Briefs

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cent franchise fees; Newark franchise would require 5 percent payment (plus 2% of all advertising revenues). (CATV 3/12 p3)

**Williams bill on tap:** Senator Harrison A. Williams (D-N.J.) is expected to introduce a bill shortly which would establish FCC regulation over cable and outline national policy for commission to follow. Bill would eliminate case-by-case challenges to FCC jurisdiction over cable. (CATV 3/12 p3)

**Boulder franchise awarded to TPT on first reading:** Despite protests from partial owner of system now operating in Boulder, Colorado (TCI is majority owner), the Boulder city council, on first reading, has awarded franchise for city to TelePrompTer. Council was swayed by TPT's apparently greater commitment to local origination, public access and undergrounding. (CATV 3/12 p7)

**Canadian CATV tangles with Bell in hearing:** Presenting testimony to the Canadian Transport Commission, nine CATV firms and the Canadian Cable Television Association accused Bell Canada of using control over its poles to "restrict competition," and "restrain trade," and called Bell actions an "abuse of its public trust." Fundamental issue was whether Bell Canada can continue to deny CATV operators pole attachment agreements other than the Complete System and Partial System Arrangements now in use. (CATV 3/5 p7)

**Franchise renewal fails commission test:** Reasoning that a 15-year franchise with an automatic five year renewal was the equivalent of a 20-year franchise, FCC rejects Leacom's application for certificate of compliance for a proposed Buena Vista, Colorado franchise. (CATV 3/19 p7)

**New center focuses on minority cable:** The Booker T. Washington Foundation has signed a one-year contract for \$300,000 from the Office of Minority Business Enterprise (Dept. of Commerce) to establish the first cable resource center for minority groups. Center begins operation April 1. (CATV 3/19 p7)

**Court rules cable liable for distant signal copyright:** In deciding appeal brought by CBS in its copyright suit against TelePrompTer, the Second Circuit Court of Appeals has ruled that cable systems are liable for distant signal copyright. Appeals Court upheld other facets of lower courts decision on case (basically, that local reception services, program origination, and interconnection of systems do not, in and of themselves establish a basis for copyright liability). Court remanded decision on actual damages to lower court. Decision of Appeals Court also expressed hope that the copyright situation would be clarified shortly by Congressional action. (CATV 3/19 p7)

**FCC approves township certificates:** In two certificate cases for systems where there is no local franchising authority, Commission has again waived certain rules. Cases involved Mahoning Valley Cablevision,

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Inc. and Armstrong Utilities. Certificates are for Ohio Townships, and run until 1977. (CATV 3/12 p12)

**Frankfort's city-owned system snaps back at Norell and NCTA:** In its response to charges of discrimination against private operator Howard Norell, Community Service, Inc., operators of city-owned Frankfort, Ky. system, have charged that Norell has relied on "factual inaccuracies, half-truths, innuendoes and undocumented generalizations" in presenting his case against Community. Response took form of both filing with FCC and letter to NCTA's David Foster. (CATV 3/5 p9)

**Certificate Applications Granted:** During the later part of February and the early part of March, the FCC granted 78 Certificates of Compliance. Listed by state the CAC's are (unless otherwise noted, all Certificates expire 3/31/77):

Alabama: Aliceville, Alabama Television Cable Co., Inc. (CAC-1287).

Arizona: Bisbee and Cochise, Carleton Signal Corp. d/b/a Bisbee CATV (CAC-1252, 1253).

California: San Pablo, Cablecom-General of Northern California, Inc. (CAC-1320); Anselmo, Clear View Cable Systems, Inc. (CAC-1196) through 8/9/76 . . . Ceres and Stanislaus County, Ceres Cable Co., Inc. . . . Fairfax, Clear View Cable Systems, Inc. (CAC-1199) . . . Healdsburg, Cloverdale and Sonoma County, H-C-G Cablevision, Inc. (CAC-1200, 1201, 1202) . . . Kern, McFarland, Delano, Shafter and Wasco, Cypress Cable TV of Kern County, Inc. (CAC-1729 through 1733) . . . Marin, Sonoma County and Petaluma, Tele-Vue Systems, Inc. (CAC-1184, 1185, 1187) . . . Salinas and Serra Village, Central California Communications Corp. (CAC-1301, 1302) . . . San Benancio, Central California Communications Corp. (CAC-1326) . . . San Joaquin County, Big Valley Cablevision, Inc. (CAC-278) . . . Santa Rosa, Total Television of Santa Rosa, Inc. (CAC-1125).

Florida: Holly Hills and Volusia, TelePrompTer of Holly Hill, Inc. (CAC-1295, 1296); Mariana, TelePrompTer Cable Comm. Corp. (CAC-1303).

Georgia: Rome and Floyd, Rome Cable TV Co., Inc. (CAC-635, 636).

Illinois: Mendota, Cable TV Service Co. (CAC-1563) . . . Monmouth and Galesburg, Northwest Illinois TV Cable Co. (CAC-1560, 1561) . . . Peru, Television Transmission Co. (CAC-1562); Wenona, Toluca and Minonk, Tri-County Cable Television Co., Inc. (CAC-895, 896, 897).

Indiana: Huntington, Huntington CATV, Inc. (CAC-1551).

Louisiana: Alexandria and Pineville, Alpine Cable TV, Inc. (CAC-1278, 1279).

Maine: Houlton, Diversified Communications, Inc. (CAC-1308).

Minnesota: Sleepy Eye, Sleepy Eye CATV, Inc. (CAC-1264), good through 7/31/87).

Missouri: Maryville and Boonville, American Television & Communications Corp. dba Maryville Cable TV and Boonville Cable TV (CAC-1289, 1292).

Montana: Miles City, Micro TV, Inc. dba Miles City Cable TV (CAC-771).

New Hampshire: Littleton Diversified Communications, Inc. (CAC-1297).

New Mexico: Raton, Raton TV Network, Inc. (CAC-1172).

# CATV News Briefs

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Ohio: Warren, Mahoning Valley Cablevision, Inc. (CAC-1050).

Oklahoma: Pryor, LVO Cable, Inc. . . . Sulphur, Commco, Inc. (CAC-1260).

Pennsylvania: Archbald Borough, Blakely Borough, Abington Township, Scott Township, South Abington Township, Glenburn Township, Clarks Green Borough, Clarks Summit, Dalton Borough, Factoryville Borough, La Plume Township, Hughestown Borough, Exeter Township, Pittston and West Pittston Borough, Northeastern Pennsylvania TV Cable Co., Inc. (CAC-1423 through 1437) . . . Menallen Township, German Township and Masontown, Video Link, Ltd. (CAC-1321, 1322, 1323); Carmichaels Borough and Nemalcolin, Video Link, Ltd. (CAC-1381, 1382) . . . Rochester, Bridgewater, Beaver, Rochester Township, East Rochester, Vanport Township, Freedom and Monaca, CATV of Pennsylvania, Inc. (CAC-1143 through 1150).

Tennessee: Cleveland, Southeastern Cable Co., Inc. (CAC-1587) . . . Lewisburg, WSML, Inc. (CAC-1633); Red Bank-White Oak, Red Bank-White Oak TV Cable Co. (CAC-1017).

Texas: Grapeland, Gra-Tex Colorvision Co. (CAC-1327); Ozona, Southwest Microwave, Inc. (CAC-940).

**Financial Developments:** TelePrompTer Corporation has reported record earnings of \$12,578,605 for the year ended Dec. 31, 1972 — a gain of 56.6% over the previous year's earnings of \$8,030,221. Per share earnings for the year were 86 cents . . . Burnup & Sims, Inc. has reported record net income of \$3,548,800 or 44 cents per share on revenues of \$62,812,800 for the nine months ended January 31, 1973 . . . Warner Communications Inc. achieved record year-end per share earnings of \$2.20 for 1972. Net income for 1972 totalled \$50,118,000 on revenues of \$510,251,000 . . . Cohu, Inc. has reported for 1972, net sales of \$11,378,987 with net income of \$610,031 (or 40 cents per share) . . . Coral, Inc. has released preliminary, unaudited statement showing record gross sales of \$3,600,000 for the six month period ending January 31, 1973. Report lists income at \$130,000 . . . Oak Industries has reported that net income in 1972 was the second highest in the company's history and that sales set a record. Net income for the year was set at \$2,998,149; sales, \$97,231,396; earnings per share, \$1.62.

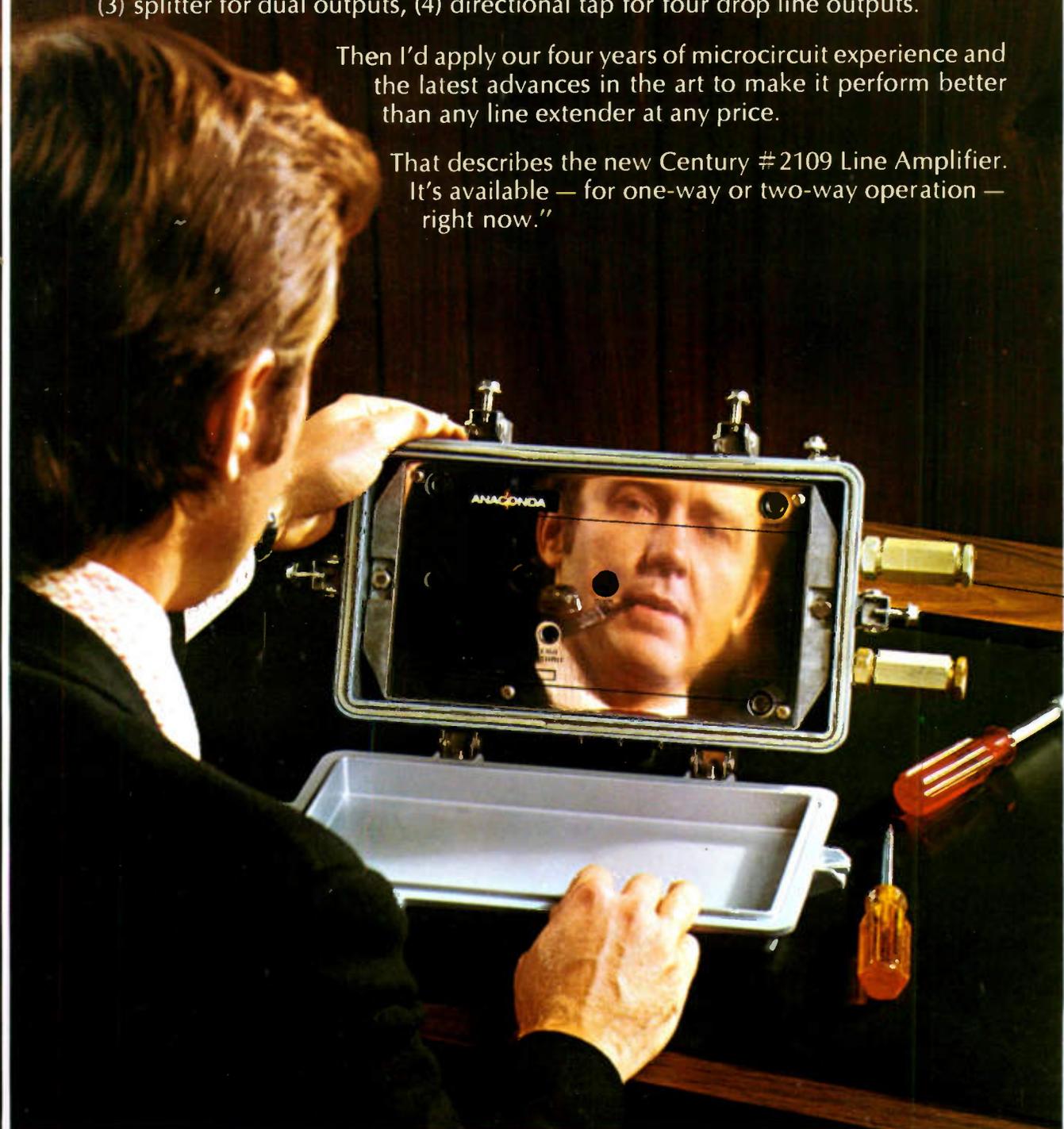
**Franchise Actions:** Robinson Twp., Pa. has signed cable contract with Laubach Radio Cable Television Company of Charleroi. . . Tangipaha Parish (La.) Police jury has approved franchise grant to CSH, Inc. for service to unincorporated areas of parish . . . LVO Cable TV granted extension of franchise until Dec. 31, 1973, by Westlake, La. Extension necessitated by study of best means to serve Westlake, either by underwater cable or by microwave . . . City of Tyler, Tex. has filed briefs appealing Oct. 4, 1972 decision that its franchising ordinance was invalid. LVO, Tyler franchisee, initiated case as result of rate dispute . . . New Lexington, Ohio franchise grant to Perry Cablevision passed on first reading . . . Non-exclusive franchise granted to locally-owned Cable TV, Inc. by Comstock Twp., Mich . . . Princeton, Ind. city council and officials of Telesis Corp. have reached agreement on franchise contract . . . West Des Moines, Iowa city council has approved agreement with Hawkeye Cablevision, Inc. that would require Hawkeye to comply with any future changes in federal regulations. Agreement is addition to franchise ordinance passed by the city council in December . . . Pole agreement and review of 1967 franchise award to Total TV of Janesville, Inc. have been completed by Willoughby Heights, Ohio . . . Metro Cable, Inc. has been awarded franchises by Pipestone and Rosemount, Minn . . . Corvallis (Ore.) TV Cable Co. granted 10-year franchise extension. Original franchise expired Dec. 31, 1972 . . . Florence, Colo. awards franchise to Leacom, Inc. . . . Theta Cable of California has been awarded franchise by South Gate City, Cal. . . Exclusive franchise awarded to Palos Verdes Cable Communications Co. by San Pedro, Cal.

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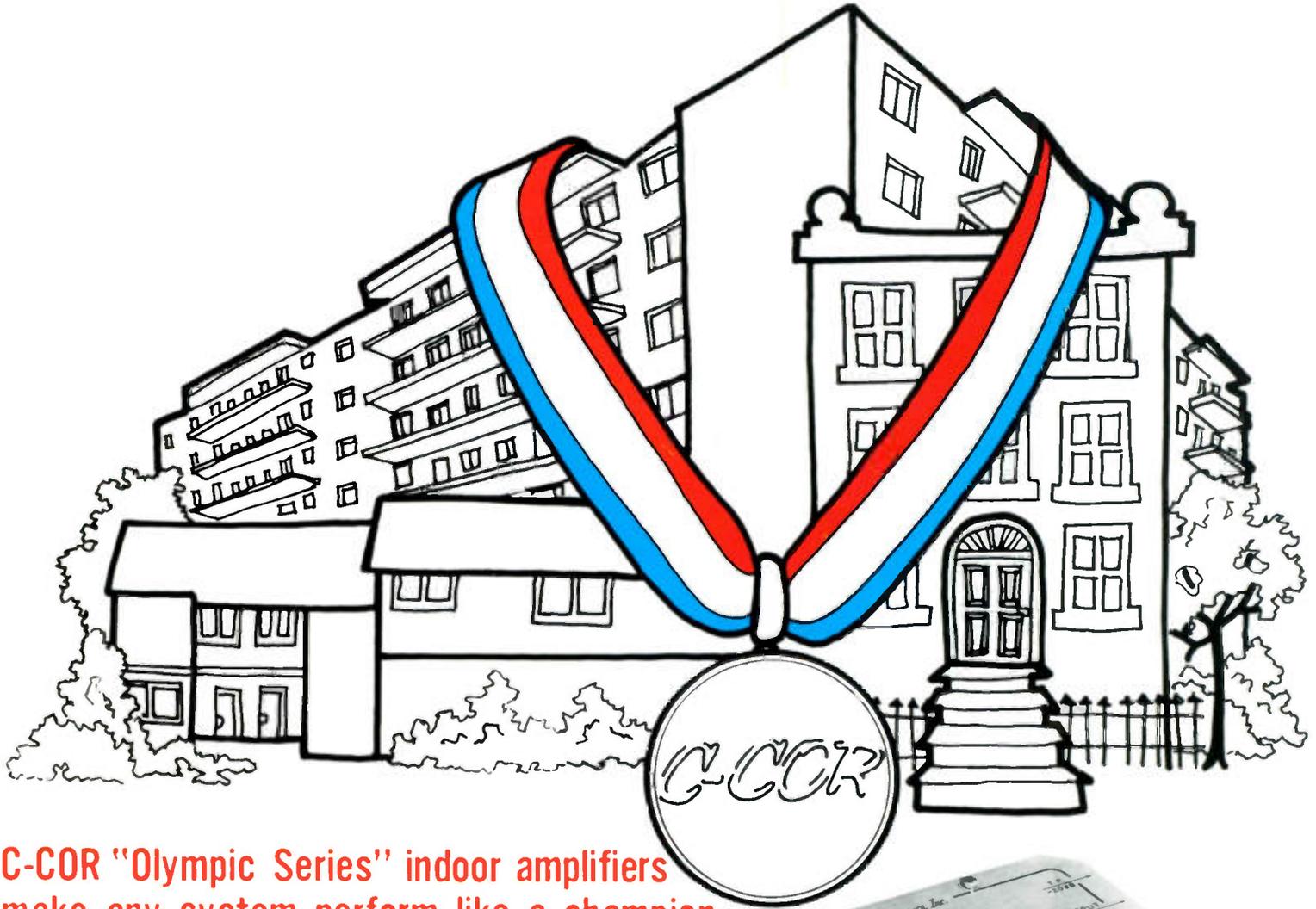
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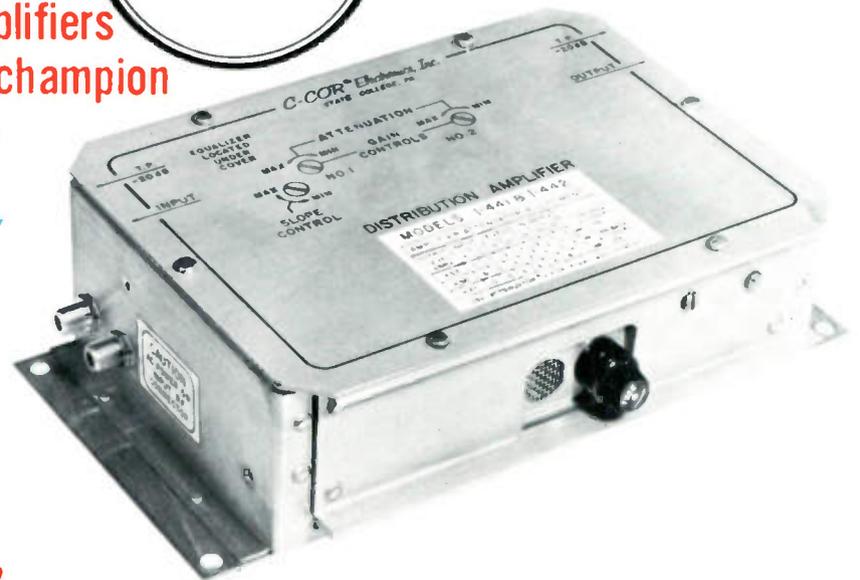


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# Management Guidelines



By Jack Burke  
Associate Editor

## Getting Involved

The transitory nature of a cable system manager's job is an occupational hazard. A manager comes to a town knowing full well that he may be leaving for another system in a year or two. All too often this knowledge results in a feeling that there is no reason to become involved in community affairs.

Such an indifferent attitude, although understandable and more than likely shared by a large portion of the permanent population, could have dire consequences for the long-range well-being of the system.

Consider for example, the date March 31, 1977. All grandfathered franchises, not to mention systems without franchises, will have to have Certificates of Compliance by that date. This could mean that the cable company will be forced to renegotiate a franchise contract with the city fathers.

The city fathers may well be typical of the community in that they know nothing about the problems of running a cable system and their only other input on the subject of cable television is what they see in their living rooms.

The best time to become acquainted with the members of the city council or town board, and with the whole town, while in turn acquainting them with the non-screen reality of cable television, is now. The best means is through involvement in the community. In any number of ways: library commissions, PTAs, coaching little league, charitable fund raising efforts, religious and fraternal organizations, local political parties.

Express an interest in what

other people do, in what is happening in the town. Other people might just be interested in what you do.

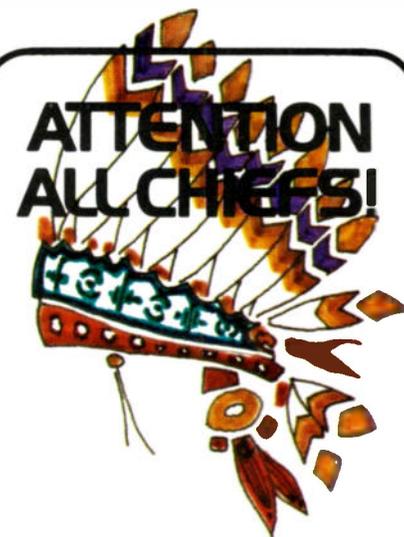
At the very least, the reaction might well be, "Hey there's Joe. Isn't he the guy that runs the cable system?" People will come to realize that there is a human being behind the cable system. (The only other contact that they have probably had was with a repairman, and that meeting may be something less than cordial.)

