



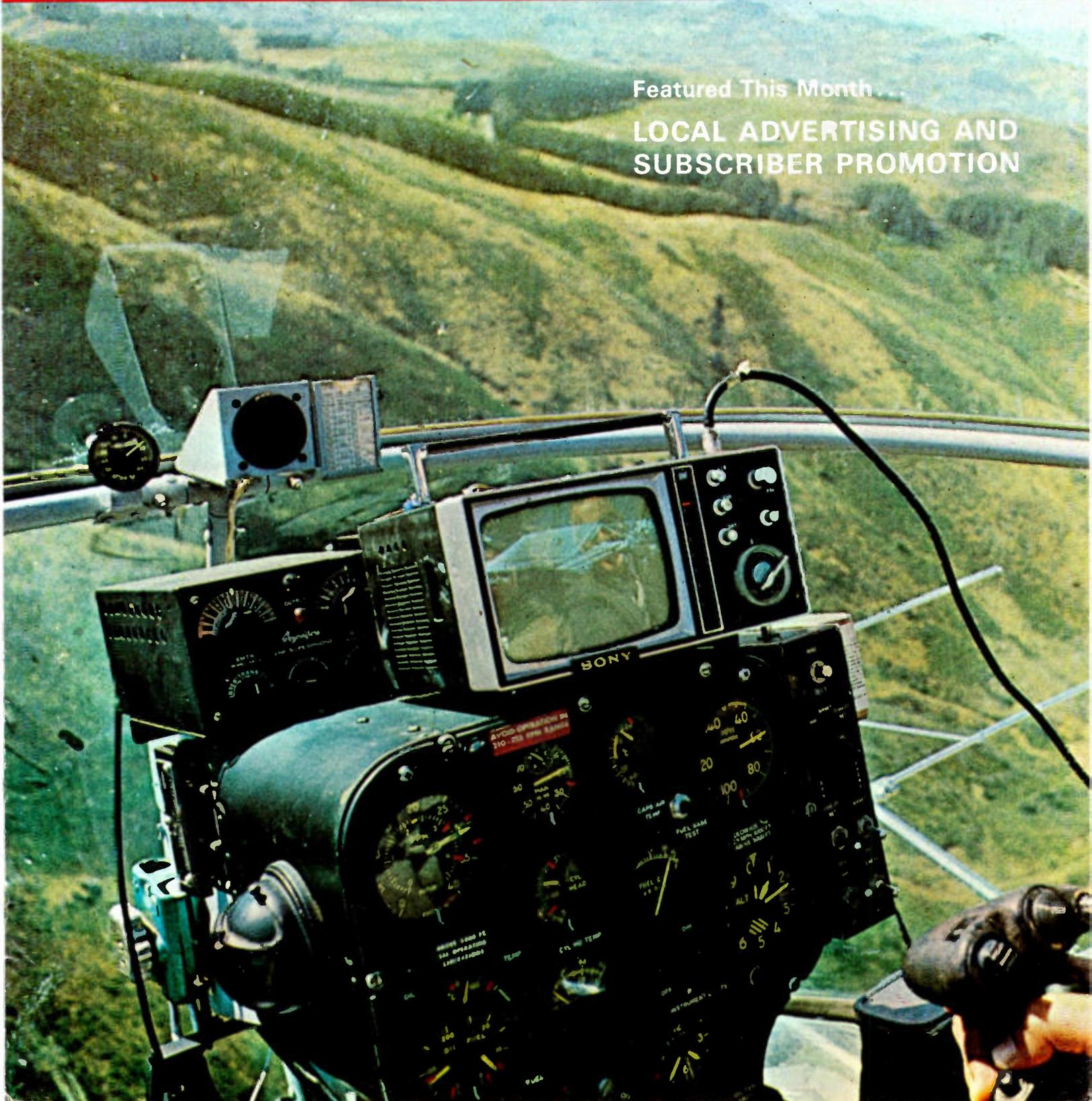
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TV Communications

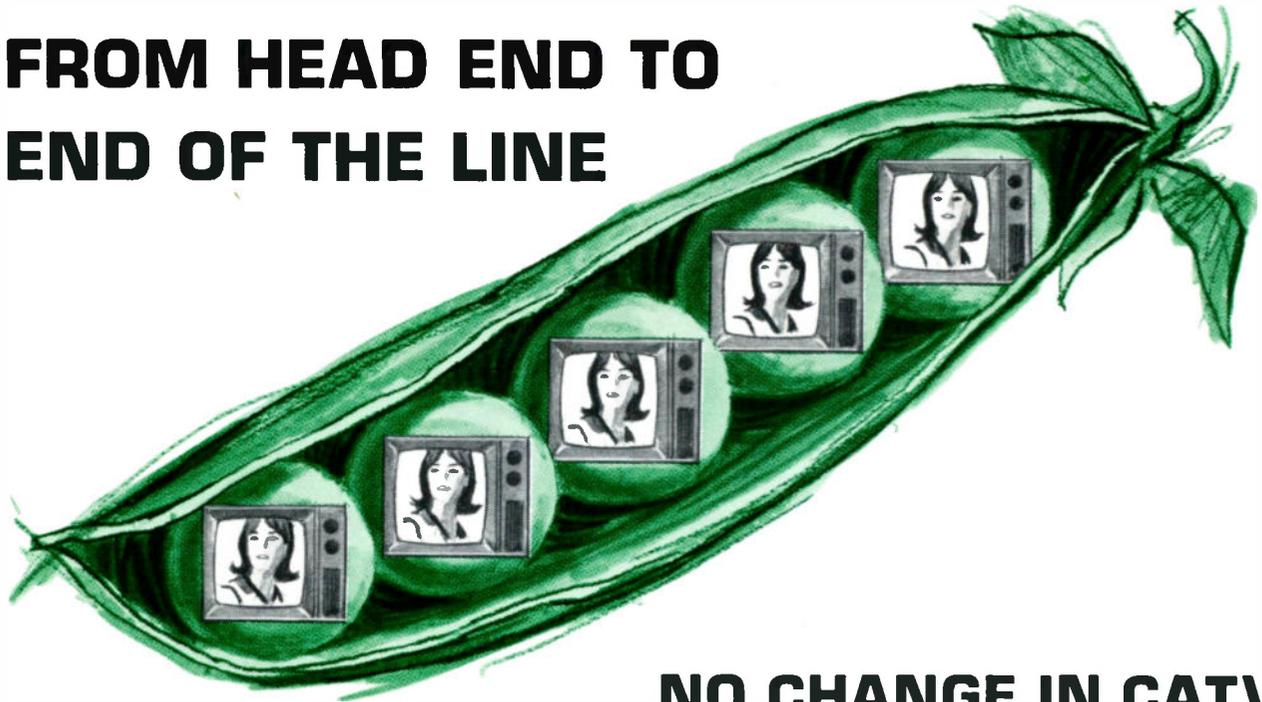
The Professional Journal of the Cable Television Industry