Such exposure will demonstrate to the public that the community does mean more to the cable system than subscriber fees. It will create a lasting impression that the company wants to be a part in the community, and it might just be an opportunity to get to know people, get them interested in the operation of a cable system.

Above and beyond that, community involvement will have some interesting spinoff benefits. For example maybe there is someone in the PTA who currently is not a subscriber. Or perhaps there is a local group that would like to have a program on your local origination channel. And they know someone who would be interested in advertising. Maybe one of the pillars of your community is presently (or will be someday) in the state legislature. If a bill is introduced to establish state regulation, of cable, it would be great to be able to talk to him on a first name basis.

And there's always the possibility that a little community involvement just might be enjoyable.

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# Cablecasting -- A Cable Manager's View

Buckeye Cablevision's Leo Hoarty brings a system manager's perspective to local origination—yesterday, today and tomorrow.

By Leo Hoarty  
Manager, Buckeye Cablevision  
Toledo, Ohio

In October, 1967, *TV Communications* magazine published an article entitled "National Survey Indicates Major Move Into Cablecasting." The article was a report based on the results of a national cablecasting survey. The article indicated, at that time, 51% of the systems responding to the survey were originating some type of programming (mostly time/weather), and many other systems planned to start and others enlarge their programming activities. That was six years ago.

It is obvious how things have changed over the past years. Origination is no longer a *maybe* possibility, or simply an extra. It is now a major consideration and necessity. The big question, for larger systems, concerning origination today is no longer whether or not to do it, but how to do it.

The system we know best of course, is our own. We believe our Toledo, Ohio system is representative of the change and progress in local origination. The first attempt at Buckeye Cablevision was a live presentation of a lunar eclipse (a lot of people think I'm putting them on when I first tell them that!). It consisted of aiming a camera at the moon and showing the eclipse instead of running the weather dials. While the quality wasn't perfect, and the content didn't hold an audience captive, it was our first attempt to do something different — a small milestone for us at least, which marked the beginning of our local origination.

## Simple, But Effective

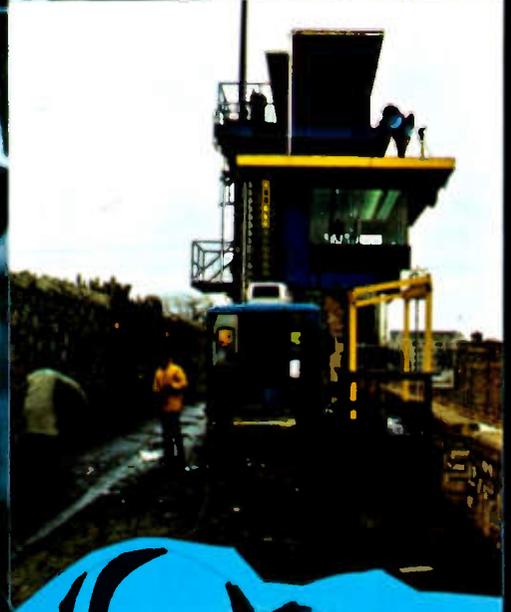
We've done some simple but effective things to enhance our offering to the cable subscribers. An example is a live fish tank full of tropical fish

properly decorated, which we put on one end of the weatherscan when we didn't have anything of special interest to announce. This has proved to be rather popular as is the little automatic drinking duck that dips his beak in a cup of water, fills up and then rares back, and after a few moments, dips his beak back into the cup. Little attempts at live or mechanical animation seem warmer than a dull sign saying "Watch Channel 5." We also have a "wave machine" and we hope to get some electronic gadgets to spice things up in the future.

It was in May, 1967, that we started origination and since then, we have tried to do something in every imaginable category of cablecasting. Our basic guideline has been to do a little extra to make our programming a little different. We began, some time ago, decorating our weather dials according to holiday seasons. For example, Santa Claus and holly during Christmas, eggs and bunnies during Easter and elves and shamrocks on St. Patrick's Day. Every day is some kind of special day and we are considering running a holiday greeting, complete with appropriate visual decorations, every day of the year.

## Programming Progressed

As the industry has progressed, so has our programming. Two and a half years ago, we began running all night movies as a service for our subscribers (and we found a good audience in old persons, disabled persons, shut-ins, second shift workers and insomniacs!). In the summer of 1970, we installed a microwave link between a recreation field and our headend and began live coverage of Toledo's minor league baseball team. This programming effort

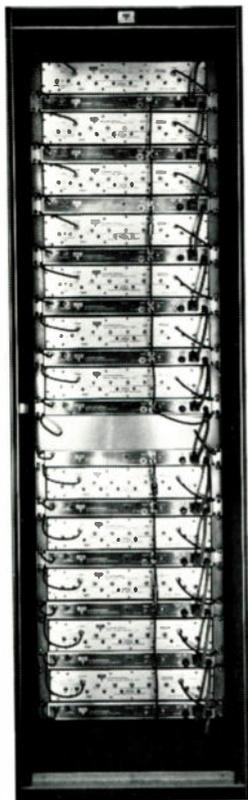


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has been credited with boosting attendance and interest in our home team, besides being one of the first live, sport presentations on a regular basis in cable. Our sports programming has increased to cover the grade school, high school and amateur athletics contests.

In September 1971, a good deal of time and effort was spent producing a "Bridge" show. Not for beginners, the eight show series exemplified the tactics and strategies of Life Master Bridge Players. Concurrent with that, our four-camera, instant replay, isolated camera coverage of high school football played for our Toledo viewers. Following that was high school basketball, also on a multi-camera basis ably directed by Mike O'Conner, Buckeye Cablevision's Program Department Director.

Initially, we moved our studio equipment out in the field to do a remote, but with the increasing frequency of our telecasts and greater confidence we held for the future of origination, it was our decision to outfit a remote truck. Now fully equipped, the truck is scheduled for daily production in the field for special community-oriented programs.

## Even in an Audio Sense

Our audio feeds are also a little different. Besides carrying FM stations, we supply the Voice of America, Radio Moscow, the Toledo Police, the Armed Forces Network, and from time to time, we carry everything from Radio Australia to Radio South America. We are very proud of the fact this attempt has been approved and recognized by the FCC and with good comment by some of the commissioners. We hope we started a national precedent for this. Simply by the addition of a few shortwave receivers, we have provided another extra service to our subscribers.

While we are very proud of our programming in Toledo, it is not our intent in this article to take all the credit for these efforts. The trade magazines have been filled with articles and news releases of programming attempts by many different systems and corporations. Some have been designed specifically according to the local interests. Some have made a profit, some haven't, some would like to, and some never intend to. Even the amount and type of equipment used by the different systems shows the wide variance between the systems.

## Advertising and Programming

Just as I feel there are buyers' and sellers' markets in CATV systems (there are some areas which don't need cable to get reasonable reception, which we call Buyers' Markets), we have the same situation in CATV programming where advertising is concerned. There are buyers' and sellers' markets as far as the programming department goes and its ability to gain revenue from advertising. Naturally, a city such as Findlay, Ohio without a TV station, is somewhat of a sellers' market. The Findlay CATV system, owned by

Continental Cablevision, greatly outgrosses Buckeye Cablevision's Programming Department ad sales — because, here in Toledo, we have two dozen radio stations, a host of television stations, newspapers, billboard companies and a half dozen other types of outfits selling advertising. We also have to spend more money to have a first class presentation on our channel.

The end result is; we are not very viable. It costs us money, and lots of it, to run our Programming Department. Findlay either breaks even or makes a profit, although I should comment that they have gone out of their way and invested large sums to do a first-class job — for which they should be commended.

## Other Guys Do It, Too

The Sterling Manhattan system is representative of one way of doing programming. The operation was highlighted in a TVC article in January, 1972. At that time, program manager John Sanfratello reported his Channel 10 programmed eight hours a day, seven days a week and had quite a few award winning programs. The Sterling operation is complete with a full color studio and heavy use of color 16mm film for programming and commercial use. Sanfratello was quoted, "If you are going to originate programming, high technical quality is a 'must.' From the beginning, we have operated a first-rate studio based on the use of two-inch videotape." Surely an expensive way to do it, but when you are in the country's top market, you have to be first-rate. TelePrompTer's Reno, Nevada system is somewhat similar in their approach. While Reno uses one-inch tape instead of two-inch, top quality in both technical aspects and content is the goal. Reno relies heavily on film packages and supplements this with studio originated local shows.

In terms of technical quality, a public access project in Northwest Ohio can be listed as the other extreme. The project is being conducted by Cypress of Ohio (now Warner Cable after the Warner/Cypress merger). The local coordinator and program director is Gene Kois. This project relies entirely on half-inch, black and white equipment owned by the company or the high school systems in each town. The technical quality isn't high, but the programming is successful. PD Kois says, "These are small, rural, isolated communities that have always been denied access to the media. We wanted some type of programming in them, realizing there was no advertising base to support full-blown origination. So we spread the cost over all the seven systems, gave free access, free use of equipment and free training to anyone who wanted to do something and the results have been great."

## "Smaller Stuff Is So Easy"

Kois feels larger, more sophisticated equipment probably would not even work in this project. "It would be nice," he adds, "but this smaller stuff is so

TV Communications

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Blonder-Tongue makes the finest custom-designed headends and makes sure that the signal that gets to the headend is in the best possible shape. For complete CATV product catalog, write: Blonder-Tongue Laboratories, Inc., Old Bridge, N.J. 08857. (201) 679-4010.

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BLONDER-TONGUE LABORATORIES, INC. OLD BRIDGE, NEW JERSEY 08857

# LOCAL ORINATION PROBLEMS?



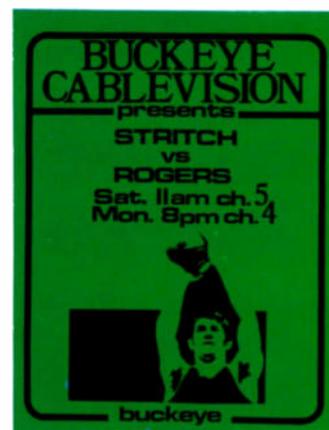
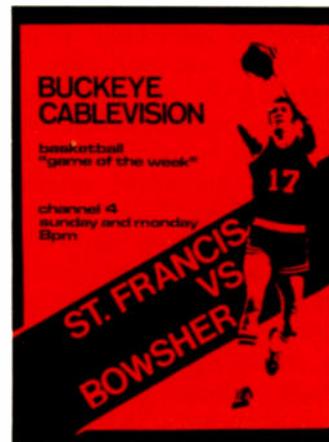
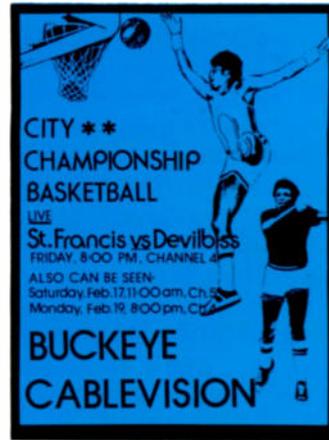
Are you trying to decide which weather scan or what studio equipment to invest in? While you are trying to decide, remember these three things:

1. R.H. Tyler Company is the originator of weather scan equipment for CATV.
2. R.H. Tyler Company can fill all your studio equipment needs whether they be black & white or full color.
3. The next time you have a question or a need for any origination equipment, **THINK R.H. Tyler Company!**

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*Examples  
of Buckeye  
CableVision  
promotional  
posters.*



easy to use, it's unbelievable. I've seen shows produced by 14 year old students that have been great. And after we run a program, I've never had anyone from the audience call me and say, 'Did you know you had a little dropout?' or 'Your noise level was high.' The emphasis here is on content and getting local people involved."

It seems every system is individualized in terms of approach, presentation and equipment. My observation seems to indicate that the programming departments of CATV systems which narrow-cast are doing the best job. There is a tendency among CATV program people to imitate television stations and to try and talk and act like they are television station producers, network producers, directors, etc. This is self-defeating — we are not equivalent to television stations and cannot compete until we get into the very highest of numbers, such as the systems in New York might do. But even then, the biggest CATV system in the country, at best, would be equivalent to a minor market UHF station in audience and ratings.

### Not "Anybody's TV Station"

We here in Toledo are not trying to be anybody's television station. Instead we are trying to fill the gap and serve the community in ways that the local television stations cannot or will not attempt. We do not go after ratings; we couldn't get them if we did make that attempt and our hopes and dreams are to please hundreds of small groups of people because to our system, all of them are potential customers for the rest of their lives.

One other thing that we've set as our creed, is to try to do quality up to a point, but not to over-reach ourselves. It doesn't do any good at all to over-reach the budget and look fancy when we really couldn't match the quality of network or top-market television station production in any event. We try not to look amateurish or sloppy, but at the same time, we have our eye on the meat of the coconut and not the

TV Communications

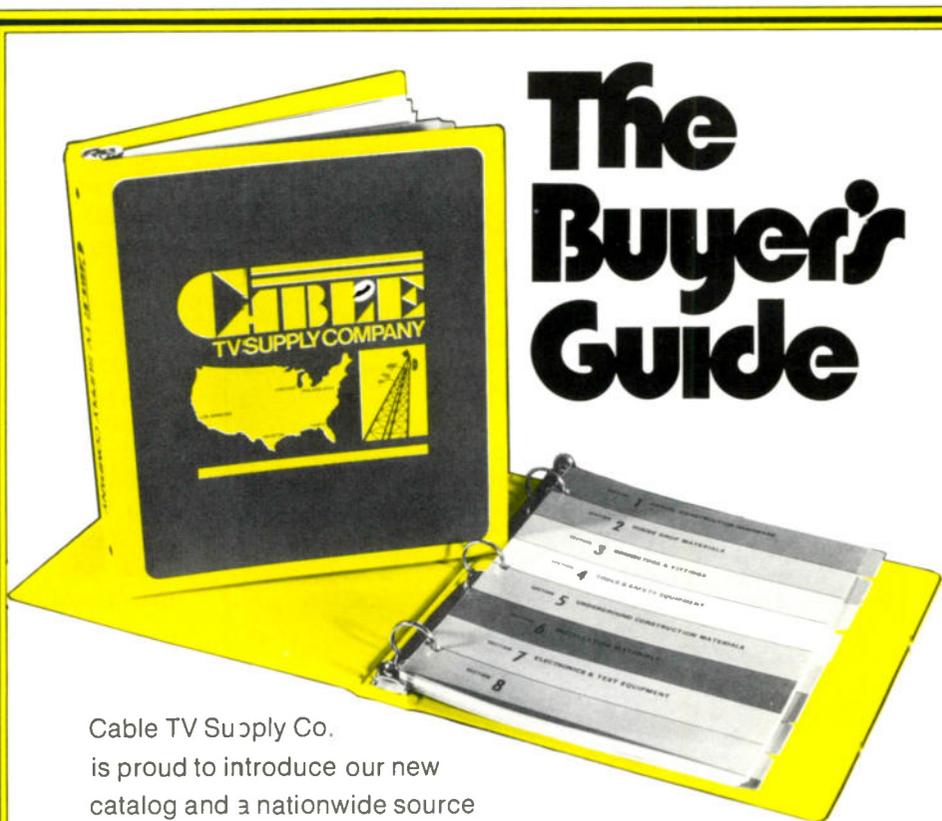
Buckeye  
Bingo



wrapper.

What is the right way to do programming, or can that even be

answered? Film or videotape? Half-inch, one-inch, two-inch, 8 mm, 16 mm? What is right?



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Cablecasters can offer more variety, attract more viewers. It's adaptable. And . . . you can get ready-made cards and slides from WEATHEREYE, the full service system.



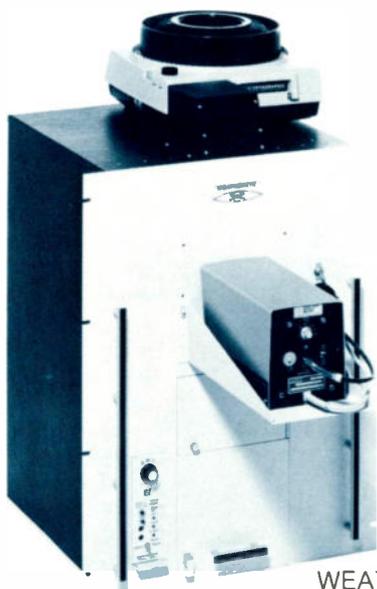
With WEATHEREYE, you can use cards, simple graphics, photographs, and slides. And that means more advertising dollars. Sell single or multiples. Your advertiser chooses the number that is best for him. WEATHEREYE pays for your investment and makes a profit the first year.



With WEATHEREYE, you give viewers up-to-the-second information on time and weather. Automatically. Around-the-clock.



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WEATHEREYE

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Should you try to make a profit right at the start? Can you never make a profit and still do good programming? What is the best way; syndicated tapes, networking, or locally produced shows? Is there a basic, overall answer, or at least, some guidelines based on experience?

I suggest there might be, but we in the industry might be missing it.

## One Manager's Opinion

I know there has been a lot of argument over this point, but I'm more or less of the belief that the one inch videotape is going to win out in the end.

It might be like the old saying that we communicators are failing to communicate with each other. If a program director reads about someone else's attempt in a trade magazine, for example, and he tries to implement it in his system and it fails, what has he learned then? It's doubtful that the article could have conveyed all the problems, solutions, and details needed to make the attempt successful. How is this information to be gotten?

I've asked quite a few questions in the last few paragraphs, and in all honesty, don't have the answers. We look for them like a lot of other managers and program directors. I do suggest though, that the industry needs emphasis in this area, but this doesn't mean another association made up of programmers, or another convention with complete emphasis on programming. But rather, integration into the present NCTA structure. Some of the NCTA programming seminars have met with some success, as have some of the seminars put on by different manufacturers.

## It Is the Wave of the Future

But we need to reorganize our thinking in this area and come up with a good, workable plan to help local origination and programming progress industrywide. One possibility could be a separate division right in the NCTA, complete with a small staff, funding, and responsibilities concerned solely with cablecasting. It would be their duty to make sure the programming aspect of the national convention would be truly meaningful with the right mix of hardware and software displays, panels and discussion, and idea exchange. Plus, and more importantly, they would insure this idea exchange would become an ongoing thing, continuing throughout the year.

It has been called the Wave of the Future, and almost everyone realizes the programming potential of cable is limitless. But let's stop talking about it and find the ways to do it. Let's stop stumbling in the dark and move together to work out the details. Let's get there sooner, but let's do it right. NCTA can really take on a leadership role in accomplishing this task, but it is our duty as managers and programmers to carry it out.



# THE CATV INSURERS

BACK IN 1962 the National Community Television Association requested that we write the CATV industry's first total insurance protection plan.

We designed that plan, and in the decade since have continued to improve and refine it.

Today we know CATV insurance like no one else knows it—from copyright liability to pole attachment and franchise bonds. And *all risk policies* are standard with us, with *full replacement cost* guaranteed.

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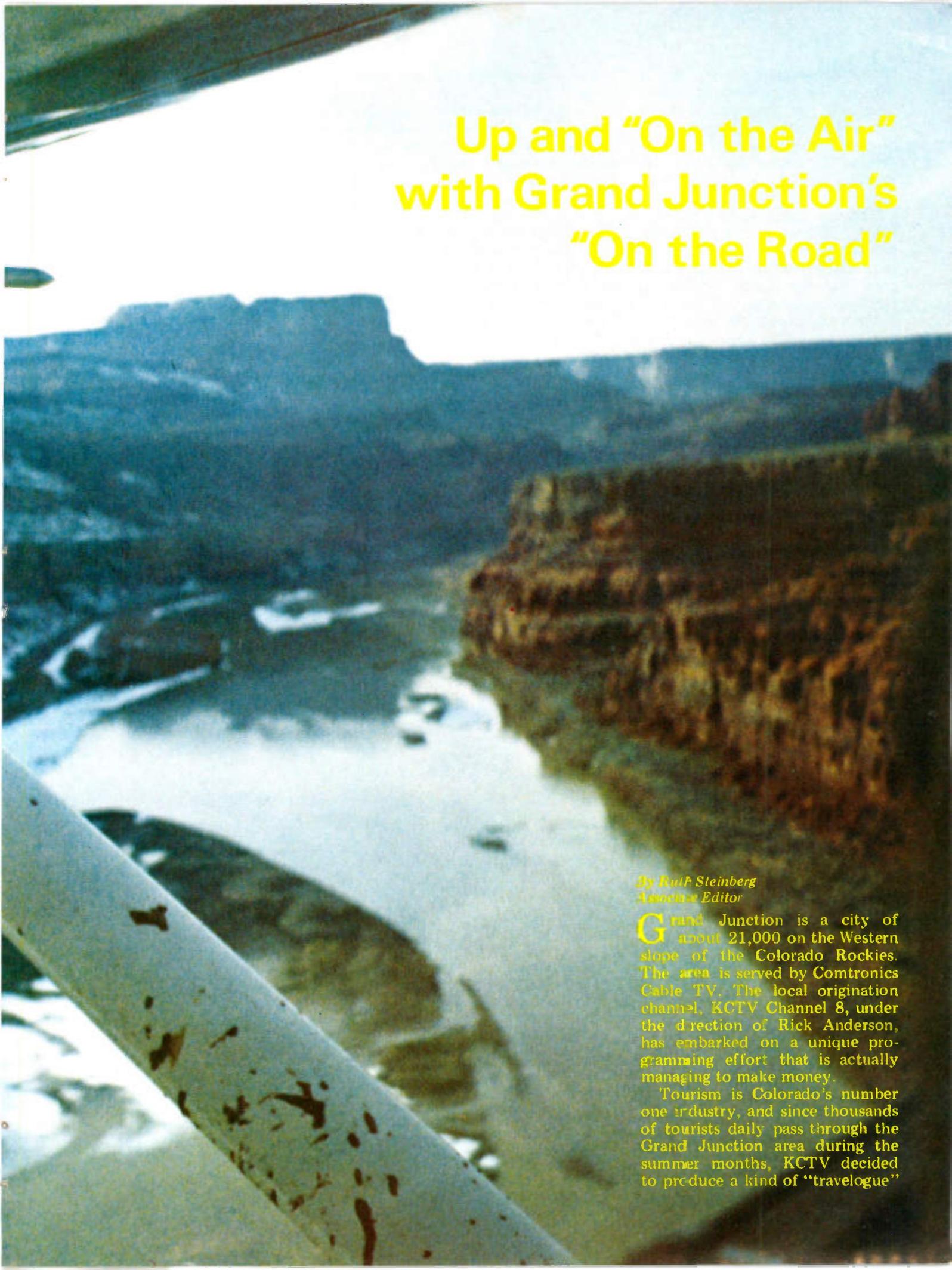
YES, I'd like to visit with someone who really *understands* CATV insurance. (And I understand that you can participate with my broker.) Please get in touch.

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ADDRESS \_\_\_\_\_ PHONE \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_





## Up and "On the Air" with Grand Junction's "On the Road"

*By Burt Steinberg  
Associate Editor*

**G**rand Junction is a city of about 21,000 on the Western slope of the Colorado Rockies. The area is served by Comtronics Cable TV. The local origination channel, KCTV Channel 8, under the direction of Rick Anderson, has embarked on a unique programming effort that is actually managing to make money.

Tourism is Colorado's number one industry, and since thousands of tourists daily pass through the Grand Junction area during the summer months, KCTV decided to produce a kind of "travelogue"

to better acquaint these tourists with nearby attractions. By selling time on the program to local businessmen, the cable system has been able to produce the film and provide a service to both the tourists and the local businesses which cater to their needs.

The travelogue entitled "On the Road," is now in its third year, and has grown to include not only the immediate Grand Junction area, but the Moab, Utah area (entrance to Canyonlands National Park) about 110 miles west of Grand Junction, and the Aspen-Glenwood Springs area, about 100 miles east. The two and a half hour film, shot with a super-8 movie camera, is shown every morning and every evening over cable Channel 8 throughout the summer months.

### Sponsors First, Film Second

Rick Anderson, program manager at Comtronics Cable, explained to *TV Communications* how he made the film: "The first

step is to go out and get sponsors."

Some of the obvious and not-so-obvious sponsors to include are service stations (or one nationally-known chain), restaurants, a 24-hour grocery store, a sporting goods store, gift shops, and a drug store for suntan lotion, band-aids, etc. Other sponsors might include family fun parks, cycle and boat rental dealers, bowling alleys, local movies and drive-ins, golf courses, and clothing stores, especially if they specialize in a particular type of clothing such as western or swimwear.

These sponsors are intermingled with the main attractions in the film — which include four-wheel drive tours into the wilderness area, chuck wagon barbeques, Colorado river trips of all kinds (including jet boats, rubber rafts, and a genuine sternwheeler), horseback trail rides, lodges and guest ranches, and auto and cycle racing tracks. Another portion of the film includes a capsule summary of the family recreation facilities available in Grand Junction

itself: the downtown shopping area with its unique "flower-boxed" streets, city parks, golf courses, tennis courts, and swimming facilities.

### Non-Commercial

Rick explained that he lined up the featured sponsors before he approached the restaurants, gift shops, etc. "We tried to keep the film as non-commercial as possible. If the bigger tourist attractions had not been willing to participate, we would have been left with nothing but strictly commercial material."

"When we made the Canyonlands film, it took us four days to line up \$5,000 worth of advertising. The cost per sponsor was \$300. When you figure that we ran the film twice a day for approximately 100 days, you can see that we were really offering these people quite a deal.

"After we lined up the sponsors, we set up a filming schedule. In Moab, Utah, we shot for eight days to come up with one hour's worth of film. One other good sponsor to consider approaching is a local car dealership for camper and motor home rentals. Our local Chevy dealership furnished us with a one-ton chassis mount camper for our filming trip to Moab."

### Into the Studio

After all the filming was completed, the film was edited. "Our ratio of film shot to film used was about three or four to one." Rick explained. The film was put together without the obviously commercial content first. "If we have nine sponsors, then we'll make three breaks in the film for triple spots. We tried to end up with 58 minutes or so, including the introduction and the close."

Scripting the film was probably the most tedious part of the production. The writer had to go through the film several times before coming up with a finished product. After the script was written, the film was dubbed onto videotape.

Dubbing in the audio portion

We're Not Entirely **Square** And...

We're Not Running "Round" in Circles

but...

We have 360° of workable area in our economy enclosures and to prove it we're introducing the

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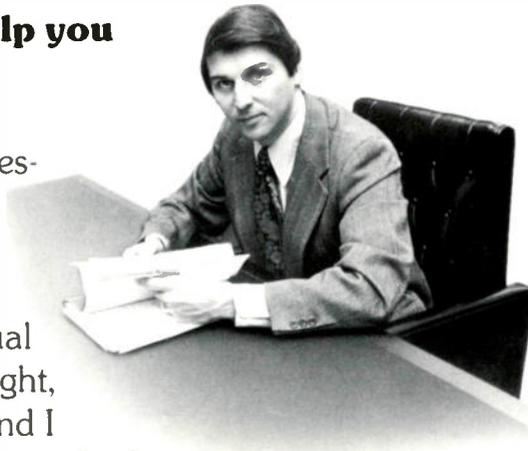
A FULL SIZE RECTANGULAR (INSIDE DIMENSION 4" x 5") PEDESTAL 11" IN HEIGHT SHIPPED COMPLETE WITH ALL HARDWARE AND WARNING DECAL

A FULL SIZE 6 INCH DIAMETER PEDESTAL 12 INCHES IN HEIGHT SHIPPED COMPLETE WITH ALL HARDWARE AND WARNING DECAL

# At Magnavox we're concerned about Cable TV

**and I want to help you  
personally.**

My name is Dan Mezzalingua. I'm president of Magnavox' CATV Division and I'd like to talk to you about our mutual problems. Day or night, weekdays or weekend I want to hear from you, whether it's good news or something we've done wrong. After all, we're in this industry together.



A special toll-free WATS hot-line has been installed in my office to answer your questions about our business, our products, our people and even our faults.

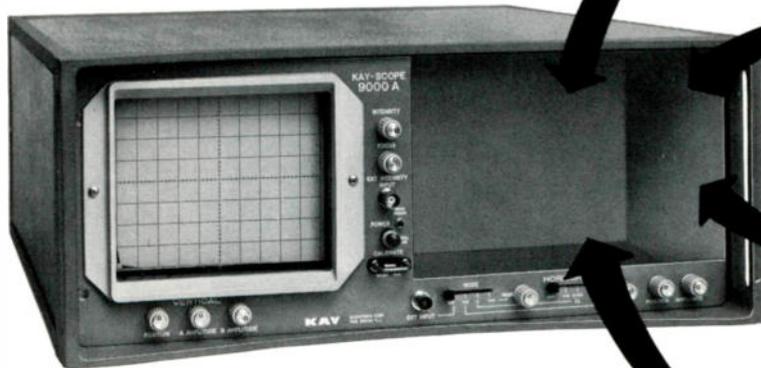
At night your call will be recorded for action first thing the next morning. If I don't know the answer to your query, the person best suited to will get back to you fast. In fact, you'll be meeting a number of our top people here in these pages over the next few months. **Please, let's communicate. We can both benefit by it.**

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**Magnavox**  
catv division

The  
**performance**  
 is in the  
**proof.**



The P9020A



The P9030A



The P9040A



The P9059A

And the proof is faster,  
 easier, more economical  
 with **Kay's** modular  
 solid-state **CATV test set.**

The new Kay Series 9000 CATV test set offers a completely new approach to system testing: a basic storage scope main frame with low cost plug-ins for summation sweep testing, spectrum analysis, loss and return loss measurements and bench alignment.

The unique design permits the addition of future test modules at relatively low cost with no sacrifice in quality. Add whatever you want, whenever you want it.

The **P9020A** is a VHF summation sweep receiver. It features a 40 db post amp, a 42 db attenuator, harmonic markers, a built-in detector and a variable tilt control.

The **P9030A** plugs into the same main frame for measurement of gain, loss and return loss of active and passive devices. It includes precision .25 db attenuators, an electronic switcher, repeatable bridge and RF detector.

The **P9040A** is a low-cost spectrum analyzer plug-in, covering the range from 500 KHz-300MHz. It offers a 70 db dynamic range, digital IF attenuator, digital center frequency readout and built-in frequency and level calibration.

The **P9059A** is a low-cost solid-state sweeper plug-in covering the 1-300 MHz range. Designed primarily as a head end sweeper, it may be removed from the head end rack and installed in the main frame for amplifier alignment.

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was another painstaking job that required excellent timing and concentration. "You really need a large selection of music to choose from. Luckily, we were able to use the local radio station's music library," Rick said. The script was recorded on reel-to-reel tape first. Pauses were included on the tape where they were needed for fading the music in and out. Then the music and the audio portion were dubbed simultaneously onto the video tape. The two-hour films on the Grand Junction and Moab, Utah areas, and the one-half hour film on the Aspen-Glenwood Springs area were all done in this manner.

"We run a pretty heavy advertising and marketing campaign for the film the first week it is shown every summer. That includes local newspaper ads, and distributing promo cards to every hotel and motel room in Grand Junction," explained Rick. "We like to run a trade-out with the local radio stations, too. We advertise the local station in the travelogue in return for five spots about the show on

their station every afternoon seven days a week."

Rick estimates that it cost Comtronics Cable TV about \$2,000 to make "On the Road" the first year. Last year, Comtronics generated approximately \$12,000 worth of advertising revenue from the film... and that's not a bad return.

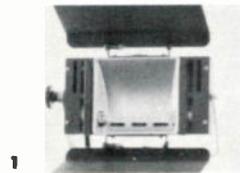
## Biggest Problems

TV Communications asked Jack Bennett, chief technician at Comtronics Cable TV, what he considered were the biggest technical problems encountered in making the film. According to Jack, there were two main problems. First, they had problems getting enough light out of a Super 8 projector (it has only a 150 watt bulb, and its rear-projection lowers the light level even more). They solved this problem by borrowing a plumbicon tube Sony camera, and by using an Ektalight Kodak projection screen. The second problem had to do with

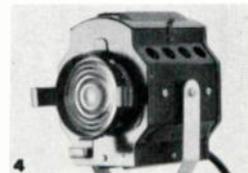
the non-compatibility of the Super 8 camera to the video tape recorder. Through experimentation, they finally found a movie camera off-sync enough to run at 15 frames per second, which was compatible with the 30 frames per second of the VTR. That was three years ago. Now you can buy Super 8 equipment that is compatible with videotape, so that the once inherent incompatibility no longer exists.

In addition to the revenue which was earned, the "On the Road" project generated general support for the cable company. Dale J. Hollingsworth, manager of the Grand Junction Chamber of Commerce wrote: "... From personal experience of travelers calling and visiting our office, we know of the value of 'On the Road.' It was a most innovative idea, the filming was first-class, and the promotional effect locally to gain viewers was very well done. We are pleased to have this wonderful program... available to our citizens and visitors to our community." [VVC]

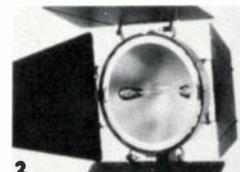
## CUT CABLECASTING COSTS with BARDWELL & McALISTER LOCAL ORIGINATION LIGHTING



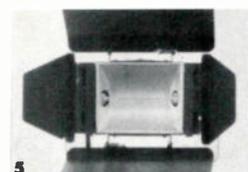
**1 BASE OR BACKLIGHT**  
B&M "Mini-Set" base or backlight illuminates cyclorama with wide, flat, even light. Uses 1000W, 110V, 3200°K quartz lamps and includes barndoors and cable.\*  
6½" x 2½" x 3½"  
3 LBS. .... ONLY \$58.50



**4 KEYLIGHT**  
B&M "Tiny-Mac" spot to flood Fresnel key spotlight for special effects lighting. Uses 150W, 200W or 250W, 110V quartz lamps. Includes cable.\*  
6" x 6" x 6"  
¾ LBS. .... ONLY \$43.00



**2 SUPER FLOODLIGHT**  
B&M "Slimline II" super floodlight for maximum even flood or fill light. Takes 1000W, 1500W or 2000W, 110V, 3200°K quartz lamps and includes barndoors and cable.\*  
12½" x 10½" x 3½"  
3¾ LBS. .... ONLY \$84.50



**5 FLOOD AND FILL-LIGHT**  
B&M "Mini-Mac" flood and fill light for all general purpose broad flood, fill or back lighting. 650W or 1000W, 110V, 3200°K quartz lamp models. Includes barndoors and cables.\*  
"650" sizes: 7" x 4¾" x 2¼"  
3 LBS. .... ONLY \$49.50  
"1000" size: 9" x 4¾" x 2¼"  
4 LBS. .... ONLY \$55.00  
B&M CHANNEL LEG STANDS (41" to 106" extended)  
..... ONLY \$37.50  
\*Lamps and Accessories Extra



**3 SPOTLIGHT**  
B&M "Baby Keg" spot to flood Fresnel spotlight for all-purpose spot modeling. Accepts 500W, 750W or 1000W, 110V 3200°K quartz lamps. Includes cable.\*  
11" x 13" x 10"  
12½ LBS. .... ONLY \$108.50

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SEE US AT BOOTH #204, NCTA SHOW, 17-20 JUNE, 1973. ANAHEIM CONVENTION CENTER, ANAHEIM, CALIF.

Can a CATV franchise holder find success and happiness in rabbit ear country? It appears the answer just might be yes.

An enterprising Seattle firm with expertise in computer technology has moved in the direction of solving the problem of selling cable service to metropolitan (high population density) areas that have good signal reception. Consider the record of success achieved by a franchise serving a bedroom community next door to Seattle, Washington.

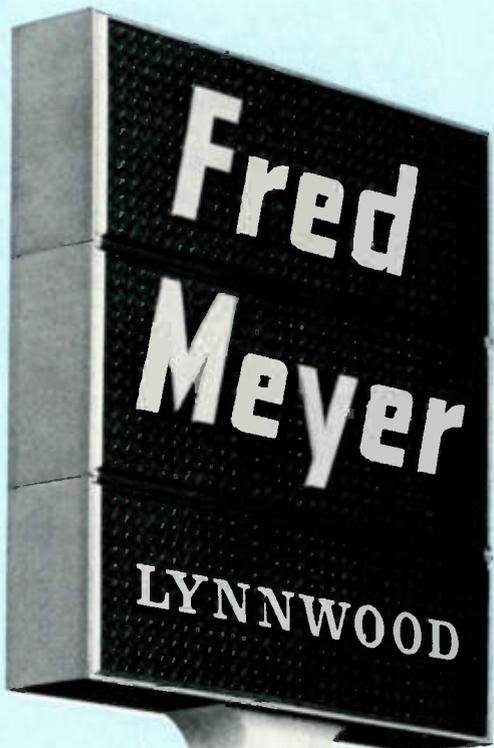
Fifty percent penetration *and retention* in rabbit ear country. The franchisee is Lynnwood Cablevision, Lynnwood, Washington. They are offering a new,

unique 30 channel package. The manufacturer and developer of this new CATV package is MetroData Corp. of Seattle.

The key to the system is an 18-channel supplement to normal 12-channel operation. Perhaps best described as an "electronic newspaper," the 18 channels display various categories of news, sports scores, weather forecasts, etc., as the information comes directly off the national or local wire services.

The MetroData system, which the company plans to market nationwide to CATV owners, delivers up to 30-channels of programming into the home.

To dramatize the eye-opening economics of this



**"...We Have Access  
To Anything  
We Want to Know."**

So says one subscriber to Lynnwood Cablevision's electronic newspaper—the proliferating channels have invaded traditionally rabbit ears country.



**LYNNWOOD CABLEVISION CHANNEL INDEX**

3-CRVT	14-NEWS	24-NEWS
3-LOCAL	14-HEADLINES	24-SON
4-KRNO	15-DETAILS	25-NEWS
5-LOCAL	16-REGIONS	26-PUBLIC
6-CRVT	17-LOCAL	26-CITY
7-KRNO	18-SPORTS	27-NEWS
8-SON	19-NEWS	27-NEWS
9-KCTS	19-SCORES	28-SPORTS
10-P. 8.	20-DETAILS	28-NEWS
11-NEWS	21-NEWS	29-NEWS
12-NEWS	22-CURRENT	29-NEWS
13-TV	23-FORECAST	30-CABLE
	23-RECREATION	HERE

Channel 1  
Channel Guide

**IMPORTANT NOTICE**

THIS CHANNEL HAS BEEN RESERVED FOR PROGRAMMING FROM COLUMBIA.

APPROVAL FROM THE FEDERAL COMMUNICATIONS COMMISSION TO BRING YOU THIS ADDITIONAL CHANNEL IS EXPECTED SOON.

CONTINUE TO CHECK THIS CHANNEL FOR FURTHER DEVELOPMENTS.

CABLE SUBSCRIBERS: SERVICE SERVICE CALLS OR CALL 775-4362

Channel 2  
in lieu of  
CBUT Vancouver

**ARE YOU PAYING TOO MUCH INCOME TAX?**

**TAX ADVISORS INSTITUTE**

LET US SAVE YOU MANY \$\$\$

Call for an appointment in your home

743-3437

Channel 3  
L/O



Channel 4  
KOMO Seattle  
ABC Affiliate



Channel 5  
KING Seattle  
NBC Affiliate

**IMPORTANT NOTICE**

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APPROVAL FROM THE FEDERAL COMMUNICATIONS COMMISSION TO BRING YOU THIS ADDITIONAL CHANNEL IS EXPECTED SOON.

CONTINUE TO CHECK THIS CHANNEL FOR FURTHER DEVELOPMENTS.

CABLE SUBSCRIBERS: SERVICE SERVICE CALLS OR CALL 775-4362

Channel 6  
in lieu of  
CHEK Victoria



Channel 7  
KRO Seattle  
CBC Affiliate

**IMPORTANT NOTICE**

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APPROVAL FROM THE FEDERAL COMMUNICATIONS COMMISSION TO BRING YOU THIS ADDITIONAL CHANNEL IS EXPECTED SOON.

CONTINUE TO CHECK THIS CHANNEL FOR FURTHER DEVELOPMENTS.

CABLE SUBSCRIBERS: SERVICE SERVICE CALLS OR CALL 775-4362

Channel 8  
in lieu of  
CHAN Vancouver



Channel 9  
KCTS Seattle  
Educational



Channel 10  
KTPS Tacoma  
PBS/Educational



Channel 11  
KTNT Tacoma  
Independent



Channel 12  
KVDQ Bellingham  
Independent



Channel 13  
KTVN Tacoma  
Independent

FROM LYNNWOOD TELEVISION--  
THE TOP 5 GAMES OF THE WEEK

RELEASED AMERICAN PRISONERS BEGAN TELEPHONIC RELATIVES TODAY FROM JAIL QUARTERS IN CAMP 525 NEAR THE PHILIPPINES. PART OF "OPERATION ENDURING FREEDOM" FOR THE HIGH SEAS CAPTURED FOR 50 YEAR.

ONE-HUNDRED-42 RELEASED MEN ARE AT CAMP 525 IN PHON

Channel 14  
HacLine News

LYNNWOOD CABLEVISION BRINGS YOU THE NEWS

OPERATION "HOMECOMING" IS UNDER WAY... AND 112 AMERICANS ARE FREE.

THE BIG STORY OF THIS DAY. THE DETAILS OF THAT STORY--AND OTHER NEWS--FROM UNITED PRESS INTERNATIONAL.

(CLANK AIR FORCE BARR)--  
THEY'RE COMING HOME...

Channel 15  
World News

FROM LYNNWOOD CABLEVISION--  
THESE WORTHY STORIES

A SCIENTIFIC REPORT SAYS EIGHTY-THOUSAND NEW CASES OF SKIN CANCER COULD BE CAUSED ANNUALLY IN THE UNITED STATES IF JET EXPOSURE FROM

Channel 16  
Regional News

PAGE 5- PAST REPORT 2/12/73 RE ROUNDS BAKER

TEMPERATURE: 21 DEGREES

WEATHER-BROOK CLOUDS

CONNECT OVER AND ICE ON THE ROADWAY.