Featured This Month

**LOCAL ADVERTISING AND
SUBSCRIBER PROMOTION**

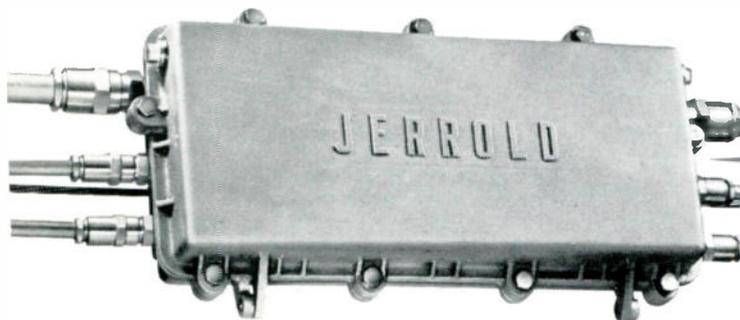


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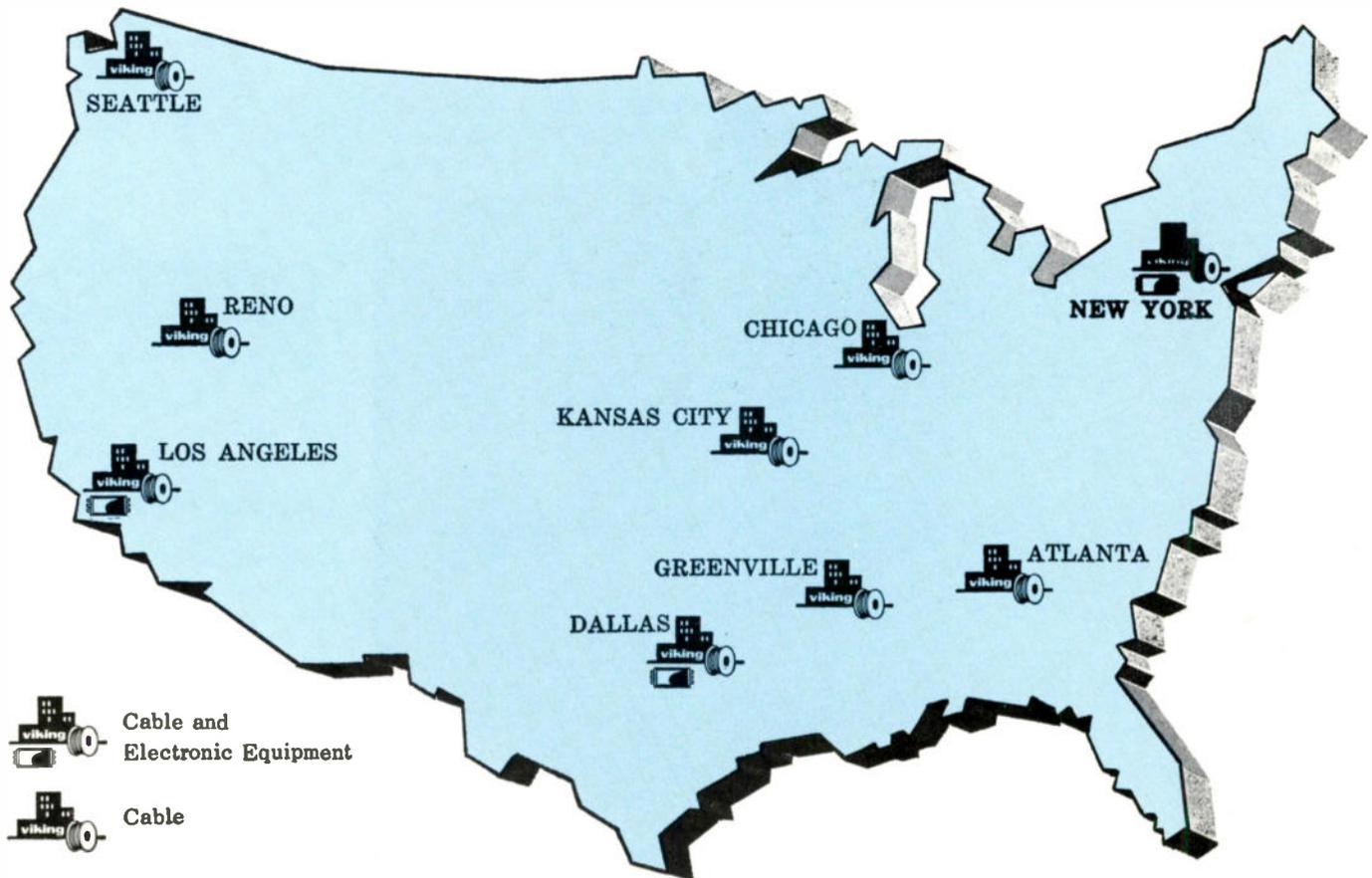
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IN THIS ISSUE

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Planning Successful Promotions

Reliable equipment; quality entertainment; superior reception—all, undeniably, are factors which contribute to the success of cable operation. But an undersold system is an unsuccessful system, regardless of the advantages it can offer. This month's issue, with an emphasis on system promotion, offers operators comprehensive information of the theory and techniques of the promotional process, starting with Robert Huston's discussion of "The Philosophy of Promotions," beginning on page 34. Direct mail—the main medium of the "rifle shot" selling technique—is explained in full by Sam Street, starting on page 37. The advantages of radio advertising, which can be targeted for both mass and selected groups, is outlined by Virgil Evans, beginning on page 44. Ad man Samuel Henry incorporates basic principles of sales and offers clues for making newspaper ads sell, starting on page 48. Charles Wigutow takes an incisive look at an entirely different kind of promotional challenge, selling CATV in metropolitan areas, beginning on page 50. Of course, the secret to phenomenal promotional success lies in a "combination" program — integrated campaigns, combined with strong publicity programs and followed up with direct sales. For Peter Schust's discussion of this hard-hitting "total" campaign, turn to page 54.

Our Cover: The unusual view featured on the front of this month's issue shows a CATV signal survey in progress—as seen over the shoulder of the 'copter pilot. Photo is courtesy of Ameco, Inc.