OR USE WITH CARE  
SEE LYNNWOOD CABLEVISION 775-4362

Channel 17  
Local News

THE TOP SPORTS STORIES FROM LYNNWOOD CABLEVISION--

THE BUILDER OF M-C-L-A ONE OF THE BEST YOUTH ATHLETIC FACILITIES AND PLANNED TO RUN THIS WINTER TO GO.

PREMIERE COACH BOY PRICHAKA, WHO ONCE SERVED FIVE YEARS IN THE LAZ BARRACKS, IS RETURNING TO WORK UNDER A NEWLY NAMED HEAD AND COACH BOY.

A SPOKESMAN FOR THE

Channel 18  
Sports Headlines

LYNNWOOD CABLEVISION SCOREBOARD

ALL	22	11	11	11	11
BAR	20	10	10	10	10
CHC	20	10	10	10	10
DET	20	10	10	10	10
MIN	20	10	10	10	10
SEA	20	10	10	10	10
STL	20	10	10	10	10
WAS	20	10	10	10	10
WSD	20	10	10	10	10
WVA	20	10	10	10	10
WYV	20	10	10	10	10

Channel 19  
Sports Scoreboard

THE TOP SPORTS STORIES FROM LYNNWOOD CABLEVISION--

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A SPOKESMAN FOR THE

Channel 20  
Sports Details

12:27:31 PM MON FEB 12 '73 - 3 P  
CURRENT CONDITIONS

HERE IS THE SEATTLE TACOMA AIRPORT WEATHER AS OF 11:40 AM: OBSERVED TEMPERATURE 42; DEW POINT 33; HUMIDITY 73 PER CENT; WINDS NORTH AT 6 MPH, BARRIQUETS 20 TO 30 AND RISING; LOCAL WEATHER IS BREEZY CLOUDS; TEMPERATURE 43; WINDS MATCH CHANNEL 23 FOR THE LATEST DEPARTMENT STORE SPECIALS FROM

OR FRED RIVER 81

Channel 21  
Current Weather

THE FORECAST FOR LYNNWOOD AND VICINITY--CLOUDS AND A CLIMBER AND IN COMPANY OF A FEW SCATTERED SNOWS, PROB. AND YOUNG, MOSTLY CLEAR TUESDAY WITH WATCY WINDS FOR NIGHTS BOTH DAYS IN THE UPPER 400. LOWS IN THE MID 30S. VARIABLE WINDS FROM E TO SE WIND TODAY AND TRICKY CHANGES OF MEASURABLE PRECIPITATION IS 30

Channel 22  
Local Forecast

FROM LYNNWOOD CABLEVISION--  
MORNING CASCADE 811 REPORT

REAS AGREE--SCATTERED CLOUDS--20 DEGREES, ONE INCH OF SNOW FROM

SIGNALS THE BARRY--HIGH CLOUDS 75 DEGREES, ONE INCH OF SNOW

WINTER PAST--FORECAST, 30 DEGREES, A TRACE OF SNOW FROM YODLIN--CLOUDY, 27 DEGREES

Channel 23  
Recreational Weather

FROM LYNNWOOD CABLEVISION--  
FIFTH FINANCIAL HEADLINES

PLEASE ON THE NEW YORK STOCK EXCHANGE CONTINUE RISES. ABOVE THE 1000S ARE LEADING DECLINES BY NEW YORK FROM TWO-TO-ONE

THE SPEAR MARKET REPORT SAYS FAVORABLE ECONOMIC DEVELOPMENTS WILL BEGETH AS THE DOMINANT INFLUENCE AND PROVIDE A SOLID

Channel 24  
Financial News

5756 5756... 5756 5756

ALL 2 24-3	LEF 2 24-3
BAR 2 24-3	REC 2 24-3
CHC 2 24-3	SEA 2 24-3
DET 2 24-3	STL 2 24-3
MIN 2 24-3	WAS 2 24-3
SEA 2 24-3	WVA 2 24-3
STL 2 24-3	WYV 2 24-3
WAS 2 24-3	
WVA 2 24-3	
WYV 2 24-3	

Channel 25  
Financial Quotes

CITY OF LYNNWOOD  
AGENDA FOR THE CITY COUNCIL MEETING, FEBRUARY 12, 1973, 7:30 PM

PUBLIC HEARING  
WACATING 300TH STREET PLAN  
APPROVAL-APPROPRIATE COMP. PLAN  
RECALCULATING BOUNDARIES, ETC.  
AND CITY ANNOUNCES  
WACATING 300TH STREET PLAN  
PUBLIC HEARING  
INTERNATIONAL BROTHERHOOD  
TOPICS PROGRAM  
BIRTH-CORPORATE & PUBL. WIL. 1973  
REC. ADMINISTRATIVE ITEMS

Channel 26  
City Hall

2. BLENCHING MEANS  
MONDAY FEB. 26, 1973  
8:30 AM

OVEN FRESH CHICKEN  
HAMBURGERS WITH CHICKEN  
CHIPS

RINGS FRESH SALAD WITH HONEY  
DRESSING

BUTTERED FRENCH BRISAO  
UNLESTINE BREAD  
MILK

Channel 27  
School News

1. FRED RIVER  
FOOD SECTION

NORTHERN PAPER TOWELS  
REG. 37.00 PER 1000 - NOW 2 FOR 1.00

PIE-THE-PIE PINEAPPLE  
REG. 39.00 PER 1000 - NOW 2 FOR 1.00

STORE HOURS 9 AM TILL 10 PM

Channel 28  
Supermarket

0. FRED RIVER  
PHOTO SECTION

LADY SCHIEB BRANDED HAMB  
DEC 27.00 PER 1000 - NOW 10.00

RESTRICTED PHOTONIC SHAWER  
DEC 10.00 PER 1000 - NOW 5.00

MORELON P.L.P. 90P HAMB 50MMER  
DEC 15.00 PER 1000 - NOW 11.00

LOOK FOR OUR SPECIALS EVERY  
DAY OF THE WEEK

Channel 29  
Department Stores

CHANNEL 30 PROGRAM SCHEDULE

MONDAY, FEBRUARY 12

8:30 PM STAN 3 WITH SHARON  
PORTIN, A VISIT TO THE  
FIRST PROGRAM OF LYNN-  
WOOD HIGH SCHOOL AND  
STUDENT'S PERSPECTIVE  
AND MUSIC LUNCH IN A  
RESTAURANT SETTING

9:00 PM THE ROCKY HORROR  
SHOW  
A "FRIENDS" GROUP HAS  
A BIRTHDAY PARTY WITH  
HOMERUN AS GUEST

9:45 PM NEWS WITH SHARON  
PORTIN

Channel 30  
Cable News

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system, consider a metropolitan wide band system operating at about 20-25 percent penetration at saturation with a \$5 service charge. Revenue just about meets direct operating expenses at average population density per mile, generating little or no cash flow. The Lynnwood pilot project, employing the new equipment package, has demonstrated the ability to market 30 channels for a premium rate increase of \$1.50 per month.

The impact of this example becomes clear when you consider that the MetroData system is being accepted at a 50 percent penetration, and comparable geographic/economic areas close to Seattle offering standard cable systems are achieving a maximum of only 18 percent! Early marketing feedback of the Lynnwood installation indicates that a real winner has been developed. The significant number of subscribers signed indicates that heretofore low potential franchise areas will be looked at in a new light.

Probably the appeal of the MetroData system in the eyes of the home viewer is that it dramatically blends the characteristics and advantages of radio, television, and the newspaper. From an operation standpoint, the system gathers, sorts, reformats, stores, and then displays in full color, news, sports scores, weather conditions and forecasts, Wall Street activity, etc., directly off the national wire services — as well as community events. This assures the homeowner of receiving up-to-the-minute information displayed on his home screen. That feeling of immediacy has great appeal to him.

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The all solid-state V-26 is manufactured by Oak in the U.S. This assures constant and reliable quality control; quick reaction time on orders, repairs, and assistance; and—*very important*—stable pricing which will not be subject to later increase due to currency revaluations.

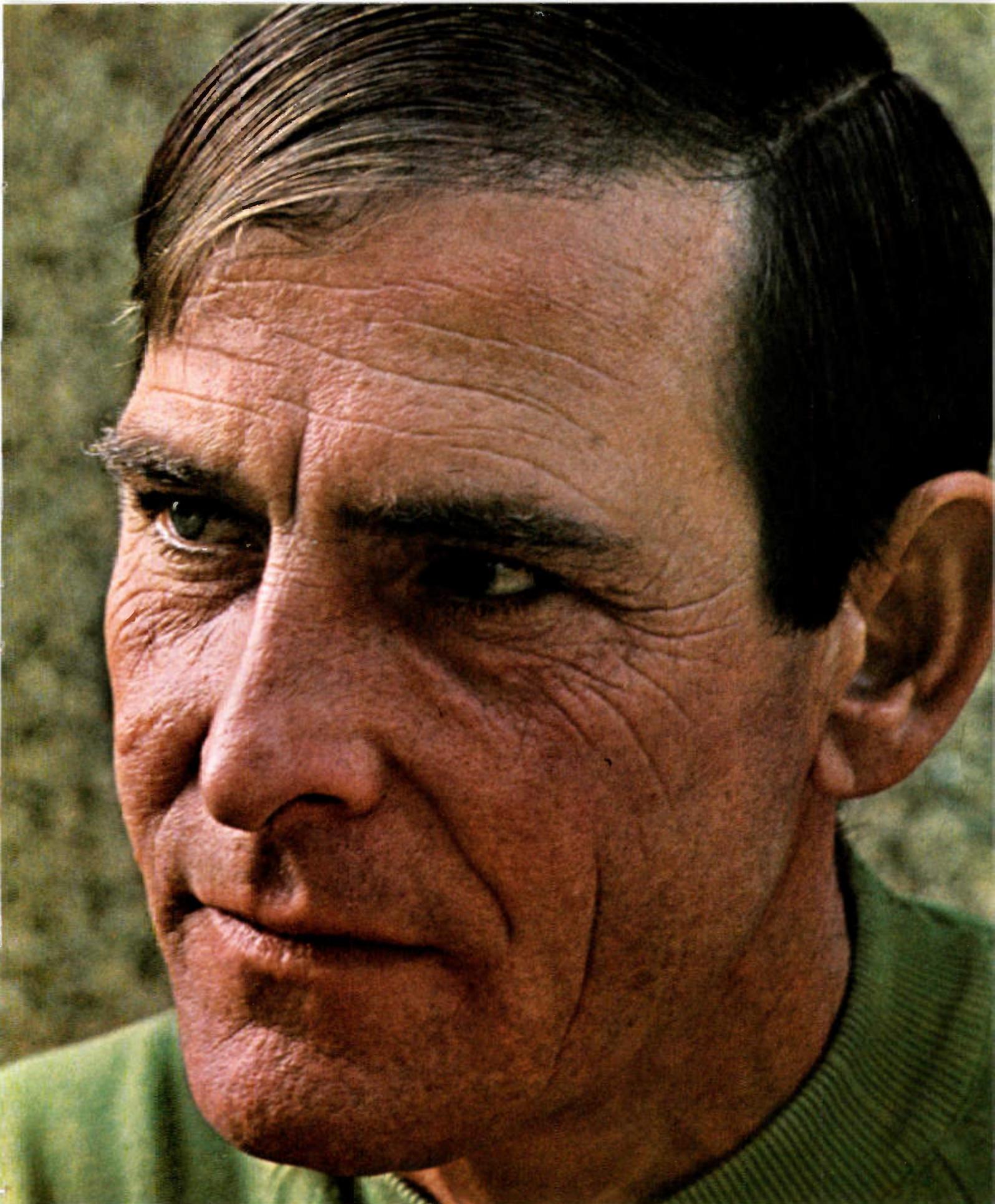
Over the years, Oak converters have scored a superior record of trouble-free operation. There are more Oak converters in the field than all other brands combined—*overwhelmingly so!* One look at all of the features of the V-26 and you'll see why. Call or write for our detailed brochure.



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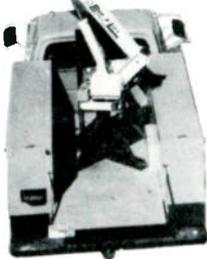
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Local origination of news or special interest items is accommodated by locating keyboards (typewriter devices remotely interfaced to the head end) on-site at such places as city hall, school administration offices — or at the commercial level — in supermarkets or department stores.

The keyboard is a direct access to a dedicated channel. The ramification of this offering is the potential now open to municipalities or government agencies. They now have a communications avenue leading directly into the living room. Another hidden benefit that the CATV owners should note is that city councils should become more receptive to franchise grants once the public service benefits of the keyboard concept are outlined.

In the case of Lynnwood Cablevision, where they are offering a full 30 channels to subscribers, it has been determined that only about one percent of subscribing homes decline the additional 18 channels. (It should be pointed out that Lynnwood Cable markets the additional 18 channels with the remote channel selector as a separate offering for \$1.50 per month additional.) The low percentage of people declining the additional charge indicates the desirability of the additional channels rather than the simple desire for better reception. Also, close scrutiny by Lynnwood market people to determine the impact of this system bears out that the home viewer does indeed view the electronic newspaper channels.

For purposes of this article, MetroData called on subscribers at random to gather impromptu impressions of the 30 channel offering.



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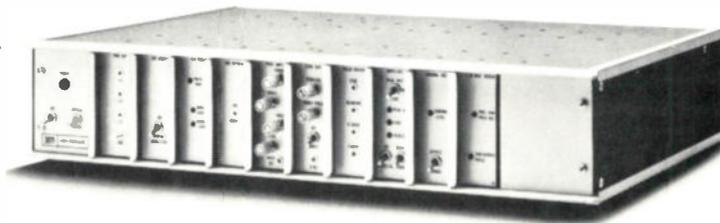
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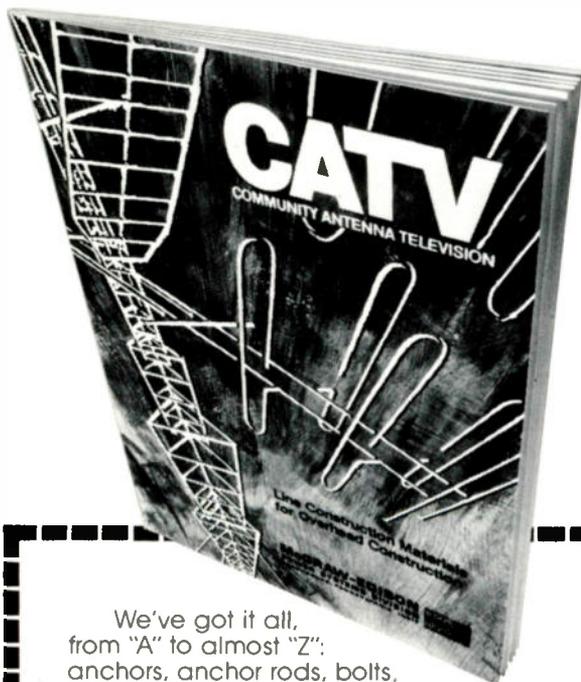


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# McGraw-Edison Company

Mrs. Robert Hoover of Lynnwood, addressing the 18 channel package stated "My husband enjoys the sports, naturally . . . and the aspect of instant news. I enjoy the sales from the local store . . ."

Mrs. Richard Byrd related "My son and husband are sports addicts, so they enjoy those channels. My son watches the school lunch menus each morning, and my husband sells mutual funds so he's interested in the financial news . . . we have access to anything we want to know."

Mrs. Terry Thorgaard, "I watch news, sports, skiing reports, weather . . . I don't know what we don't enjoy."

An interesting sidelight, an employee of a department store that originates two dedicated channels was asked if shoppers ever mentioned watching the store's programming. The sales clerk related "Oh, yes, quite a few people mention the subject. I can't think of anything specific, but all the comments are favorable."

An unsolicited letter from a retired Air Force officer stated in part "I've been all over the country, had plenty of cable hook-ups, and this is the best picture quality and best variety of services I have ever seen."

The Mayor of the City of Lynnwood was approached and asked his impression. "It's of definite value to the city as far as getting information to the public. We plan to utilize the facilities to the utmost to keep our citizens informed."

## The Community Served

It might be interesting here to draw a physical picture of the Lynnwood community to again emphasize that, on first glance, the area wouldn't seem to warrant a cable installation investment. Lynnwood, Washington, is comprised of some 8,000 homes located about ten miles north of Seattle. There are no real restrictive topography barriers standing in the way of transmission towers. With standard rabbit ears or home antenna, a household can pick up an average of seven channels. By subscribing to a standard cable service, the home viewer would gain one channel (an educational UHF). In most cases, the one additional channel would not be a prime incentive to subscribe to cable service. (FCC authorization to carry three Canadian signals has not been granted at this writing.)

However, as is apparent, the above franchise is very typical of the standard bedroom community with close proximity to the core city, and as such, not really a prime candidate for profitable gain.

The concept pursued by the MetroData people was to make it possible for every home TV set to become a computer terminal for direct reception of data sources.

Because the majority of the information to be displayed originated from the national wire services, it was necessary to devise a software program that segregated or analysed the stream of data coming in for allocation to the proper channels. Also, MetroData wanted to avoid the need for the news services to use a special code to identify news content. By

using standard news wire services without special alterations, they knew they could offer a truly universal system that would have identical operating characteristics across the United States.

## The System Itself

In essence, the MetroData System 180 is comprised of a minicomputer programmed with their proprietary special language that sorts out specific incoming data, reformats and delegates it to the proper channel; and a series of alphanumeric generators that store and convert digital data into readable text for the home screen. The alphanumeric generator also includes a colorizer that allows split screen colors in various programmable configurations.

Each channel is allocated up to 4000 characters of storage, representing about four minutes of reading time. This information is displayed on the TV screen in 16 line increments containing up to 32 characters across.

Although the 18 channel offering can be programmed to suit individual areas or desires, the Lynnwood offering is probably typical of what the majority of CATV owners will present. Briefly, here is the content of the Lynnwood offering.

**Channel 14, News Headlines.** Lifted from the national press wire service, the top national and international headlines of the hour are presented. Any late breaking news bulletin is accommodated and presented immediately.

**Channel 15, News Details.** This is an expanded summary of above news headlines for the viewer who wants further details.

**Channel 16, Regional News.** The latest of regional news is automatically lifted from the national press wire service. By using text headings or contents, the news stories are sifted out and displayed.

**Channel 17, Local News.** The source of news is the local newspaper office which is to be equipped with an on-premises keyboard. Local news items are displayed in headline form. Cooperation from the publisher is accomplished by allowing a tag line that reads "for further details be sure to read this week's edition of your local newspaper."

**Channel 18, Sports Headlines.** This is computer edited in the same manner as the news. Headlines of events, personalities and other developments in the world of sports are updated hourly.

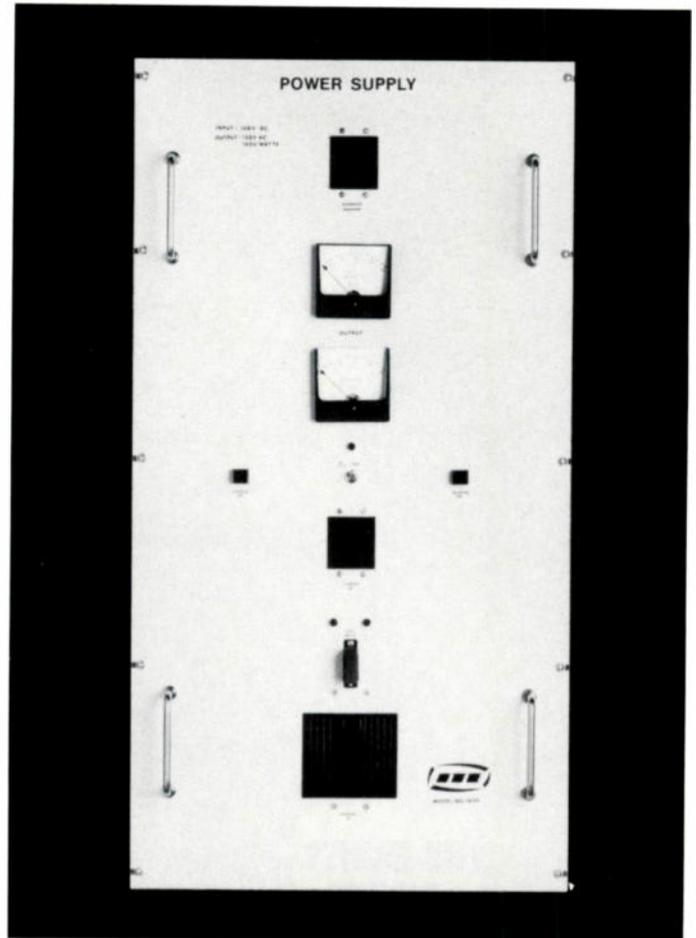
**Channel 19, Sports Scoreboard.** A computer edited and continuous display of the latest box scores of games in progress or completed that day on the major league sports circuit.

**Channel 20, Sports Details.** Again similar to the news format, further details on the headlines of the day for the viewer seeking more detailed information.

**Channel 21, Weather, Current Condition.** Gathered from reports from the U.S. Weather Bureau via the news wire, this display is restricted to the local area.

**Channel 22, Local Weather Forecast.** Again using the services of the U.S. Weather Bureau, this channel presents expected weather. The advent of storm warnings are immediately displayed.

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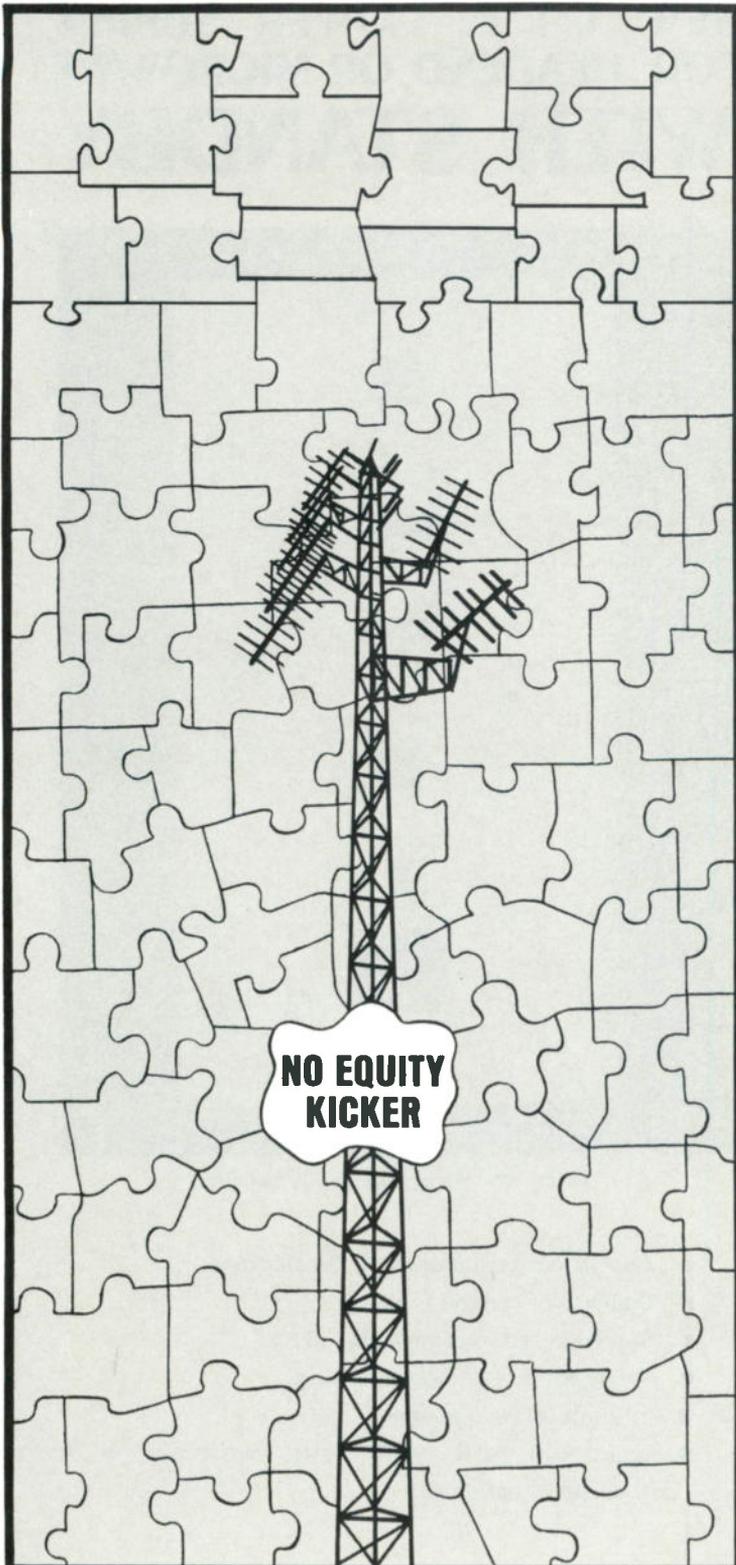
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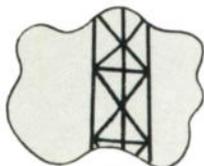


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Channel 23, Weather for Recreation. This is presented for the sportsman and recreationalist. Marine weather and water conditions for the boater, snow reports or conditions for the skier, forest and camping conditions, etc., are examples of items displayed.

Channel 24, Financial News, Dow Average. Gathered from the business wire, news and headlines from the floors of Wall Street are presented.

Channel 25, NYSE and AMEX Quotes. Complete listings and prices are displayed from the New York Stock Exchange and American Exchange quote wires.

Channel 26, City Hall. The office of city hall is equipped with a keyboard to allow direct entry of announcements, agendas, and other pertinent information.

Channel 27, Schools. Also utilizing an on-site keyboard, school news, lunch menus, closures, events, etc., are reported direct from the school administrative office.

Channel 28, Supermarket. Subscribing supermarkets use on-site keyboards to list the latest specials, shopping tips, and promotions. The cable company receives compensation from the supermarkets.

Channel 29, Department Store. Also by subscription, local department stores list their traffic inducement items and promotions.

Channel 30, Cable News. Originated by the cable company, this is a review of upcoming programming and special cable features. This is the channel the cable company uses to communicate to their subscribers.

Channel 1, Channel Guide. This is a constant listing of the 30 channels and their content.

It should again be emphasized that the selection of the above programming was at the discretion of Lynnwood Cablevision. Another franchise area would have the opportunity to create their own individualistic programming. It's simply a matter of harnessing the available news services or sources available.

The benefits of this system continue beyond the tremendous economic returns realized. The system provides that initial step toward two-way communications systems. And with the success of home penetration the system has realized to date, a two-way system can become viable.

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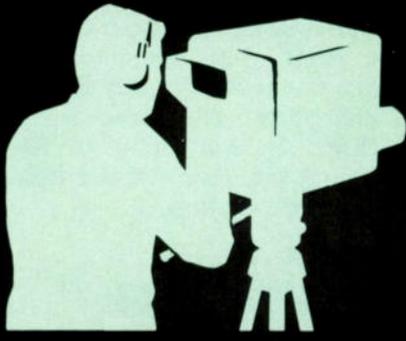
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# STUDIO

*Cablecasting*

A special monthly section devoted to TV programming operations in small studios

## The POWS Come Home With Cable Watching

At McGuire Air Force Base in New Jersey, the return of the POWs is being covered on cable. The project is a joint effort by Audubon Electronics and TelePrompTer's Ventnor, N.J. system.

**A**udubon Electronics, Inc. operates the cable television system

at McGuire Air Force Base and nearby Ft. Dix, New Jersey.

Recently, Audubon became one of the first cable companies to

*Left: News media film the arrival of POWs at McGuire Air Force Base. Right: Commanding Officer Doremus addresses the crowd.*



tape the arrival of returning POWs.

## Joint Effort

Thomas Troehler of Audubon, in cooperation with Ed Hep, manager of TelePrompTer's Lentor, New Jersey system, taped the arrival of the POWs last February 15. The tape was shown on February 16 on both Audubon's and TelePrompTer's systems.

The original tape which was 15

minutes long was edited down to 8 minutes for the systems' cable viewers. It included the arrival of three POWs on an Air Force C-9 Nightingale, their descent from the plane, remarks by the Commanding Officer, Navy Commander Doremus, and a personal interview with Col. William Quelch, representing the Air Force Homecoming operation at McGuire.

The three POWs were Navy Cmdr. Doremus, Army Capt.

Wanate, and Army Rodriguez (rank not known). Rodriguez, who was carried from the plane in a litter, was not photographed, but was taken directly to a waiting helicopter. All three men were flown by helicopter to Philadelphia Naval Hospital for treatment and recuperation.

## Porta-Pack Used

The actual filming was a cooperative venture between TelePrompTer and Audubon. Because of poor light conditions, filming was done with the TelePrompTer system's portable power-pack camera.

The three major television networks all covered the arrival of the POWs, as well as the local newspapers.

## More Taping Expected

Since February 15, two more Homecoming operations have been filmed, and Audubon expects to cover all of the POW arrivals at McGuire Air Force Base. TVC

*A staff sergeant inspects the C-9 Nightingale that returned the POWs to McGuire Air Force Base. Audubon Electronics which operates the cable system on McGuire teamed up with the Ventnor, N.J. system, operated by TelePrompTer, to tape the arrival of the POWs.*



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- **Our flexible repayment policy.**

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- **We make loan decisions quickly.**

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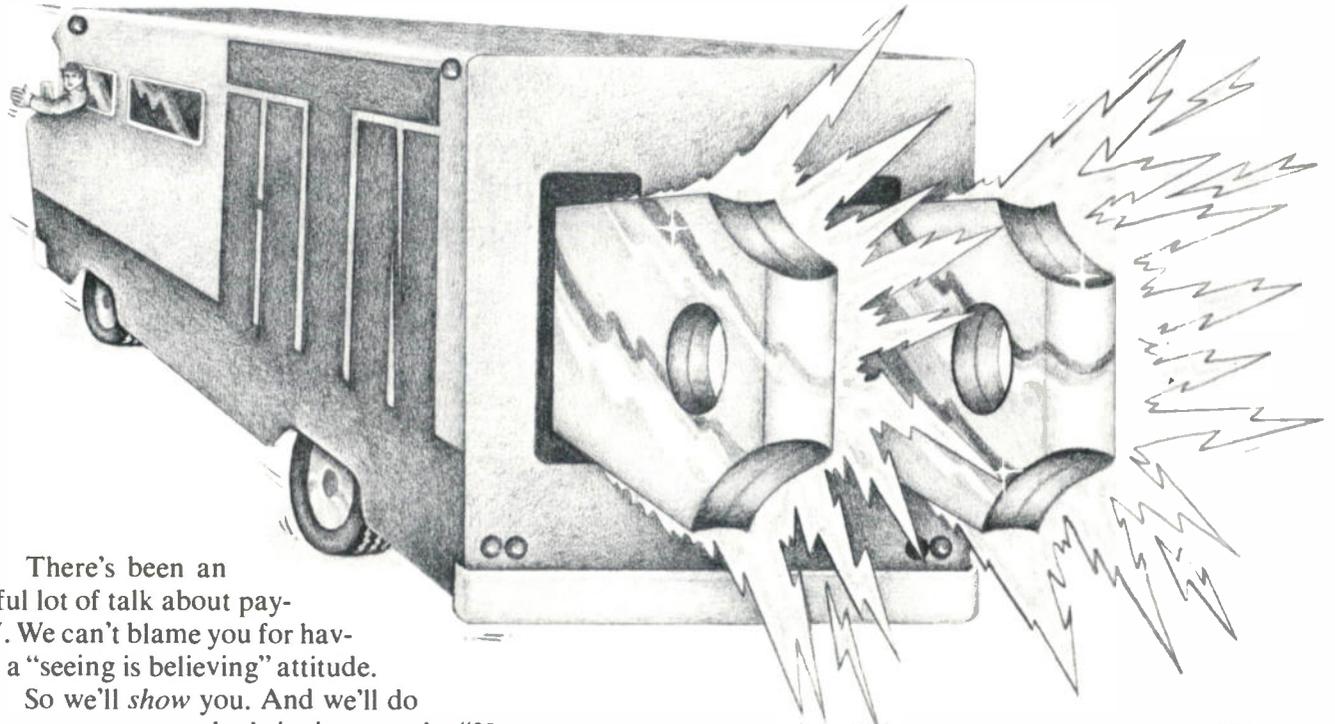
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We'll give you a private demonstration of our system and sneak preview of available programming.

With the Home Theater Network, there are no pre-purchased cards or tickets which self-destruct in "black boxes" or otherwise unscramble signals, nor are calls to operators necessary. A compact ordering unit, communicating with a computer, allows HTN viewers to request programs by telephone—on impulse! The control is absolute. The picture is perfect. And the unit itself is goof-proof.

No other system makes it so simple for a customer to purchase his entertainment. Or makes it so simple for *you*. HTN computers automatically record charges the instant a customer orders his

programming. Subscribers will be billed by HTN or through major credit cards—without involving *your* company's personnel.

All *you* have to do is transmit our two channels of programming...and collect your share of the gross receipts.

What about programming? In addition to current motion pictures, HTN's developing nationwide microwave network will allow us to deliver—live—everything from Broadway plays to rock concerts and special sports events.

Cable systems passing over 2,000,000 homes have already joined the Home Theater Network. Wouldn't you like to know why? A call or a letter is all it takes to bring our mobile demonstration unit to you.

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**The First True Network of Pay-TV**

# Local "O" in San Francisco Gets an "E" for Excellent

Five people at San Francisco's cable channel 6 are working hard to bring local and varied programming to the Bay Area residents they serve.



By John Rather and  
Christopher Burnett  
Television Signal Corp.

A small staff, limited equipment and an entire channel to program for... this is the typical situation faced by local origination departments in the still adolescent cable television industry. Cable's widely predicted future as the giant of global com-

*Editing session for the community news program at the Television Signal Corporation studios. Foreground: Barrett Giorgis, director; background: Carter Bannerman, technical supervisor.*



munications is still an uncertain number of years and many dollars away. While technology takes its course, the immediate question in local origination is how to program in the present. Despite impressive studies and numerous experiments, the programming question still remains open.

Like many other Local "O" departments, Cablevision Channel 6 of Television Signal Corporation in San Francisco is exploring the enormous opportunities local origination affords. Two considerations confront us — how to make revenue through programming, and how to produce programs that are not only different from broadcast television fare, but of vital and immediate interest to San Francisco's wired community.

## Exploring the Occult...

Awareness of the occult sciences seems to be growing throughout America, and this is especially true in San Francisco. To assess how great this interest is, we produce an astrology program called "Cablecharts." We invite our subscribers to send us their birth data, and then give this information to two professional astrologers who alternate hosting "Cablecharts." They, in turn, cast detailed astrological charts, and analyze them in fifteen minute shows cablecast five times a week. The subscriber pays nothing for this. Judging from the steady flow

of letters, we have a growing audience.

Two programs are designed to make revenue, while at the same time providing useful information to subscribers. One of these is "Vacancy Factor," aimed at the frustrated apartment hunter and paid for by the agents and apartment house owners who enter listings. Through slides, we show subscribers what the apartments look like inside, what the immediate neighborhood is like, and where to call for rental information. Our success here has been moderate. We are still in the process of educating agents and apartment house owners about the advantages of showing listings in this new form.

### ...and Unique S.F. Culture

Our other revenue producer is "Performing Arts," a show that reviews what's playing where and when, in theater, dance, movies, and opera. The revenue comes from paid commercial announcements. Jerry Friedman, manager of "Performing Arts" magazine, is co-host of the show and adds authenticity to its content. Co-host Christopher Burnett interviews movie celebrities and not quite celebrities on location. One recent interview was with Peter Boyle, who starred in "Joe," and a new release, "Steelyard Blues." Under the direction of Barrett Giorgis, the show is our most elaborate production. Financially, it's future looks promising.

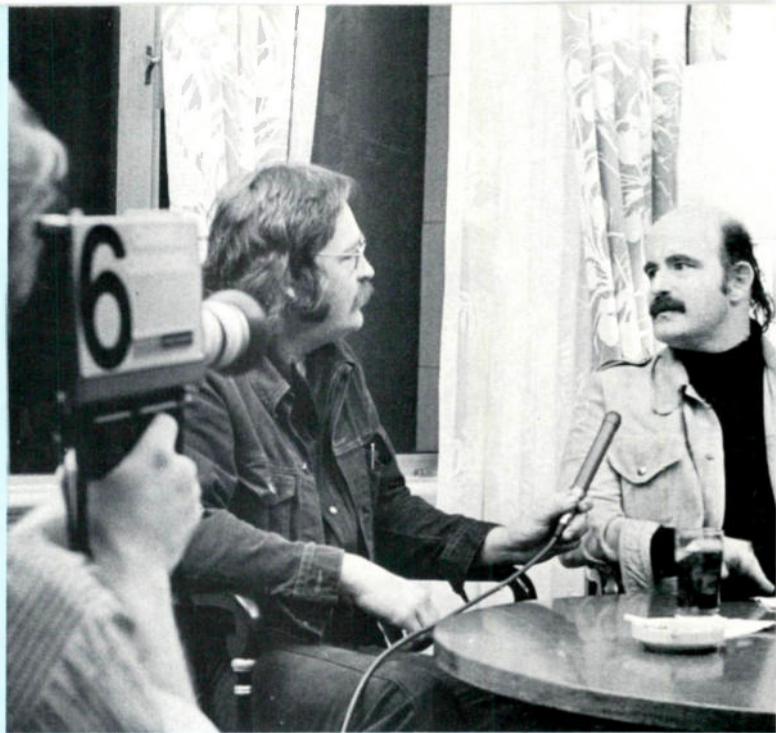
These shows are the core of our programming. We are always changing. The one certainty in local origination is flux. Our approach to programming is pragmatic. We will expand shows that attract viewers or produce revenue, and drop those that don't. The balance we seek is to provide content programs to our subscribers, while producing revenue to offset our expenses.

As anyone with even slight knowledge of Local 0 knows, revenue is very hard to come by these days. Advertisers and agencies are reluctant to buy time in a new medium that most of them scarcely understand. Small businesses have not been buying either. We find we must educate potential time buyers both about cable and what we do in Local 0. This is time consuming, and we expect revenue through advertising will largely be withheld until Local 0 has gained more visibility.

### A Little Public Access

Our visibility will best be achieved through programming, and in San Francisco Channel 6 is cablecasting quite a variety of programs.

At least once a week we take our invaluable Sony Rover into the streets to tape "Videosketch." As the name implies, the show is a sketch made with video equipment about some aspect of daily life in San Francisco. Urban history is unfolding around us, and with our small Sony we are attempting to sketch life in the city in the year 1973. Real people living real lives seldom see their own realities portrayed in the media. Media processes reality by editing it to a



*Above: Interview for "Performing Arts" at the Fairmont Hotel; left to right, Dewey Janey, cameraman; Christopher Burnett, interviewer; Peter Boyle, film actor.*

*Below: "Woman: Ode to Artemis" crew on set; left to right, Lani Silver, director; Kennette Benedict and Katherine Mazur, camerawomen.*





“Three thousand feet of hot news film to get on the air in five hours. And something wasn’t working right.

“Our processor, which had developed hundreds of thousands of feet of film with total reliability, suddenly developed a problem.

“So I called Bruce Berner. He’s the Kodak Sales and Engineering Representative who has helped us before with technical assistance and guidance. He came over right away because I told him we needed him. Fast.

“Bruce remedied the situation quickly... and then he stayed on the job for several hours to double-check everything. The processor functioned perfectly, and I didn’t have to air last night’s news.

“But what’s more important, Bruce is always available whenever we need him. It’s a good thing, because life around a television station can get kind of hectic, and a cool head always helps.

“That’s why I stick with Kodak and Kodak products. And with technical assistance from experienced personnel like Bruce Berner.”

---

Edward E. Thompson, Director of Photography,  
WAVE-TV News, Louisville, Kentucky.

Bruce Berner, Kodak Sales and Engineering Representative.



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On the set of "Performing Arts" program. Left to right: director, Barrett Giorgis; host, Jerry Friedman, managing editor of Performing Arts magazine; Christopher Burnett.

shadow of its actuality. With "Videosketch," we are attempting to reflect a true picture of daily life, without inflicting our own viewpoint. Most recently, we have begun training groups and individuals in the

use of the Sony. We then give them our equipment and they make the show. The enthusiasm of these "trainees" has been enormous. "Videosketch" is thus evolving into a program about life in the wired community, produced by the people who live there.

## Not a Typical Woman's Show

A women's group approached us several months ago, and were quite surprised when we expressed enthusiasm about working with them to produce a women's liberation program. The show, "Women: Ode to Artemis", is now in its third week. At their request, we have integrated the women into our production crew. They have quickly learned basic production skills, and by the second taping they were taking large roles in technical production. Our policy has been to leave content largely up to them. The show, as one might expect, is outspoken and novel. It has also attracted a good deal of attention among women and women's groups.