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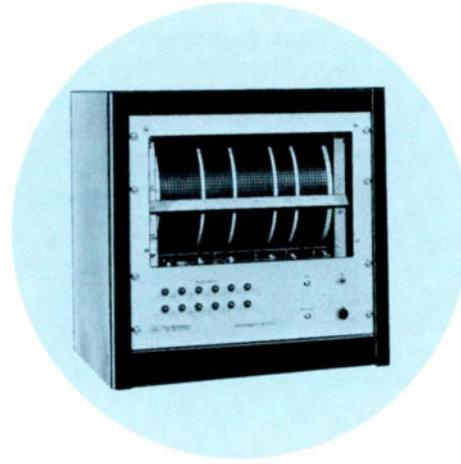


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TV COMMUNICATIONS

THE PROFESSIONAL JOURNAL OF THE CABLE TELEVISION INDUSTRY

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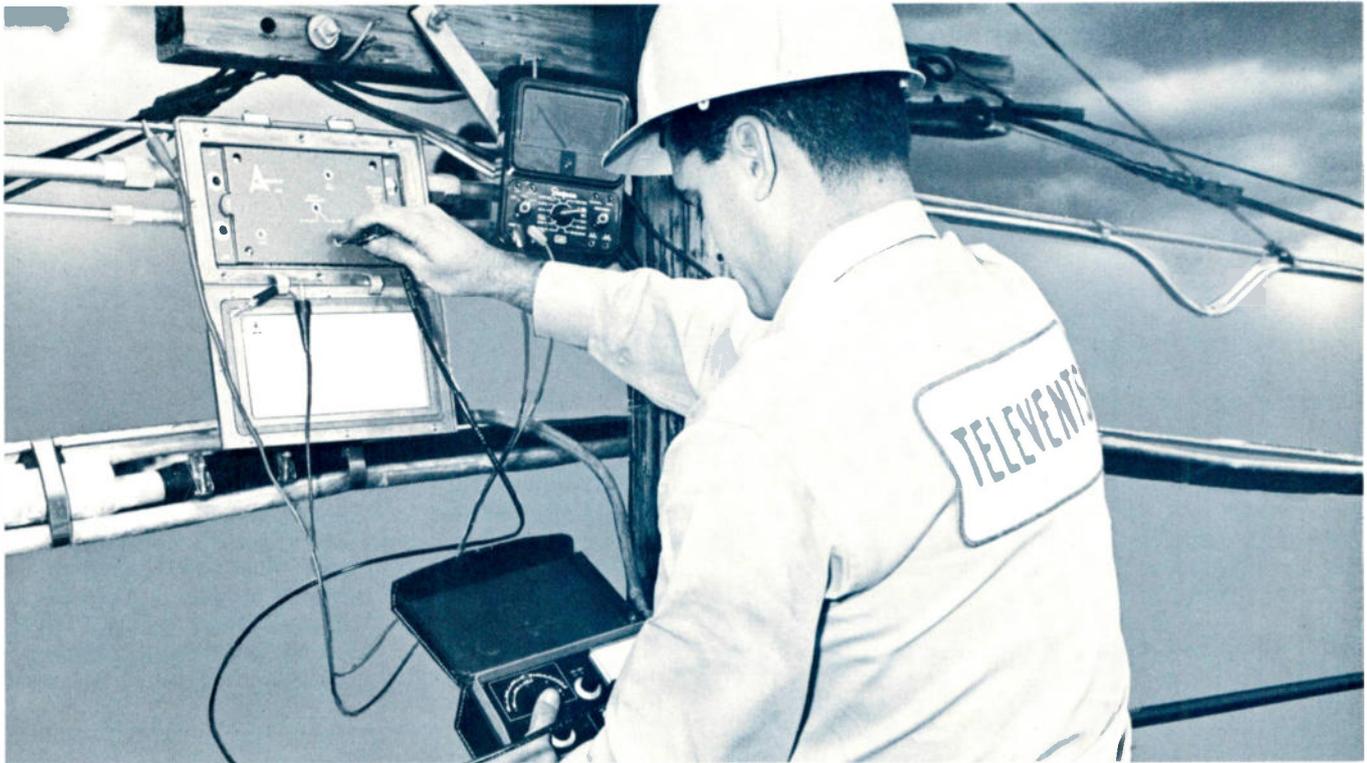
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EDITORIAL

By Stanley M. Searle

Horse And Buggy Methods

Chances are, you've never seen a horse drawn aerial ladder being used in cable system maintenance. But, unfortunately, there are a great number of systems which are being robbed by "horse and buggy" *marketing methods!*

Although cable television is an exciting product of space-age electronic technology, it is too often sold with very little understanding of the *marketing process* — through sales promotion techniques which utterly fail to communicate the infectious desirability of the product.

For any business to enjoy optimum sales, it must activate *all four parts* of the total marketing process. Obviously, management must first recognize these four aspects; then apply appropriate energy to each. In very simplest terms, the marketing process consists of:

- (1) identifying and locating the prospective customers
- (2) presenting the product and creating a desire for it
- (3) getting the order — the decision to buy
- (4) being paid for the product

Every dollar you bank is the result of all four of these steps having been accomplished — by some means, at one time or another.

Pretty basic stuff? Sure. But each of us needs to take a fresh look at his business methods occasionally. If you can stand back and look objectively at your sales program, you're sure to detect opportunities that are presently being overlooked due to overfamiliarity with your own business and, possibly, failure to apply sound marketing techniques in all four basic area.

Now, back to the horse and buggy comparison. Do you simply wait for prospective customers to find you? (That was the accepted method of eighteenth century merchants.) Or do you satisfy marketing phase No. 1 by using imaginative means of discovering newcomers to the community, so that you can invite them to join the cable television family? Do you wait for residents of a growing suburb to send you a petition for cable service — or do you periodically survey un-wired areas for feasibility of extending you plant?

Does your sales thinking mirror the wonder and excitement of what cable television *really means*? To put it another way, do you think of your product as "six channels of television and a weather board" . . . or do you sell "*six marvelous electronic portals into the space age experiences of televised entertainment and enlightenment — plus instant access to a knowledge of our atmospheric environment?*"

Chances are, you don't care for "Bat Man" and a continuous weather display doesn't really thrill you. But unless you can look at your product through your prospective customer's eyes . . . unless you can get excited about the tremendous bargain in laughter and knowledge that cable television affords . . . unless you

can awaken to the fact that a continuous television weather advisory *is exciting*, then you'll never do much of a job with marketing phase No. 2.

How about No. 3? What imaginative, modern techniques do you use to evoke the decision to buy? You have undoubtedly seen a lot of people who seemed ready to buy . . . but didn't. People who were captivated by the abundance of programs displayed on monitors at your "open house" . . . but walked out without signing an order. Do you use the horse and buggy, take it or leave it, approach? Are you self-conscious about asking for the order?

Your prospective customer will normally welcome your help in making up his mind. Enthusiastically urge him to "*sign up today — and start enjoying the wonderful world of cable TV!*" The same principle applies to your advertising messages. Create special inducements for prompt action — and make it easy to sign up by telephone or with a post-paid coupon.

Okay — now that you have creatively, imaginatively and enthusiastically gotten Mr. Subscriber tied to your cable . . . you come to the last, crucial phase of the total marketing cycle. You must collect for the service.

At this point, you can easily recognize the horse and buggy approach (unwittingly used by operators who think that the "total marketing process" only occurs on Madison Ave.). They dutifully send out bills with a single purpose in mind — getting paid for one month's service. No effort to remind the customer of the benefits of cable service. No personal word of thanks. No friendly little note advising of future plans to add another channel. In fact, *no effort at all* to keep on *selling* the product!

Every contact with the customer should be a *sales* contact. This is especially important when you are handling the most delicate and personal part of the whole relationship — relieving your subscriber of a portion of his income! The more pleasant you make this process, the richer you will be.

In requesting or accepting a payment, express your interest in the customer, voice your appreciation, inform him more fully about the service and the bargain he's getting . . . and smile! You'll not only collect your money faster and lower the disconnect rate, but you will also consistently add new subscribers through the good will which will be created.

Cable television service is a uniquely modern "product". Antiquated or unimaginative business techniques have no more place in CATV than does the non-existent horse drawn aerial ladder. This issue contains several articles on cable system promotion. They are aimed at getting the horse and buggy methods out of cable television marketing — and replacing them with profitable, 20th century horsepower!

Stan Searle

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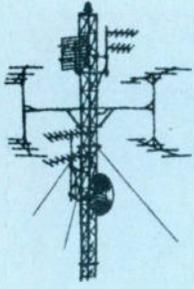
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CATV Industry PERSPECTIVE

Removal of CATV section of the Copyright Bill--which both NAB and NCTA term victory for their respective side--places the decision on cable system copyright liability in the hands of the Senate. Cable industry leaders hope that moderate climate in Senate will produce hoped for amendments, limiting CATV copyright liability to a liveable formula. How much might copyright payments be? No one seems to be willing to venture a guess--although cable system operators are generally reconciled to the virtual certainty of the copyright payment. (Westinghouse Broadcasting once proposed a fee of 1/10 of 1% of gross revenue per channel carried). NCTA wants a statutory formula of payments for channels brought into communities which do not lie within 35 miles of an independent plus three network stations. The Association platform calls for total exemption on carriage of local signals and for systems outside the normal reception areas of all TV stations--and for negotiated payments on non-local channels brought into "adequately" served areas.

Many individual cable operators are worried about the possibility that industry leaders who represent multiple system operations and firms interested in the big metropolitan markets may neglect the interests of smaller operators. However, lawmakers from CATV-served areas will probably urge safeguards against burdensome levies on small cable systems.

The high hidden costs of local origination are becoming increasingly obvious to cable operators. The principal cost factor which many operators fail to recognize initially is that of additional personnel. Cost of manpower for any extensive cable television local origination far outweighs the investment in hardware over a few years' time. Producing programming of a quality and quantity sufficient to substantially increase customer count will be expensive--and return on investment will be slower than from a conventional CATV operation. TV viewers will expect picture quality, continuity and precise program scheduling comparable to commercial channels they regularly watch. Hundreds of cable systems will continue to develop program origination capability--but most will confine their efforts to a strictly supplemental service which does not require additional manpower.

National Cable Television Association will once again be submitted as new name for National Community Television Association. Motion to change name was soundly defeated at last year's NCTA convention on the grounds that name change might dilute industry arguments in copyright cases pending in the courts. This argument won't have much impact this year and, consequently, there is a good chance that cable operators will vote to make the Association name more accurately descriptive of the service which cable television systems provide.

Current FCC investigation into cross ownership of broadcast and cable television properties will not result in any restriction within the next year or two. However, by 1970 the FCC and the Justice Department will scrutinize very closely the possibilities of entertainment monopoly through giant corporate structures containing program production, broadcast stations and extensive cable distribution facilities. The outcome will depend largely on size and number of companies which will have become involved in such cross ownership.