This is the beginning for local origination. Whether or not it will survive is unclear. Like the rest of the cable industry, we await the many expected decisions from the Federal Communications Commission that will affect us greatly. We are John Rather, Barrett Giorgis, Christopher Burnett, Carter Bannerman, and Dewey Janney . . . all students of this new form with much to learn . . . but with an almost unprecedented learning opportunity before us.

rvc

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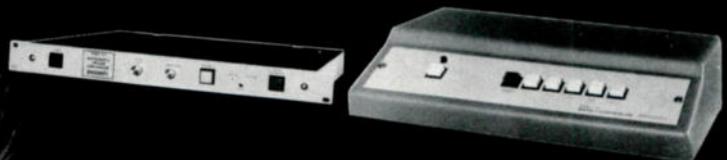
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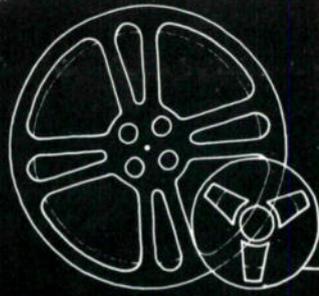


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## CATV Programming

software news and tips

### A New Programming Source

If you're looking for programming to fill time on your local origination channel, you might consider the barter approach. CAT Video, based in Denver, Colorado, is offering local origination channels the opportunity to join a programming network based on this approach. For an initial \$7.50/quarter membership fee, the network will supply programming to cable systems.

CAT Video will represent this cable network in the marketplace. In return for the cable systems' cooperation, the network will offer spot advertising on programming that the system already cablecasts, actual barter productions that have been produced for CATV, or in the case of systems having no local origination channel, spot advertising for the weather-scan channel.

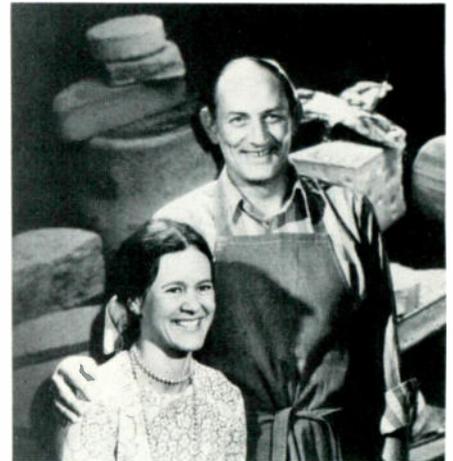
Sol Gins, president of CAT Video, explains his approach this way. "Most advertisers have been hesitant to enter into agreements on cablecasting because they haven't been able to predict the outcome of their investment or anticipate the audience they would reach. By joining forces with other cablecasters throughout the country, you make yourself and your community a viable market. The potential for cablecasting is there and most advertisers know this, but they must be able to justify their costs, and to do this they must have substantial subscriber count and a feeling of cooperation and unity."

One of the programs presently

being offered by CAT Video is called "Foods of the World." The series is an audio-visual illustration of the well-known Time-Life Books' series. On each program, test-kitchen chef, John Clancy demonstrates how to make one of the recipes from twelve different *Foods of the World* books. Assisting John with the patter and her knowledge of the history of each dish is *Foods of the World* researcher, Wendy Rieder. Each show is 28 minutes, 50 seconds long, permitting local advertising before and after the show.

CAT Video will supply its programming in any form — tape, film, etc. If your system is interested in joining the network, you can contact Mr. Gins or Kevin Elizabeth Morrison, executive vice president of the company at: 5295 W. Rowland Avenue, Littleton, Colorado 80213, (303) 794-9588 or 333-8000. rvc

*John Clancy and Wendy Rieder on the set of "Foods of the World" series.*



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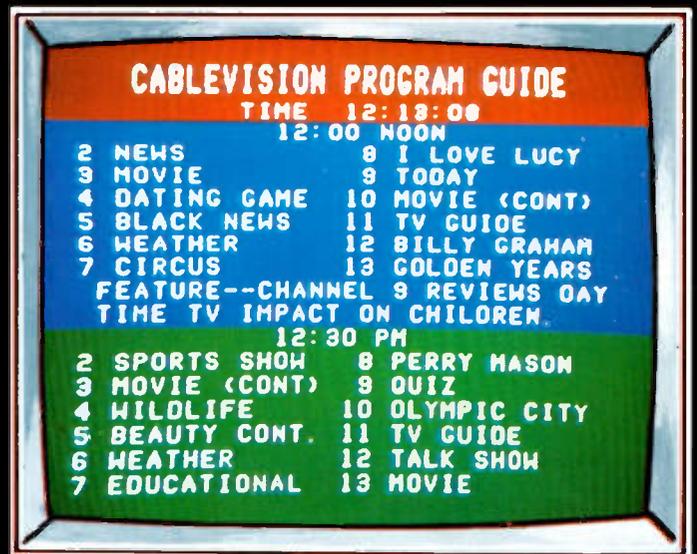
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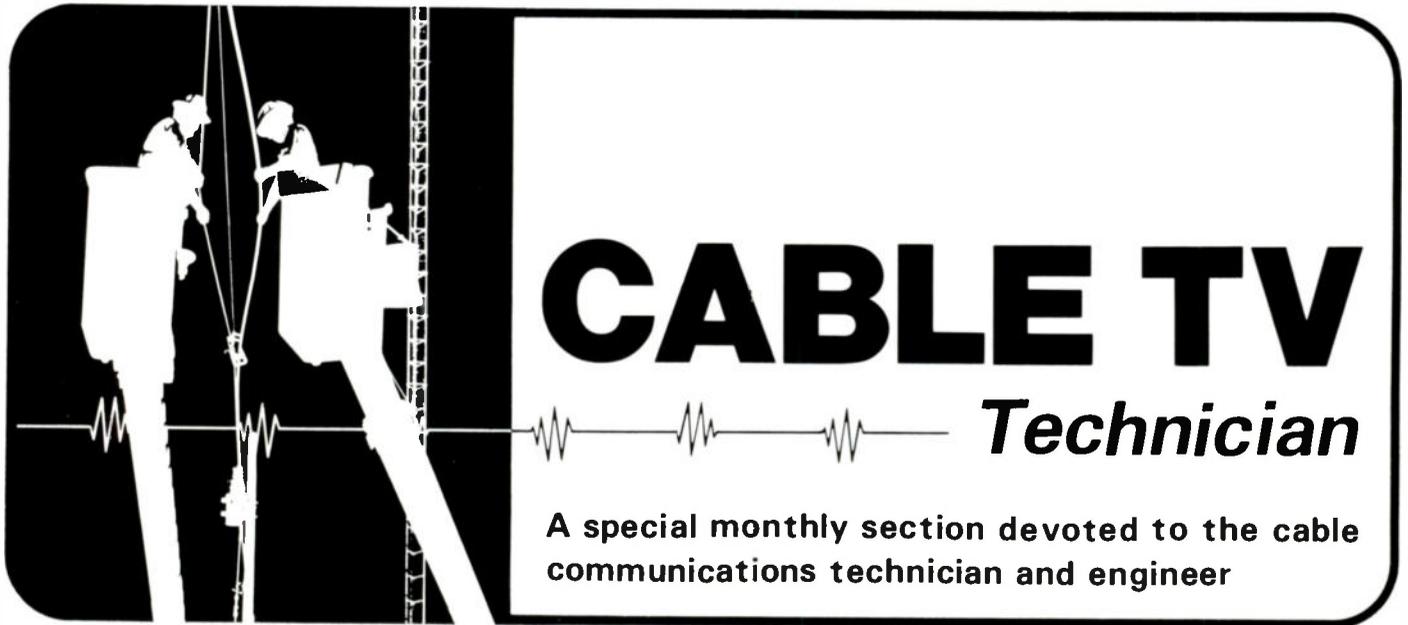
Designed expressly to house CATV and microwave electronic equipment, Fort Worth Mobilt Head-End Buildings withstand any climate or location problem... house electronic equipment according to the most rigid standards. Mobilts are completely portable. . . Simply drop on your site, and connect the service inlet. Complete wiring is installed at the factory. Many options are available in size, outside finish, wiring and ventilation. There's one exactly suited for your system.

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## First Down on the 2: Then, Shades of "Heidi"

NBC cut from Joe Namath to "Heidi" on purpose—and got in a lot of hot water. An automatic video switcher could do it to you—but a \$20 triggering device can keep it second and one.

*By William S. Gardner  
Louisiana CATV  
West Monroe, La.*

**H**ave you ever been plagued by trouble calls because a part-time broadcast station is off the air and you are giving your customers a blank screen on that particular channel? Educational stations are especially notorious for not adhering to a fixed broad-

cast schedule. The problem is compounded when you import the part-timer from a distant city and their schedule is not carried in your local newspaper.

At first glance, the solution would appear to be the use of a spare module on your non-

duplication switcher. Simply carry them as a primary during their on-the-air time and switch in another video source when they are off. This, of course, would entail keeping careful track of their schedule (sometimes an impossible chore) and constantly

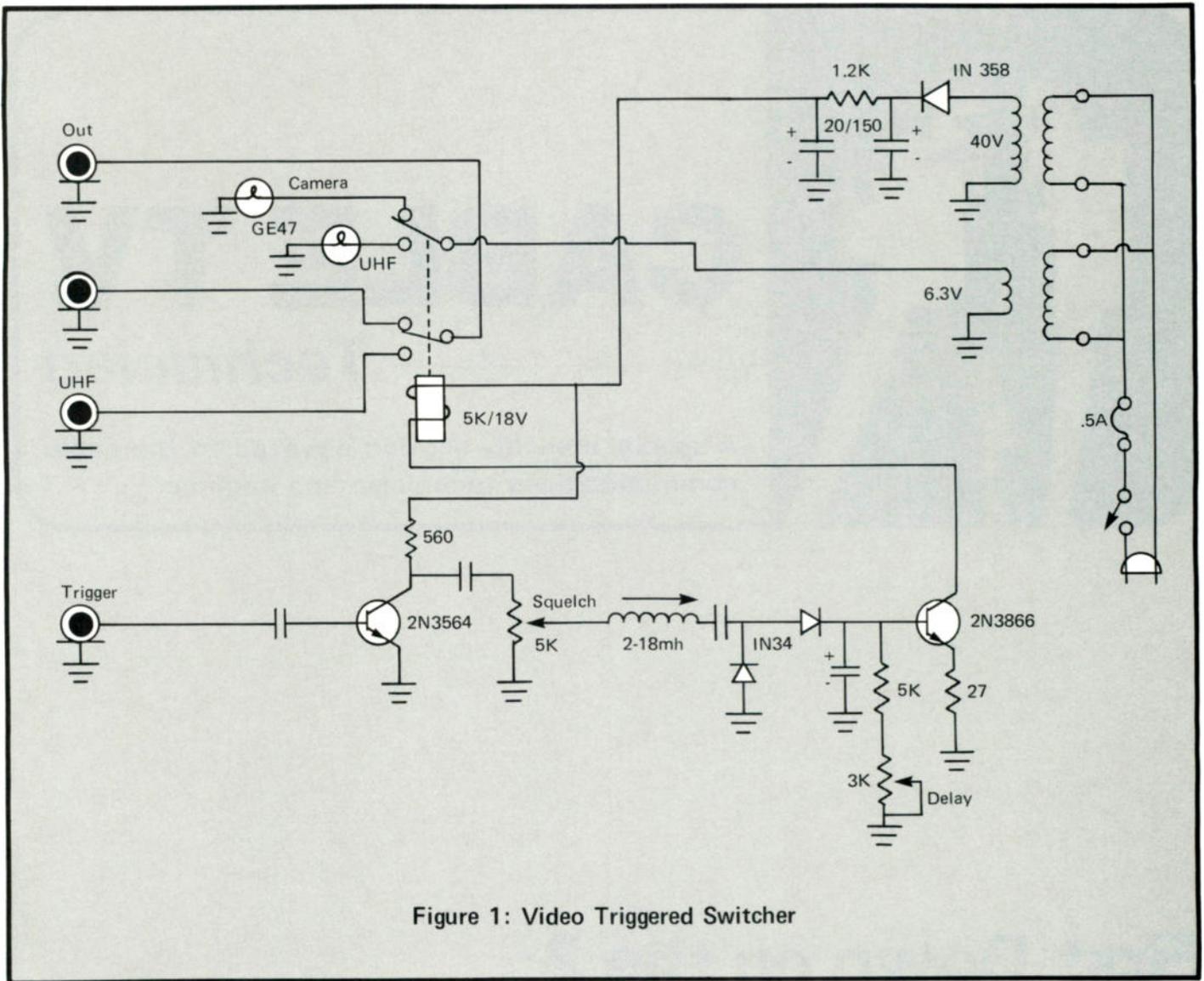
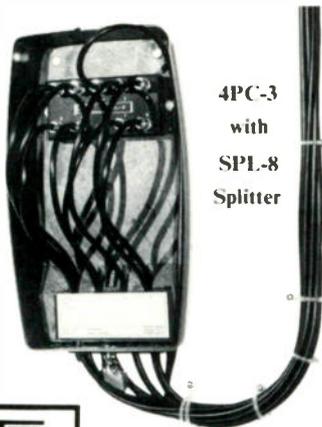


Figure 1: Video Triggered Switcher

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changing your programmer. However, if ETV stations are sporadic about sign-on time, they are downright haphazard about signing off. They may publish a 2 pm to 10:30 pm schedule and then run until almost midnight if they are running a long play or movie.

Now I am not knocking ETV. If you are located in an area which does not have an educational TV channel, you can stimulate lots of subscriber interest by importing one. (That is, if you can manage to wade through that backlog of compliance certificates at the FCC.) However, if you do carry one on a part time basis and happen to switch off the last 15 minutes of a movie, you can expect your answering service's switchboard to light up like a Christmas tree.

A video trigger switcher (see Figure 1), which can be built for about 20 dollars, leaves you independent of schedules and carries the station whenever it is on the air. It triggers on as little as 100 millivolts of video.

The transistors were chosen be-

cause they happened to be in bench stock: the 2N3564 because no clipping was evident at the levels used, and the 2N3866 because it had a power rating of 1 watt and kept the relay energized without overheating. The two signal diodes become a conventional voltage doubler used to increase overall sensitivity. The electrolytic across the base circuit of the 2N3866 is 3000 micro-farads at 10 volts. This long time constant enables you to set drop-out delay from 10 to 25 seconds, which prevents switch-over during video scene fade-outs. The entire switcher can be constructed in a three by five inch mini-box.

### Sensitivity Reduced

Since some processors have only one video output jack, a short jumper from the UHF to the TRIGGER input was tried with no visible degradation of the video signal. However, since the modulator input necessarily terminates into a 75 ohm load, the overall

sensitivity was reduced by half.

There are many other uses for such a switcher. It could be used to switch to a standby VHF receiver during microwave fades. Since inversion layers which bend CARS band microwave out of alignment tend to enhance the reception of VHF signals, this is a very practical application. Used in this manner, the squelch control could be adjusted to set your fade margin to the amount of video actually received, changing over to standby VHF at the point where the picture drops below entertainment quality. In the event the switcher is used in this configuration, it would probably be wise to choose a relay with an extra set of contacts and include a two minute timer in the pull-in circuit. This would prevent relay chatter when the microwave signal is riding on the edge of fade margin, changing over only when the signal has been up and stabilized for two minutes.

Figure 2 shows the configuration in which the switcher is presently being used in the Monroe, Louisiana system. UHF channel



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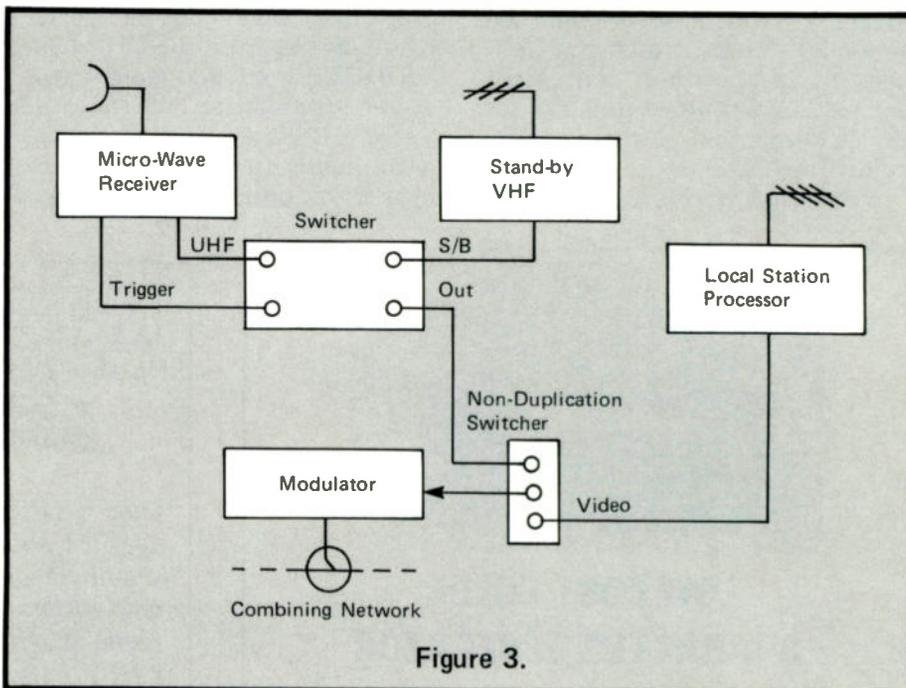
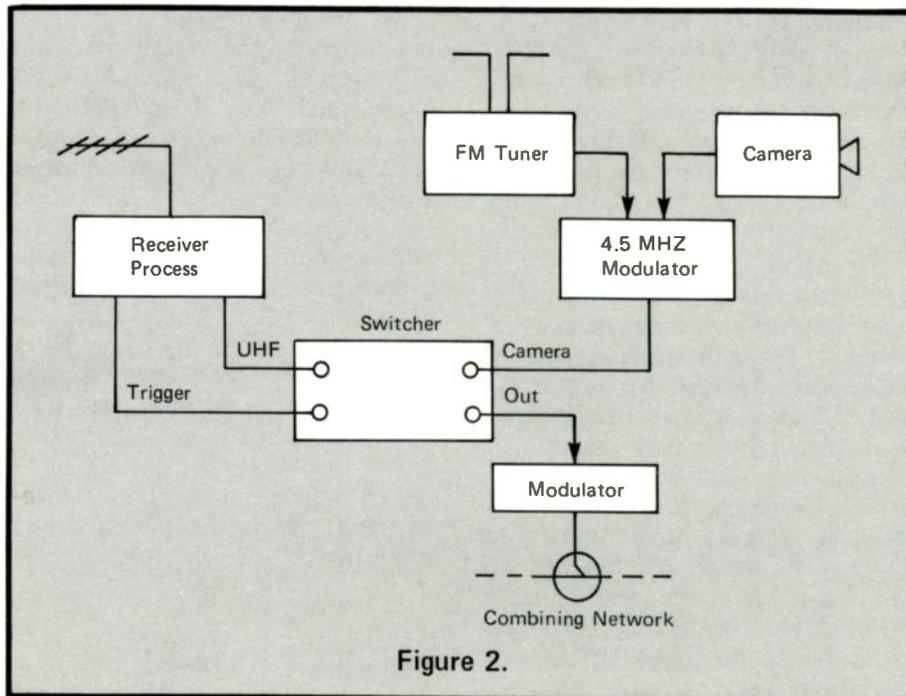
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29, Jackson, Mississippi, is carried whenever it is broadcasting. When the channel is off the air, a spare camera is focused on a sign which gives the channel's rough schedule. The FM tuner and 4.5 MHz modulator provide background music.

Figure 3 shows the switcher being used to switch to a standby VHF receiver during microwave fades. As can be seen from the drawing, this has no effect on non-duplication programming. To adjust the fade margin, simply insert a variable attenuator be-

tween the wave guide and the pre-amp input and adjust the squelch control to switch at the point where the video is no longer acceptable. This will enable you to run the squelch control on your microwave receiver wide open with the added blessing that the AFC will continue to track even on very weak signals. This prevents the AFC from locking on a noise burst and thus locking out the desired signal. This feature alone should save many unnecessary trips to the head-end. rvc

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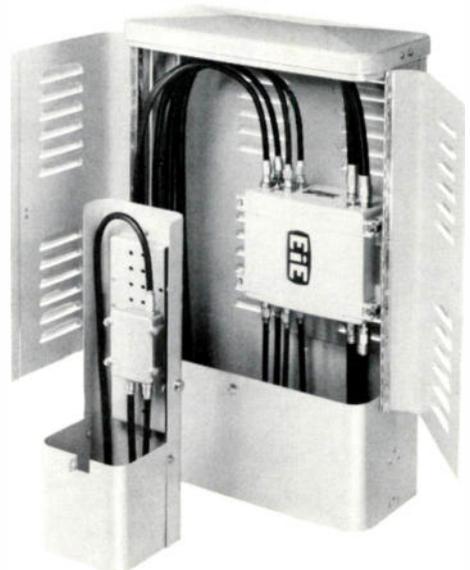
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CATV is no place for fly-by-nights. It's a big piece of the future—yours and ours both. That's why it's a good idea to talk to us about your next system.

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For the small cable system that can't afford a wide range of test equipment, Lawrence C. Dolan has what might be one solution.

By Lawrence C. Dolan  
Mid State Communications, Inc.

**L**ocate opens and shorts through splitters and baluns.

Measure return loss.

Measure a splitter's isolation.

Measure directivity of taps.

All of these tests can be made with an installers meter. Any signal level meter can be used to make the tests described. An installers meter is used to demonstrate that it is not the cost of an instrument, but its application, that determines its usefulness.