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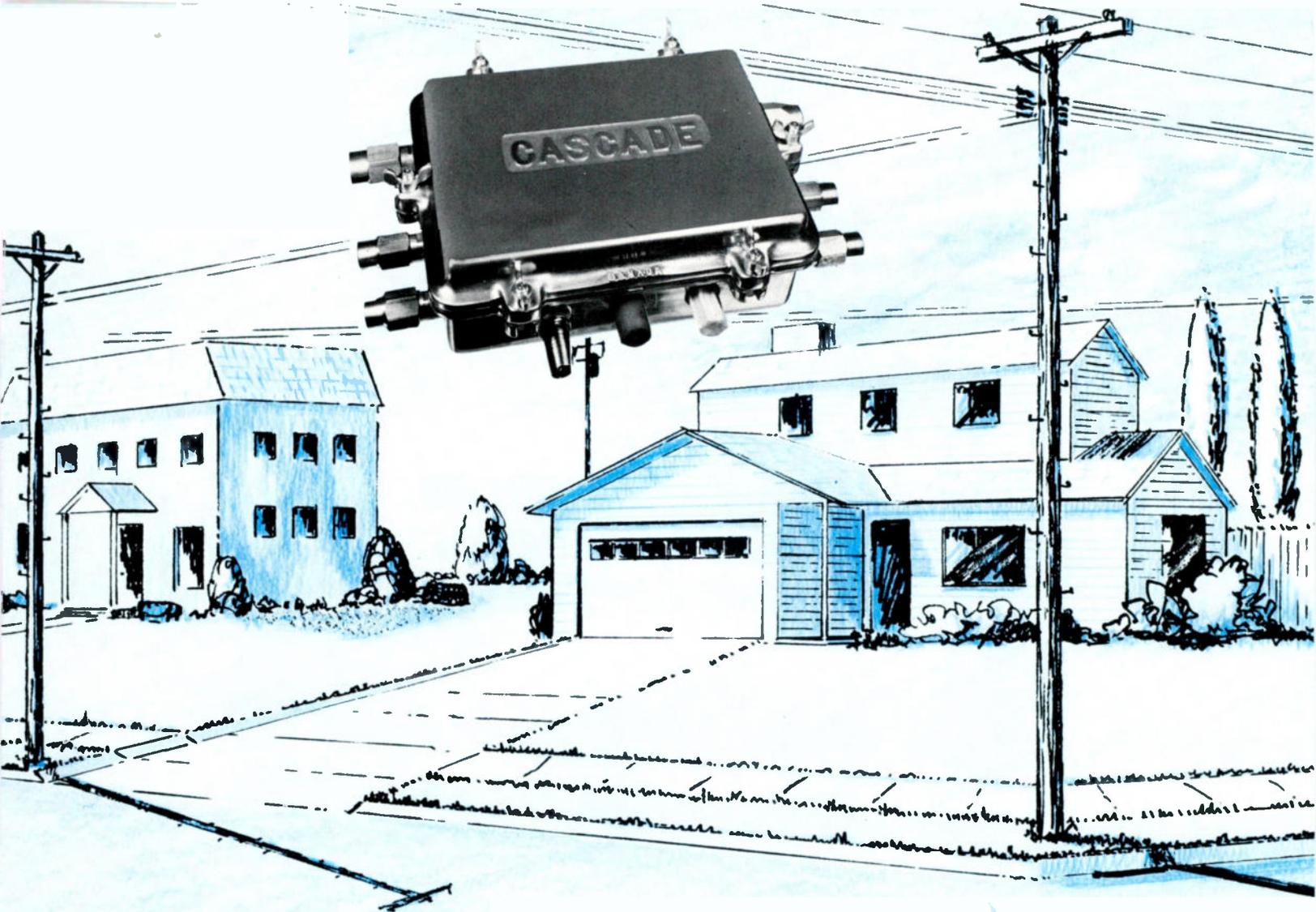
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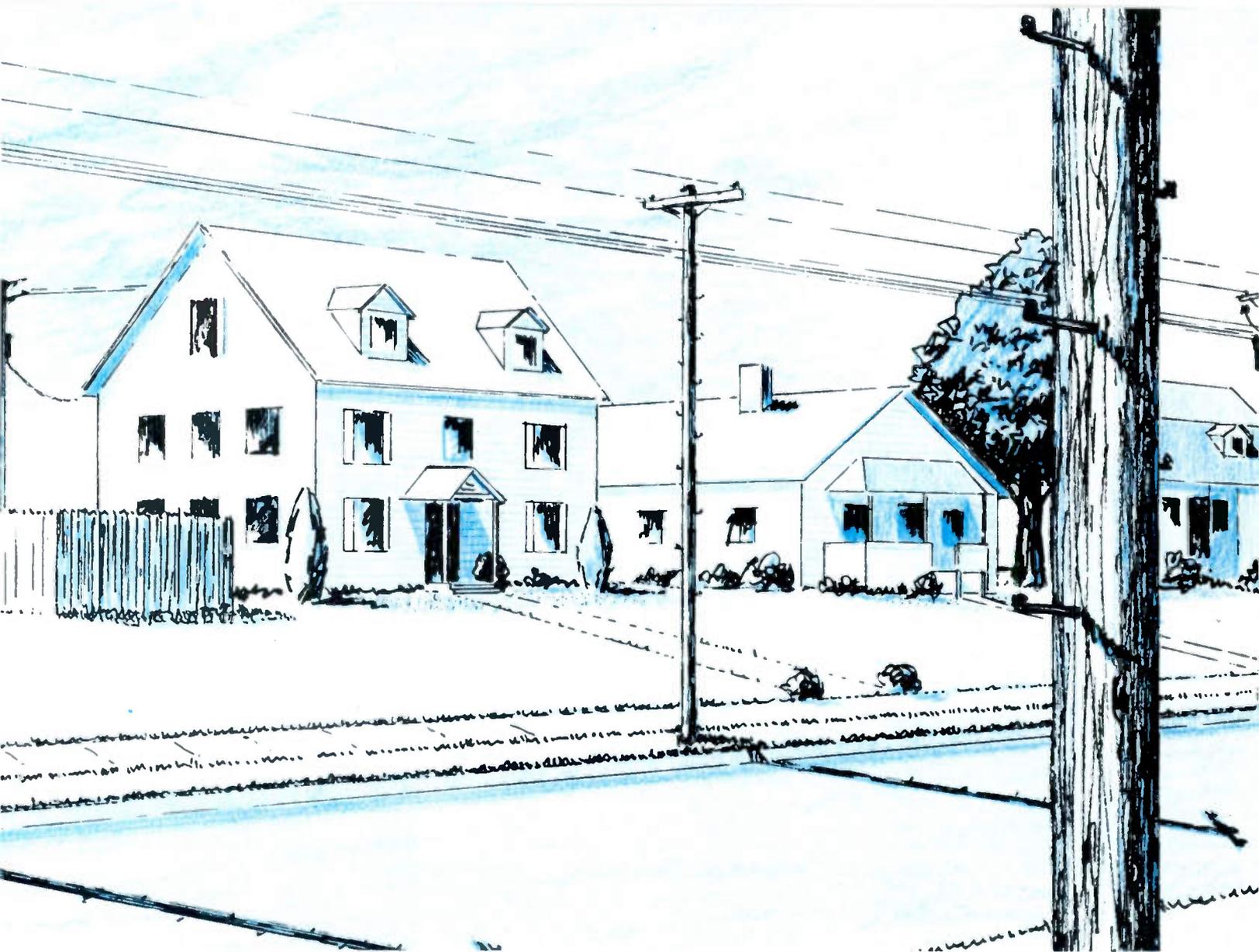
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CATV Legal VIEW

BY JOHN P. COLE, Jr.

Keep The Faith—Baby

As most community antenna operators already know, the FCC, with uncommon speed and consistency, has acted to reject literally hundreds of petitions by CATV systems requesting waiver of the so-called "carriage" and/or "non-duplication" rules. Utilizing several basic prefabricated opinion formats, depending upon the general nature of the circumstances then at hand, the Commission has been writing, adopting and issuing a steady flow of decisions — literally all of which culminate in an order directed to the CATV requiring it to adhere strictly to the carriage and non-duplication requirements in the further conduct of its operation.

Sadly, it has been our observation that some CATV operators were beginning to lose faith with the FCC in its promise to evaluate carefully all waiver requests on a case-by-case basis.

But things are now looking up. Recently, CATV interests were heartened, with good reason, by a landmark opinion of the agency which promises to call a dramatic halt to the flow of heretofore adverse decisions in this important area. Finally, and at long last, the FCC, in the case of *Buck Hill Falls Company*, has acted to grant a more-or-less permanent waiver of its CATV carriage rules for a CATV system operating in Buck Hill Falls, Pennsylvania.

Careful analysis of the Commission's decision in this case per-

suares us that any CATV operation, which can demonstrate factual circumstances similar to those under consideration in the *Buck Hill Falls* case, should now have more than a fair opportunity of convincing the Commission to exempt it also from the requirements of the rules. Thus, the precise facts upon which the Commission based its decision in the *Buck Hill Falls* case have become terribly pertinent to the CATV industry. These facts, as recited by the FCC in its opinion, are largely as follows:

(1) The CATV system in Buck Hill Falls has a total of "only 134 subscribers."

(2) Buck Hill Falls is a "private year-round, resort community consisting of 190 cottages."

(3) "Approximately 25 persons actually live in Buck Hill Falls year-round."

(4) The "maximum subscriber potential is limited to the number of cottages (190)."

(5) The "annual profit from CATV . . . has not exceeded \$2,000 . . . and (Buck Hill Falls' CATV) is not a commercial venture."

Acting upon these facts, so very carefully recited, the Commission granted a waiver to the CATV operator observing indeed "that the circumstances are unique." The Commission then proceeded to state that "of decisive weight in our determination is the small number of permanent residents who receive CATV service" in Buck Hill Falls.

Finally, the Commission, obviously concerned that its *Buck Hill Falls* opinion might open up the floodgates to a tidal wave of waiver grants for similarly situated CATVs, cautioned that its decision to waive the rule "is limited to the factual situation" prevailing at the time of its action.

As any CATV operator can see,

the *Buck Hill Falls* case represents a significant breakthrough. The Commission's heretofore stern resistance to granting waivers is obviously beginning to crumble; the dike is beginning to show leaks. The majority of CATV operators, we are certain, must be encouraged greatly by the leniency demonstrated by the Commission in this situation. Regretfully, however, it still seems that those few CATV systems who cannot fit their operations rather precisely into the somewhat restricted factual circumstances of the *Buck Hill Falls* case are more or less doomed to failure in their efforts to persuade the Commission that a waiver of the carriage of non-duplication rules for their systems would be in the public interest.

But CATV entrepreneurs must not lose heart. The *Buck Hill Falls* case is a perfect example of the rewards for those who keep the faith and persist. □

NEW CATV FIRMS

Walnut Grove Community TV has been issued a certificate of incorporation by West Virginia Secretary of State Robert D. Bailey. Incorporators are Robert L. Garlow, William J. Wilcox, Thomas P. McRobie and T. Ralph Hawkins and Thomas R. Curtis. . . **Vumore TV Corp.** has been formed to bring CATV to the cities of Lancaster and Cassville, Wis. Officers of the new corporation which will operate under the Trade name of Total TV of Grant County, are: Dr. G. Burton Bloch, pres.; O. D. Miller, vice-pres.; James Fitzgerald, treas.; and Fred Weber, secy. . . **Pittsfield Cable TV** has been granted a charter by the Illinois Secretary of State. The charter authorizes issuance of 1,000 shares of common stock. . . **Community TV Cable** has filed an application for a charter. The new company, with offices at Tamaque R. D. 3, West Penn Township, Pennsylvania, purposes to provide service to Clamtown, Pa. residents. Twenty-eight persons filed as charter members. . . **Allenal Enterprises** has been formed to provide CATV service to residents of Westmorland, California. Principals in the firm are Bill Little, Bob Le Couteur and Gene Omerston. □



John P. Cole, Jr. is a member of the Bar of the District of Columbia and the States of Maryland and Georgia.

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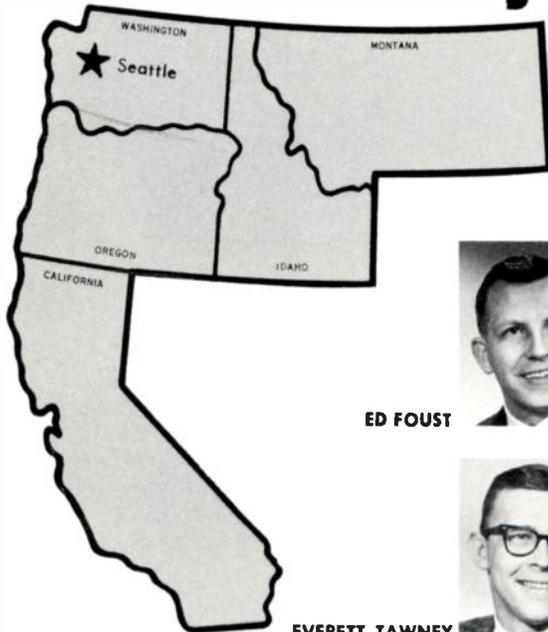
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CATV MANAGEMENT CORNER

Protecting Your Mind

Not too long ago, a group of business reporters talked with a psychologist, psychiatrists, and the head of one of the most progressive mental institutions in the United States. Through their office doors have passed countless business executives who have found to their forlorn unhappiness that they couldn't take the anxieties and tensions that were constantly stabbing away at their emotional balance. They weren't "nuts" or "crazy." They were pitifully lonely, unhappy men for whom life had suddenly lost its meaning, had become a bad dream. Most refound themselves. Not the person they had lost, but a wiser self who had learned, the hard way, to render unto Caesar only that which was Caesar's.

Tension can't be dismissed with an airy "I-can-take-it" attitude. You can't take it. Nobody can. How are you standing up under today's mounting tensions? Examine your mental well-being today: now. Or would you rather do it the hard way? *Waiting* is what makes it the hard way, states an eminent psychiatrist and author: "Most people wait until their mental unhappiness is deeply rooted before consulting a psychiatrist, or doing anything about their situation themselves."

If you are becoming increasingly irritable; if you're not joining wholeheartedly into the spirit of family activities; if you feel yourself uncertain of your contribution to your company; if you are discontent with your lot; if you are worried, anxious, tense, unhappy, for any one of a thousand reasons, real or imaginary, now is the time for you to do something about it.

Most men feel it's up to them to insure their wife and children against want: that it is the sole task of the head of the house to plug away at his job to safeguard their economic future. But many a man forgets that he must provide for his family emotionally as well as economically. By concentrating on his financial responsibilities, his emotional family bond gradually atrophies. Coming home from the office, he finds himself incapable of joining the carefree, give-and-take spirit of family life. In time, he becomes an autocrat who feels his efforts to keep a roof over his family's head go unappreciated. Result: He turns more and more towards his second love, his job or business, until one day he discovers it to be lifeless, cold, and without meaning. Now, too late, he craves warmth, tries to use the atrophied limb of family conviviality. His grotesque efforts scare everybody, including himself. He has no anchor, and his mind is ripe for seeding.

One eminent psychiatrist strongly believes that a man can augment the relaxing, therapeutic effects of a well-rounded family life with the pursuit of culture. And not enough time, says this psychiatrist, is spent in quiet, relaxed contemplation. He goes on to say that not only should a man throw himself into the spirit of family affairs, but into community activities as well. At many major mental hospitals, group therapy is one of the most important tools used to bring back a patient from the selfish never-never land to which he has retreated. The hospital gently woos a mental patient to partake of group activities until finally, under his own power, he moves into the healing circle of friends. If this trip must be made, why do it the hard way? Life is not really complicated, but many business men make it so. □

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5. How can I increase revenue in the face of impending copyright liabilities?

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House Passes Copyright Bill

The copyright seesaw—for a moment, at least—slid the industry's way last month when the House sliced out the section on CATV before approving the House version of the copyright revision bill. The limited victory came by way of an overwhelming 279-29 vote, and was more than likely the result of a strong debate on the House floor between the Judiciary Committee, which had worked on the bill for years, and the House Commerce Committee headed by Rep. Harley Staggers (D-W. Va.) Staggers, along with many of his committee members, thought that the Commerce Committee should handle legislation governing CATV

The CATV industry case was stated by Rep. Arch Moore (R-W. Va.), who argued that "what we seek to do in this legislation is control CATV by copyright. I say that is wrong. I feel if there is to be supervision of this fast-growing area of news media and communications media, it should legitimately come to this body from the legislative committee that has direct jurisdiction over the same."

"I believe the public has a right

to choose to receive the locally originated program by a CATV operator or to choose a program originated by a television station or a network. I rise in this instance in behalf of the public's right to choose. I believe the public should have the right to make a choice, and I do not agree that the public should have to pay the copyright owner twice to watch the same program for this right of choice, if they happen to subscribe to a CATV system that originates a local show or permits me in any instance to report to my constituents.