The measurements to be made fall into two classes — insertion loss and return loss. These measurements, when made in a laboratory, use a sweep/signal generator for a signal source and an oscilloscope or spectrum analyzer for a receiver. It is not always convenient or practical to carry expensive equipment into the field. The following measurements use the CATV system drop for a signal

source and a signal level meter for a receiver.

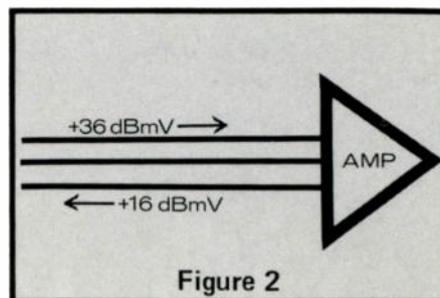
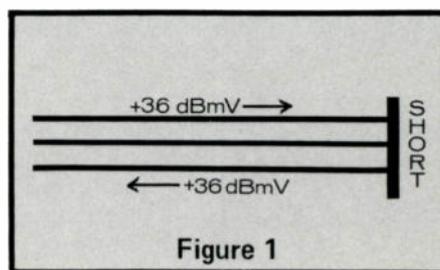
To better understand the mea-

surement technique a brief review of the theory is in order.

What is return loss? Return loss is the amount of signal lost by reflections caused by poor impedance matching. The return loss number is the number of dB down the reflected signal is from the forward signal. A 20 dB return loss number indicates that the reflected signal will be 20 dB less than the forward signal.

Figure 1 shows a side view of a piece of cable. To make the discussion simpler think of the cable as a loss-less transmission line. An open or a short has a return loss of 0 dB. A short is put on the cable; therefore the returned system signal will be at the same level as the forward signal.

In Figure 2 the cable is connected to an amplifier with an input return loss of 20 dB. The reflected system will be 20 dB less



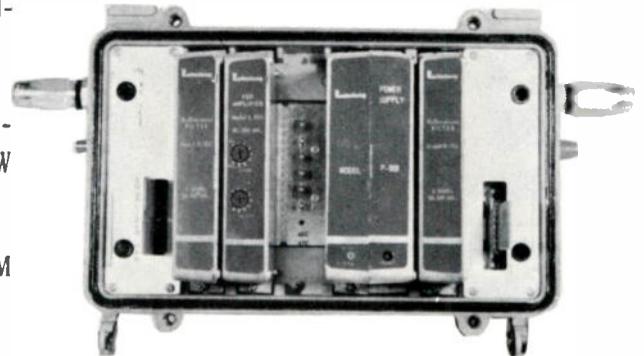
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than the forward signals, or +16 dBmV.

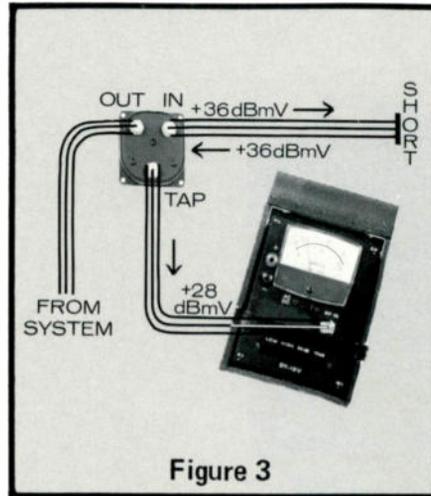


Figure 3

Figure 3 shows an 8 dB directional tap inserted backwards in the line. Now if the line is shorted, the full +36 dBmV will be reflected and come out the 8 dB port at +28 dBmV is a theoretical number and cannot be achieved in practice because of cable insertion loss, and leakage from the out connector to the tap. Although

the theoretical limit cannot be achieved, the basic principle can be used in field tests and trouble shooting.

### Trouble Shooting Cable

The basic technique shown in Figure 3 is excellent for trouble shooting drop runs where the other ends are inaccessible. Multiple dwelling units are ideal locations. A simple calibration procedure may be used to calibrate the test set up shown in Figure 4.

1. Connect a good drop to the OUT port on the directional tap.
2. Place a short on the IN port of the directional tap.
3. Read the signal level at low and high band frequencies.
4. Place a termination on the IN port.
5. Read the signal level at low and high frequencies.
6. Connect the cable to be tested to the "IN" port and read the SLM. If the readings are similar to the reading at Step 3, the cable is open or shorted. If the



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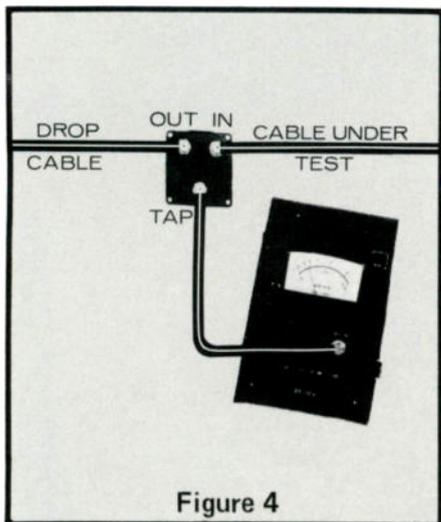
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level is similar to Step 5, it is a good cable.



This technique can be further refined by using a calibrated mismatch on the IN port; i.e., if a known 10 dB return loss is used, it can be determined what the SLM will read with a 10 dB return loss.

If a conventional SLM is used for this test, the measurement must be made at four or more

channels. This ensures that VSWR patterns are not giving false readings. The composite meter will average out this effect.

This RF technique will check a cable even if the termination is inductive or AC blocked, which is something that can't be done with an ohmmeter-type test.

### Return Loss Tests

The main limitation of the test system in Figure 4 is the directional tap. It has a directivity of 20 dB which severely limits the measurement range.

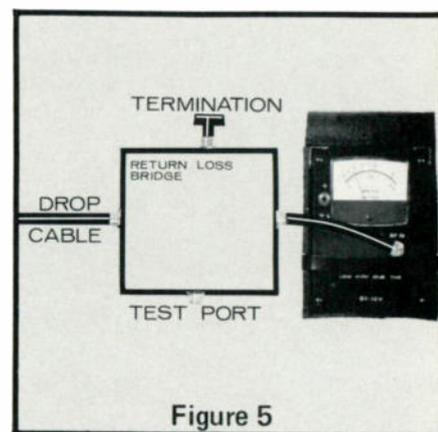
Figure 5 shows an RF return loss bridge substituted for the directional tap. Accurate readings can be made easily with this system:

1. Short the test port and read the SLM.

2. Put device to be tested on test port and read the SLM. The difference in readings between steps 1 and 2 is the return loss. For example:

Step No. 1 reads +36 dBmV.

Step No. 2 reads +9 dBmV. The return loss is 27 dB.

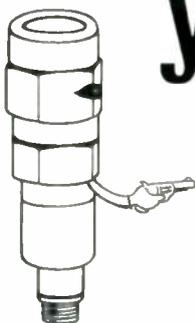


### Insertion Loss Measurements

Insertion loss measurements are attenuation measurements. Several common terms used to specify passive components can be thought of as attenuation measurements. They are:

- a. Insertion loss.
- b. Isolation.
- c. Coupling loss.
- d. Cable tilt.

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The following tests are for field use where complex test equipment is not always practical. The signals on the CATV system will be used as a source, and a low-high composite meter will be used as a receiver. Although they are not as convenient, standard tunable meters may also be used for these tests.

When using tunable meters make all tests on channels 2 and 13 as a minimum. Four channels would be more preferable.

### Field Testing Splitters

**Insertion loss** This is the trough loss of the splitter. Most splitters measure between 3.2 and 3.5 dB.

1. Measure the drop level at the low and high band.
2. Connect the splitter as in Figure 6.
3. Measure the levels and subtract from the readings in step No. 1. The difference in levels is the insertion loss.
4. Reverse the termination and SLM.

5. Repeat reading and subtract from step No. 1. A good splitter will have the same loss on both output ports.

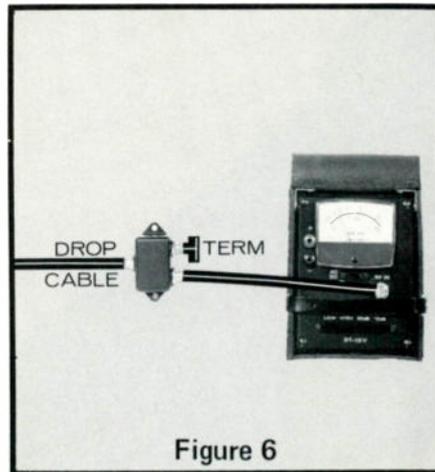


Figure 6

**Isolation.** Isolation is also a good test of the performance of a splitter. A waterlogged or otherwise damaged splitter won't pass this test.

1. Measure the drop on the low and high band.
2. Connect the SLM as in Figure 7.

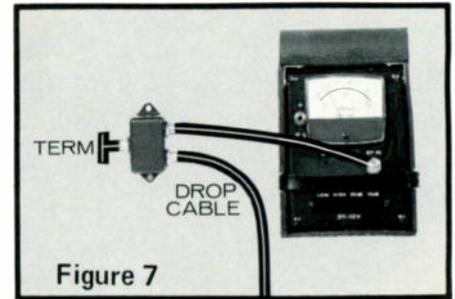


Figure 7

3. Take reading on the low and high band and subtract the reading from that obtained in step No. 1. The difference is the isolation between ports on the splitter.

### Field Testing Directional Taps

Directional taps may have three main specifications that can be field tested. The tests are for insertion loss, isolation, and coupling loss.

**Insertion Loss:**

1. Measure the drop level in the low and high band.
2. Connect the tap as in Figure 8.
3. Subtract the reading reached

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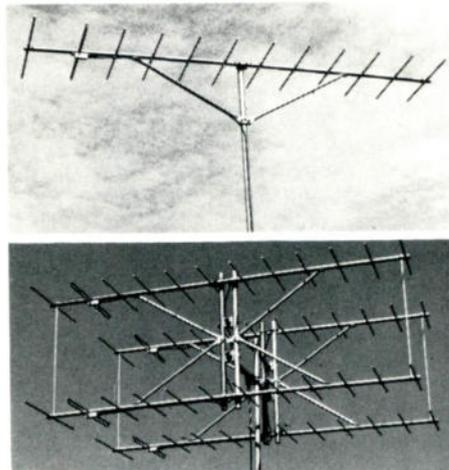
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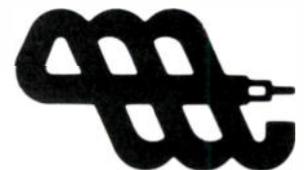
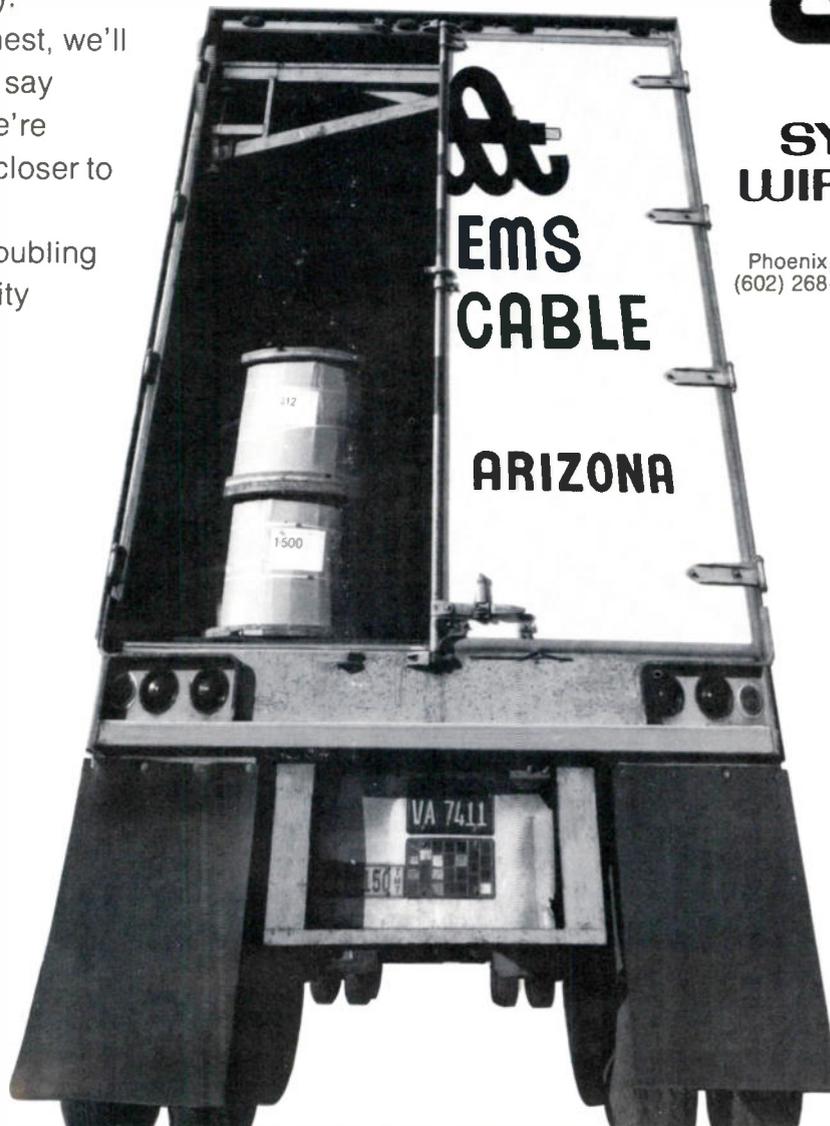
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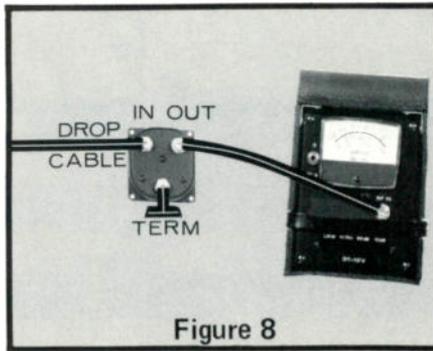


Figure 8

in step No. 2 from that in step No. 1. The difference is tap insertion loss.

**Isolation:**

1. Measure the drop levels in the low and high band.
2. Connect the tap as in Figure 9.

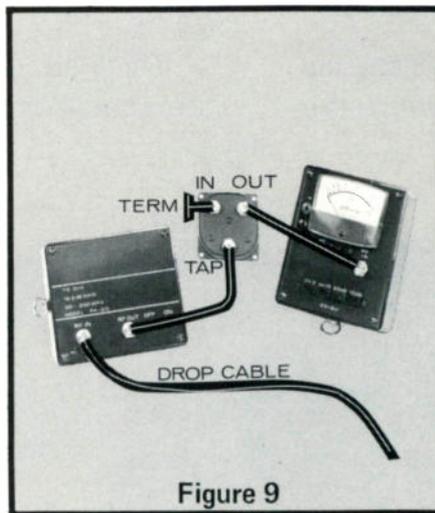


Figure 9

3. Read the levels on the low and high bands and subtract from the readings taken in step No. 1.

If the levels obtained in the test are too small to measure, use a

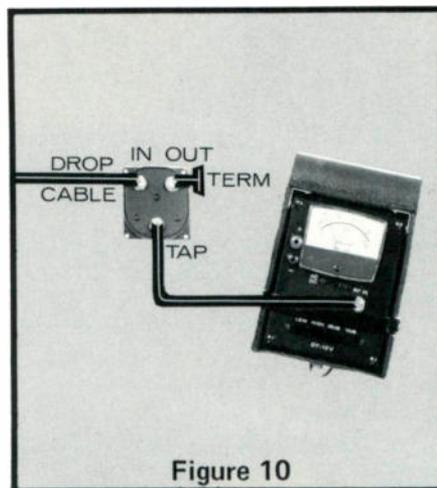


Figure 10

small laboratory amplifier or a flat line extender to increase the drop level, and repeat step No. 1, measuring the output of the amplifier.

**Coupling Loss:**

1. Measure the drop levels in the low and high bands.
2. Connect the SLM as in Figure 10.
3. Read the level and subtract from the reading obtained in step No. 1. The difference is tap loss.

**Field Testing Insertion Loss**

Waterlogged or otherwise damaged cable can be quickly identified without sweep testing. A composite meter can be used; however, a meter tuned for channels 2 and 13 will do as well.

1. Measure the drop at channels 2 and 13.
2. Connect cable as in Figure 11.
3. Measure channels 2 and 13 and subtract from the reading obtained in step No. 1.
4. Divide the answers from step No. 3 by the length of the cable tested.
5. Compare the answer with the manufacturer's specification. If a higher attenuation is obtained than the one specified, the cable is damaged.

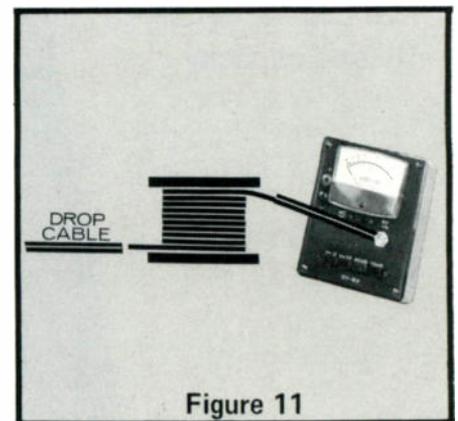


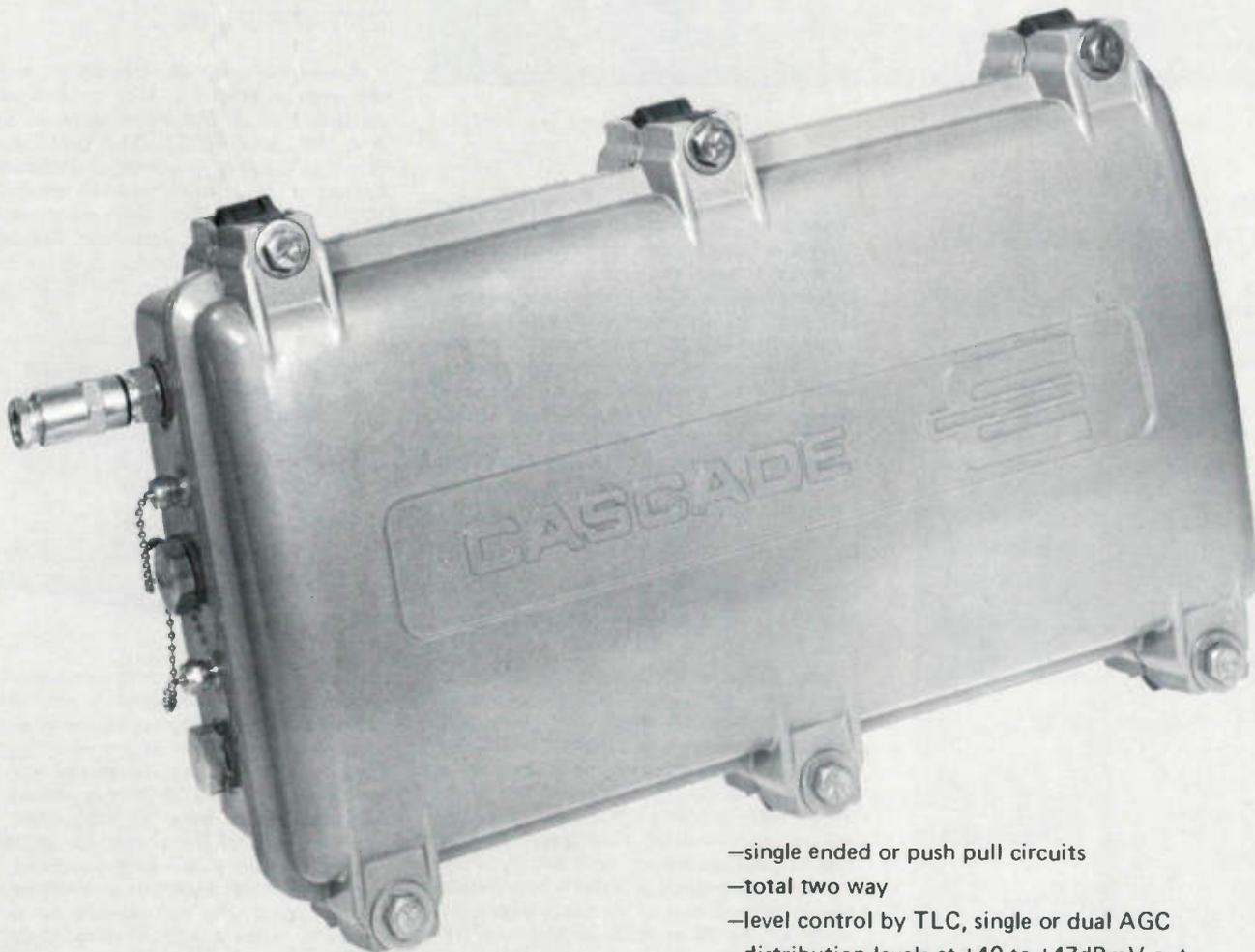
Figure 11

In all of the tests described, the accuracy of the meter does not matter. All the measurements are relative; therefore, absolute accuracy is not important.