"The issue is very plain. Do we favor free speech for the CATV operator as well as for the broadcaster, or do we seek to close down the CATV operators in the country?" In arguing for Commerce Committee jurisdiction, MacDonald said: "May I point out that it is the function of the FCC and not the Register of Copyrights to make plans and to regulate the use of the airwaves so as to give people in all parts of the country the opportunity of listening to and viewing the best in programs. Protection of this

opportunity is equally as vital in the public interest as is the protection of the financial interest of copyright holders."

In offering the amendment to strip out the CATV section, Rep. Richard L. Ottinger (D-N.Y.) noted that, "After consultation with the two committees, the jurisdictional problem has now been worked out, as I understand it. The agreement that I believe has been arranged between the two committees provides that the Interstate and Foreign Commerce Committee will take up promptly the problem of regulation of CATV, referring the matter of copyright protection of CATV to the Committee on the Judiciary at that time . . ."

In working out a compromise on the CATV issue — which if unresolved would threaten to torpedo the entire Copyright Bill, which has a sweeping range and is generally acknowledged to be badly needed by many segments of the country — the House once again, as they had the week before, rejected a proposed amendment that would have explicitly exempted CATV from copyright liability in any form. Rep. Arch Moore (R-W. Va.), in offering the amendment, stressed that it would not preclude the House Commerce Committee and Judiciary Committee from eventually applying a different copyright formula to CATV, but Celler and Staggers had already agreed on their approach, and they easily rallied a majority of their colleagues to support them in merely stripping the section out of the bill.

Connecticut Franchises Granted

The Connecticut Public Utilities Commission exploded a franchise bombshell last month when it awarded seventeen CATV grants to serve approximately half the towns in the state. The franchise winners, each of which will serve from two to seven communities, were: Community Television Systems, Inc.; Waterbury Community Antenna, Inc.; Ducci Electric Co.; Matthew Jenetopulos; Laurel Cablevision, Inc.; Greater Hartford Broadcasting, Inc.; TelePrompTer Corp. of New York; Teletron, Inc.; Tele-

Systems Corp.; New England Industries, Inc.; The Outlet Company; Eastern Cablevision Company; Grossco Inc.; Bridgeport Community Television Company — New Canaan; Eastern Connecticut Cable Television Inc.; Cable Video Inc.; and New Milford Cablevision Company.

Connecticut law requires that before the PUC may grant CATV franchises it must "consider the need for the proposed service, the suitability, financial responsibility and technical competence of the

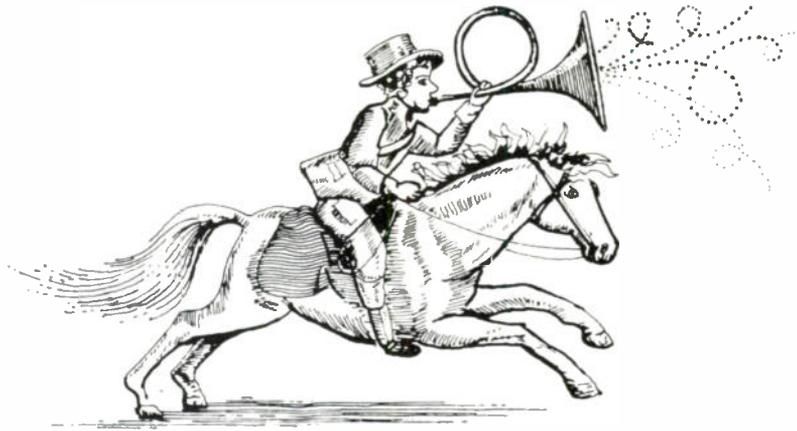
applicants." The seventeen grants were all approved on all counts by the Commission.

Noting that CATV in the past has generally been considered a small business, the PUC "concluded that better service to the public will be assured through a series of relatively small independently owned systems. This arrangement will serve the further useful function of providing the Commission with comparisons of operation." All of the grants were conditional on prompt application to the FCC for Federal approval and filing of detailed construction plans with the

PUC within sixty days. Exact nature of charges and rate of return were scheduled to be worked out by the PUC and the franchise holders at a later date.

In reasoning on the question of CATV/broadcast cross-ownership, the PUC said that "The interest of the viewing public is not the same as that of the television station or network. The CATV customer is interested in receiving the widest assortment of high quality entertainment that is possible. In order to meet this desire, the CATV operator must, of necessity, make a choice of the available signals it sends into the subscriber's home. A CATV unencumbered by a financial interest in a particular television station will be free to select those channels which in its opinion will secure maximum viewing. The interests of the viewing public and the CATV here coincide. However, if the CATV operator has a substantial financial interest in a TV station, he may approach the problem of channel selection with conflicting feelings."

The Connecticut PUC's involvement with CATV dates back as far as 1963, when Connecticut became the first state to enact legislation giving the State Commission jurisdiction over CATV, and hearings were held in 1964 on a multitude of CATV applications. After thoroughly reviewing the issue — by means of as many as 93 sessions of hearings, 9,481 pages of testimony, and volumes of exhibits — the PUC found that the General Statutes of Connecticut vest "ample authority in the Commission to specify such terms and conditions as the public interest may require." The ruling provides that "franchises granted for operation of CATV shall be exclusive franchises," and that . . . "in return for the privilege of having a legal monopoly, (a system) must be subjected to rate regulation." It notes that such regulation is required by the public interest for the protection of patrons of the service." The ruling also provides for the protection of local television stations; requirements for system engineering; dissemination of weather forecasts and other services; and standards of construction and maintenance.



“Here at last is something in the doings of man that corresponds with the broadcast doings of the day and night.”

— WALT WHITMAN
Preface to Leaves of Grass (1855)

We don't know whether Mr. Whitman really had SONY in mind when he penned his preface. But we do know that SONY's remarkable EV-200 Videocorder* system most certainly "corresponds with the broadcast doings of the day and night" when it comes to CATV operations.

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Other outstanding features of the EV-200 system are: ability to operate with existing CATV systems; use of economical 1" tape; slow tape speed ensuring long tape life; complete tape interchangeability with other EV-200 recorders; weight, only 88 pounds.

Here at last is your answer to reliable, rugged, low-cost local CATV programming.



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Telco Hearing Begins This Month

Scheduled to begin May 31, the consolidated CATV/telephone company hearings are drawing an increased amount of scrutiny from the Federal Communications Commission. Last month the Commission issued two more rulings on the forthcoming hearings:

The first was aimed specifically at telcos who might plan to continue to build CATV facilities while the hearing continues. If the hearing results in a Commission decision adverse to telco interests, the Commission said, they may be stripped of the very facilities they are not constructing; to continue to build is at their own risk. (The decision was a welcome one for the CATV industry, which had been concerned about the possibility that no matter how the hearing is eventually resolved, the telephone companies might have *de facto* control of CATV.)