Many new pieces of equipment are available, but a signal level meter is still the most useful and practical instrument for a cable system.

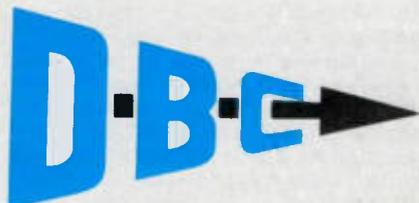
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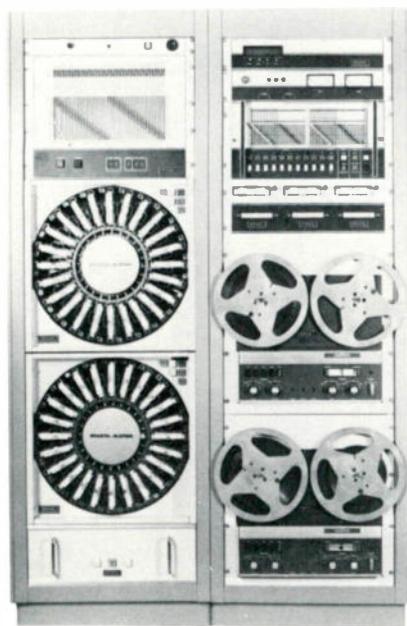
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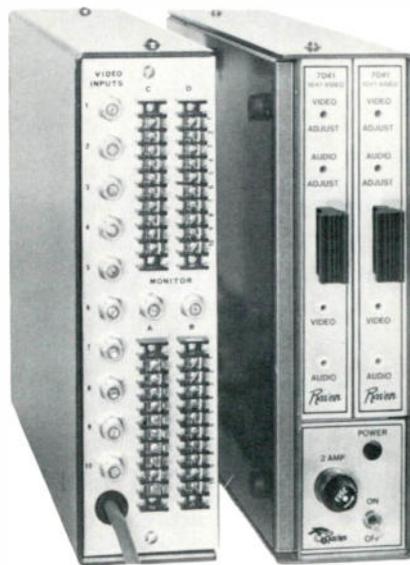
## "PORTA-PATTERN": TELE INDUSTRIES LTD.

Telecommunications Industries Limited, 414 N. Alfred St., Los Angeles, Calif., announces the acquisition of the rights and interest in the "Porta-Pattern" television test

chart system. The "Porta-Pattern" system consists of an anodized aluminum frame containing a resolution, registration, ball and chip chart, each recessed in a color-coded plastic frame. The charts are water resistant, and are fully protected from abrasion and normal wear and tear at all times. The frame is designed to be used either by itself as shown, or on a microphone or light stand through the use of adapters. A level is built into the lid of the unit, allowing for accurate alignment of the charts. The unit is priced at \$180.00, FOB Los Angeles, and specialized charts and accessories are available.

## SWITCHING SYSTEM: RAVEN ELECTRONICS CORP.

Raven Electronics Corporation, 884 Freeport Blvd., Sparks, Nev. 89431, announces the availability of their new Model 319 Video/Audio Switching System. The RAVEN Model 319 solid-state system is designed to accommodate up to ten video and audio inputs with remote control capabilities and routing on command to a single 75 ohm monitor and speaker or lamp display. Automatic sequence mode provides time adjustable sequential switching of all inputs with a rate from 2.0 to 20 seconds as requested. The



system does not require any external relays or stepping switches for operation and contains an instant lock-in circuit to hold desired camera during sequencing. The 319 system is available in 3 models for maximum system flexibility and optional remote control terminals with direct numerical lamp read-out

are offered to permit direct call-up of any camera, start-stop functions, and control of sequence rate.

## TAPE EDITING SYSTEM: DATATRON, INC.

A new low cost video tape editing system, the Vidicue 5050 has been announced by Datatron, Inc., 1562 Reynolds Ave., Santa Ana, California 92707. The basic system, priced at \$10,000, is capable of simultaneous control of any two professional quadruplex VTR's or helical VTR's with electronic edit capability. The basic system also includes an SMPTE time code generator. It is no longer necessary to pre-record the SMPTE time code.

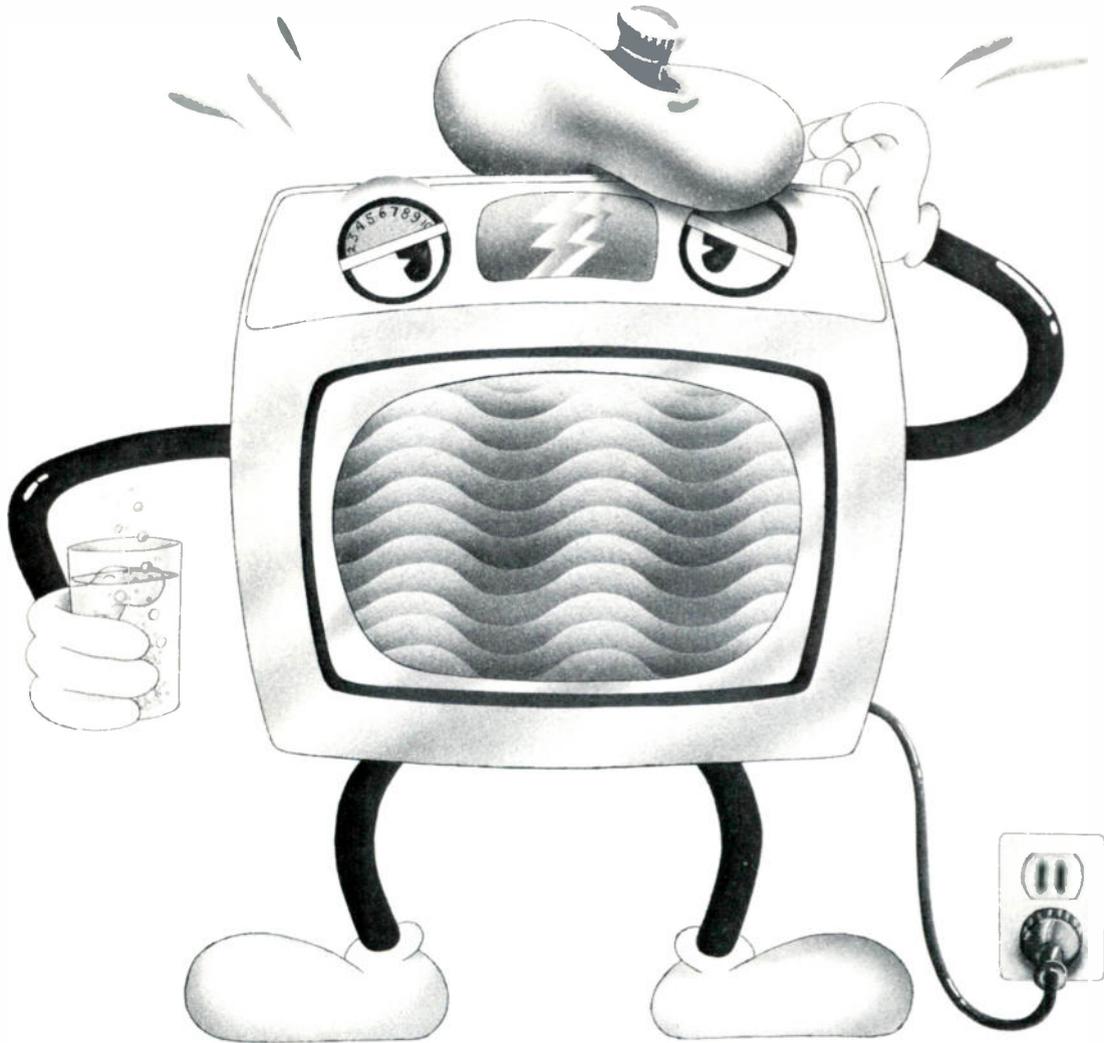


During the preroll the internal generator is automatically synchronized to the SMPTE time code recorded during the previous scene and at the edit point begins recording new time code in sync and contiguous with that previously recorded. With this feature, unnecessary head wear is eliminated; the machines are free for production use, and an elapsed program time is always available. Two options of major interest are available with the Vidicue 5050. The first provides for precise frame to frame synchronization of the two VTR's under control. The second virtually eliminates overshoot during the search cycle, considerably decreasing cue times. The system can perform audio/video, audio only, or video only edits. All control commands and times are entered on a simple integrated control panel featuring keyboard entry of edit point times.

## STUDIO CAMERA: AUDIOTRONICS CORP.

Audiotronics Video Systems Division, 7428 Bellaire Ave., N. Hollywood, Calif. 91605, which markets VTRs, TV monitors/receivers, complete CCTV videopak systems, now offers an expanded line of moderately priced vidicon cameras. Models include the new PVC838 monochrome studio camera, the PVC808 and the PVC818. The new model PVC838 studio camera features 1-inch vidicon, 550-lines of resolution, a 6-inch self-contained viewfinder, which functions as an independent video monitor, a built-in 5:1 rear-operated zoom lens, optional remote control, optional 2:1 interlace, EIA (RS-330), intercom and tally light connections. Model PVC808 is a viewfinder camera, with 2/3-inch vidicon and 3-inch electronic viewfinder. Model PVC818 is a 2/3-inch vidicon, non-viewfinder camera

# Co-Channel Beats Got You Down? For Quick Relief...



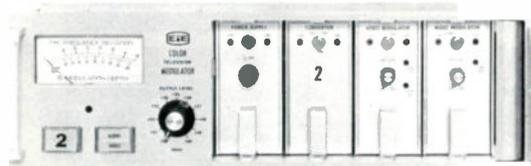
EiE has what you've been waiting for. A performance proven phase-lock color television modulator that allows you to "reclaim" those cable channels which have been vacated due to direct "off-air" pickup in strong signal areas. Co-channel beats can now be eliminated with our CTM2 Phase-Lock Modulator which synchronizes the modulator output to the interfering broadcast signal.

The model CTM2 is only one in a series of broadcast quality EiE color television modulators which includes: the CTM1 standard modulator; the CTM3, for microwave applications; and the CTM4, a phase-lock version of the CTM3.

All CTM series color television modulators feature

modular design, low differential phase and gain distortion and minimum group delay. Spurious beat suppression on all channels is in excess of 60 dB below visual carrier at +60 dBmV (maximum output) without the use of external bandpass filters. An optionally available network provides group delay predistortion characteristics which conform with FCC transmitter requirements.

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(213) 764-2411



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Industrial  
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which is easily upgradeable to a viewfinder model. Both PVC808 and PVC818 feature accuphase circuitry which enables the user to employ simple special effects without external sync drive. Other features include 500 lines of resolution, automatic sensitivity circuits, internal/external sync switch, and standby function.

## COLOR MONITOR: TEKTRONIX, INC.

Tektronix, Inc., P.O. Box 500, Beaverton, Oregon, is announcing the 670 color picture monitor featuring the 17-inch Sony Trinitron\*. In contrast to the complex shadow

mask tube, requiring 20 or more front-panel adjustments, the 670 has just four. Those four front-panel controls are fully capable of handling the needs of the professional to achieve a "standard" color picture which he can secure by locking a protective door to assure no diddling. The picture tube employs a simplified arrangement of three beams and one gun. The three beams, red, green and blue are on the same horizontal plane, making convergence a simple matter of modulating the horizontal deflection of red and blue beams. All Tektronix NTSC color monitors now incorporate an additional matrix which allows viewing program material with essentially the same chrominance characteristics as a modern home receiver. The correction matrix may be switched out with a front-

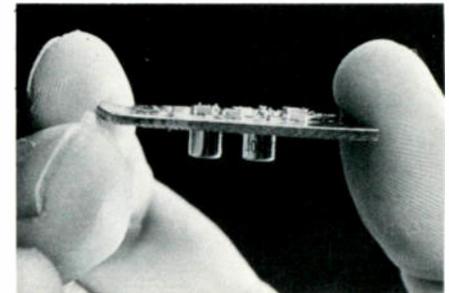
panel control to allow test and setup with a strict NTSC demodulation characteristic. Picture quality should be judged on the monitors with the matrix operating. It is disabled only for test with standard color-bar signals. Price of the new monitor is \$2500.

## REMOTE SWITCHING SYSTEM: COMSONICS INCORPORATED

ComSonics, Incorporated, P.O. Box 1106, Harrisonburg, Virginia 22801 announces a remote switching system which provides for the remote control of the usual non-duplication switcher via the existing CATV coaxial system linking the two points while the CATV system is carrying normal signal carriage. No reverse carriage filters are required by this system. The remote switching system uses the present non-duplication switcher timing mechanism which is relocated to the system office where it can be programmed conveniently. ComSonics is accepting orders for the remote control system for delivery in July 1973. Price of the unit is \$1,695.00.

## PREAMPLIFIERS: MU-DEL ELECTRONICS, INC.

Mu-Del Electronics, 2426 Linden Lane, Silver Spring, Maryland, announces a new low noise, single channel VHF preamplifier, a fallout of a development for NASA's Space Program. This amplifier assembly includes a



high quality, 3-pole, low loss preselector that provides rejection to out-of-band signals. The preamplifier noise figure, including the filter, is as low as 2.5 dB, has a gain up to 30 dB and has an input and output return loss of 14 and 22 dB respectively. It is designed to operate over a temperature range of -40 to +140 degrees Fahrenheit and is powered from a 30 volt AC supply connected to the RF output. Output power handling capability is 50 dBmV maximum. Connectors are either type F or N per customer's requirement. Normal delivery is 30 days after receipt of orders. Price is \$295.00.

## VIDEO SWITCHER: BALL BROS. RESEARCH

The Miratel Division of Ball Brothers Research Corporation, 1633 Terrace Dr., St. Paul, Minn. 55113, has introduced an updated version of their video production center (VPC). The new VPC model features an

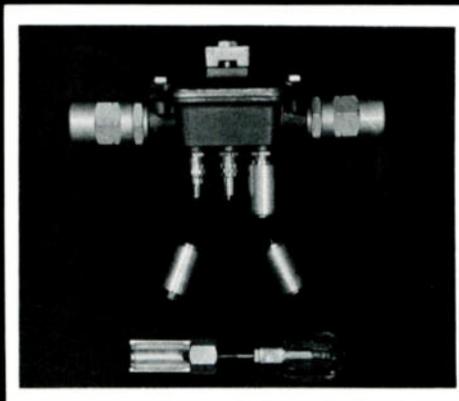
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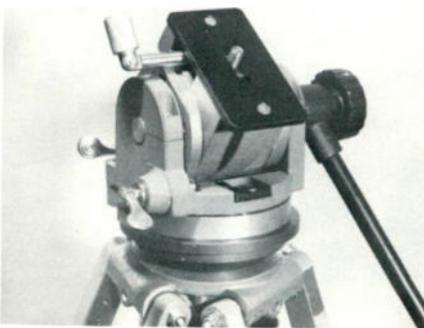
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interlocked and fail-safe switching technique which prevents loss of program control by operator error. Single program selection on "take" type switching is preserved, regardless of simultaneous selection of two or more inputs. The Miratel VPC offers flexible input capability, accepting synchronous or non-synchronous, composite or non-composite, and color or black and white signals.

### MAGNESIUM FLUID HEAD: SOS PHOTO-CINE-OPTICS, INC.

F&B/Ceco announces the availability of their new Pro-Jr. magnesium fluid head. Now made of super light-weight magnesium (7 lbs.). This fluid head accommodates cameras



weighing up to 30 lbs. This new Pro-Jr. magnesium fluid head is manufactured with a special leakproof fluid which guarantees efficient operation in temperatures ranging from

20 degrees below zero through 120 degrees above. The weight of the camera is balanced by an adjustable 3/8" camera lock screw. This magnesium fluid head is equipped with a bubble level gauge, pan and tilt lock or release knobs, left or right hand adjustable pan-tilt handle and quick leveling ball and cavity system with base lock-release knob. The new head with ball leveling tripod legs is available for \$565.00 and may be ordered from SOS Photo-Cine-Optics, Inc. 7051 Santa Monica Blvd., Hollywood, Calif., 90038.

### MESSAGE CHANNEL: METRODATA CORP.

MetroData Corporation, 3201 Fairview Ave. E., Seattle, Wash. 98102, manufacturer of automated CATV data display systems, has introduced a low cost character generation device that displays encoded messages from any number of keyboards over a general message channel. Known as the D-100 Datacaster, the memory unit receives information directly from remote keyboard sites. Designed for cable operators that maintain a general community message channel, the MetroData Datacaster system features a solid state memory that stores and displays in color up to eight full pages of text (over 4000 characters). Messages are repeated continuously on a sequential basis until new information is entered from a keyboard. An acoustic coupler is provided with each keyboard to directly access the head-end via a standard office telephone. This allows keyboards to be located on-site at City Hall, school administra-

tive offices, supermarkets, or wherever the information traffic originates. The keyboards are operationally similar to a standard office typewriter so operator training is not necessary. Information entered on the keyboard is automatically stored in the Datacaster memory for proper display at the proper time over the message channel.

### DEMODULATOR: COMSONICS, INCORPORATED

ComSonics, Incorporated, P.O. Box 1106, Harrisonburg, Virginia 22801 has introduced a broadband zero carrier keyer demodulator for the purpose of enabling technicians to easily and accurately set the required depth of modulation of a television modulator. The zero carrier keyer will permit the adjustment of the depth of modulation to be performed rapidly and without other expensive equipment and lengthy procedures. The device covers all CATV carriage channels without tuning. ComSonics is accepting orders for delivery in July 1973 at a price of \$995.

### Addenda to the TV Communications' Contractor's Directory

CCD, Inc., a Division of Commco, Inc.; 804 Brown Bldg., Austin, Tex. 78701; Ph. (512) 476-3532; complete construction capabilities, overhead and underground installations, strand-mapping, and installations. TVC

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MODEL SP-1

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The SP-1 is \$495.00 and the CM-20M is \$800.00. Delivery on both units is 2 weeks. For all channel capability order Model SP-2.

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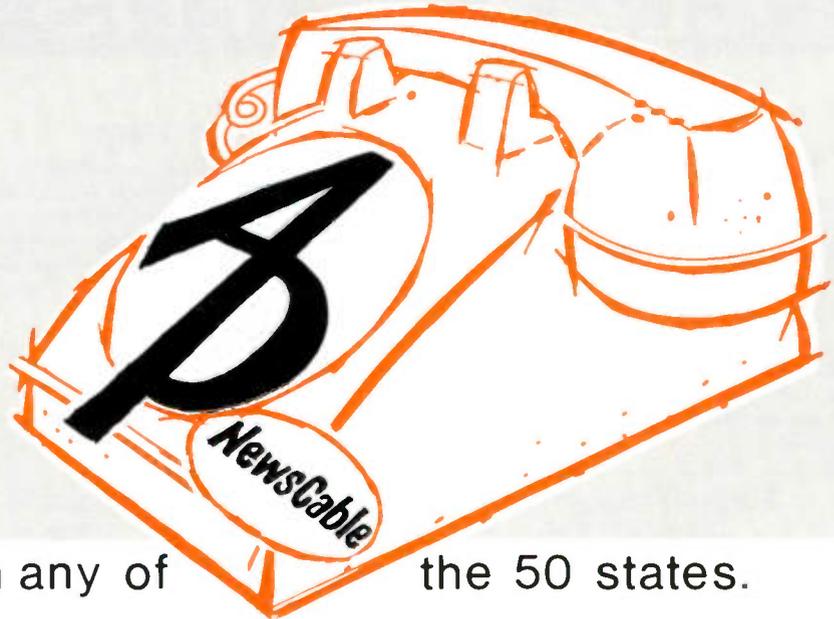
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## Calendar

### APRIL

10-11, Ohio Cable Television Assn. Annual meeting, Scot's Inn, Columbus, Ohio.

10-13, TeleMation programming seminar, Buffalo, N.Y.

16-17, North Central CATV Association meeting, Holiday Inn, Sioux Falls, S.D.

18-19, New England Cable TV Assn. Convention, Sheraton-Regal Inn, Hyannis, Mass.

24-27, TeleMation programming seminar, Indianapolis, Indiana.

24-26, Pennsylvania Cable Television Association spring meeting, Chatham Center, Pittsburgh.

25-27, Texas Cable TV Assn. Convention, Marriott Motor Hotel, Dallas.

29-May 1, West Virginia Cable Television Assn. spring meeting, Pipestem State Park, near Hinton, W. Va.

### MAY

5, Conference on Cable Programming, University of California, Berkeley.

8-11, TeleMation programming seminar, Washington, D.C.

18-19, North Central Chapter of the Society of Cable Television Engineers, spring meeting, Holiday Inn, Downtown, Minneapolis, Minnesota.

22-25, Canadian Cable Television Association, Four Seasons Hotel, Toronto, Ontario.

22-25, TeleMation programming seminar, Milwaukee, Wisconsin.

### JUNE

3-5, National Conference on Community Cable Communications, Washingtonian Country Club, Gaithersburg, Md.

17-20, National Cable Television Association Convention, Anaheim Convention Center, Anaheim, California. 

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