The Commission also ruled that the proceeding is adjudicatory in nature. This point had earlier been argued by General Telephone and Electronics Corp. and United Utilities Inc. The GT&E filing came after CABLE TELEVISION REVIEW reported that the Commission's CATV Task Force had been instrumental in the FCC's decision to spin off the Section 214 Issue for early consideration. (That issue of whether telco CATV construction has to be authorized by the Commission has been given expedited consideration.) This warning is apparently an effort to forestall the industry takeover possibilities warned of by the Commission in telling the firms that they are now constructing at their own risk. GT&E argued that the Task Force was making *ex parte* contacts, and the Commission ruling agreed — though the effect is to throw open the confidential files of communications between different FCC departments on the matter.

Hanover Injunction Denied

The possibility that constructed CATV facilities might be taken away from a telco played a prominent role in the first round of the landmark antitrust case which

continues to brew in Hanover, Pennsylvania. Ruling on the case, Judge William J. Nealon denied the motion by Radio Hanover, Inc. for a preliminary injunction which would halt construction by Penn-Mar CATV, Inc., a corporation formed by United Utilities, United Telephone of Pennsylvania, United Transmission, Inc., Susquehanna Broadcasting Co., Brush-Moore Newspapers of Canton, Ohio and Penn-Mar Publishing Co., owners of the Hanover *Evening Sun*. Both CATV companies are operating under franchises issued by the city of Hanover.

Although Radio Hanover won the first round of the battle (Judge Nealon had called an unprecedented immediate hearing on the injunction after Radio Hanover contended that construction could begin before the defendants could be notified), the Judge's 10-page memorandum on the case stated that Radio Hanover "has not carried its burden of showing irreparable injury will result . . ." Therefore, he ruled that the "evidence does not show a right to interlocutory injunctive relief." The denial rested on the key word: "irreparable." Judge Nealon pointed out that the defendants had testified that if Radio Hanover prevailed after a trial of the antitrust issue, it could have lists of subscribers to the Penn-Mar system and, in fact could "step into the shoes" of the defendants and have an operational CATV system turned over to them. This, as the Judge saw it, nullified the "irreparable" aspect needed as justification for granting an injunction.

NYC Wants In Hearing

The City of New York filed with the Commission last month asking for permission to intervene in the consolidated telco hearings.

The city's filing briefly sketched its own CATV history, noting that it has granted a pair of CATV franchises in Manhattan, but is now confronted with the case of New York Telephone Company offering cable service without a franchise. (The telephone company has argued that it does not need a

franchise to extend television distribution service.) "New York City has only so much franchising power over its streets as the State has delegated to it," the filing said, adding: "It is thus presently unresolved as to whether or not the City has a right to require a franchise of a subscriber to a telephone service who conducts a business in City streets through such service."

New York City noted that it was actively considering the case when the hearing was consolidated, and now wants to participate in the hearing. "The basic issues at the heart of the consolidated proceeding affect not only CATV service," the New York City filing stated, "but the whole concept of broadcasting: the new ways developed by technology to bring information, news, advertising, and other services and products into the viewer's home . . . It is important to the City of New York that its many residents and varied industries obtain the full benefit of such electronic advancement. To assure this, it is important that the commercial uses of these new broadcasting methods grow in a regulated and orderly fashion."

NCTA Opposes Storer

The National Community Television Association has also filed with the Commission in opposition to a petition by Storer Broadcasting Company to intervene in the hearing. Storer's request stated that it wants to protect the broadcast industry's interest in the proceeding. The NCTA, however, told the Commission that Storer's filing "basically is a request to be allowed to submit evidence as to economic impact of CATV on its television broadcast stations" and could inject into the hearing a whole range of issues unrelated to CATV-telco matters.

Hawaiian Tel Files

The Commission also received a request from the Hawaiian Telephone Company for a ruling that its CATV tariff offerings are intrastate in nature and therefore do not have to be filed at the Commission as other telco tariffs now must be. The Hawaiian organization said it has offered CATV service since 1962, and all programming carried has been Hawaiian in origin.

NCTA Announces Staff Changes

Several major changes in the National Community Television Association's staff have been announced by president Frederick W. Ford. The changes, the first in a series, were said to be planned to help increase the Association's capacity to serve its members. They were initiated in accordance with instructions from the board of



Mr. Ford



Mr. Briscoe



Mr. Street



Mr. Roudybush

directors, to implement the recommendations of Fairbanks Associates, a management consultant firm retained last September.

Wally Briscoe, NCTA's administrative assistant and office manager, will assume the key post of managing director. In his new position, Briscoe will assist the NCTA president in formulating and effecting appropriate operating policies; provide coordination and assistance for the programs and activities of the key staff personnel, and provide advice and recommendations concerning overall headquarters objectives. He will perform a coordinating and liaison function with respect to convention management, and in the absence of the president will undertake the responsibilities of administering the headquarters office operation.

Briscoe, who has been with NCTA since 1964, previously served as administrative assistant to Rep. Oren Harris (D-Ark.) when the latter was chairman of the House Committee on Interstate and

Foreign Commerce; as manager of the KATV (TV) in Pine Bluff, Ark., studio; and as field underwriter for Mutual of New York.

Sam Street, who joined the Association last October as director of membership services, will become director of convention and field services. As such, he will have primary responsibility for the operation of the annual NCTA convention, seminars and regional meetings, in addition to his present responsibilities of liaison with state and regional associations, development of member services, and acquisition of new members. Street's previous positions include: director of marketing, Viking Industries; director of advertising and public relations, Ameco; partner, Adler, Street & Associates; advertising manager, TeleSystems Corp.; owner, president, S. S. Street Inc., advertising agency.

David Roudybush will move up to office manager from his present position as bookkeeper, which he has occupied since joining NCTA in 1964. He will still retain primary responsibility for the Association's accounts, in addition to taking on the task of managing supplies and supervising the clerical staff. Roudybush has held accounting and clerical positions with National Business Publications, Inc.; the Washington brokerage firm of T. J. McDonald Inc., and the Federal Bureau of Investigation. He will be assisted by a new bookkeeper, Miss Erna Poulsen.

Under the new reorganization plan, three staff members—the managing director, general counsel and director of information (Berry Crickmer)—will report directly to the president. These three, together with the director of convention and field services and the office manager, form a staff management committee which will meet periodically to discuss problems, exchange ideas, and advise the president. A new position, that of technical director, designed to provide staff liaison with the standards committee and develop and coordinate technical data and engineering education programs, will probably be filled in the summer of 1967.

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IEEE Hears CATV Viewpoint

The 1967 International Convention of the Institute of Electrical and Electronics Engineers (IEEE) heard a lot about the subject of CATV when it met last month at New York City's Hilton Hotel. At least three scheduled speakers not only mentioned the industry — they expounded upon it.

J. Leonard Reinsch, president of the Atlanta-based Cox Broadcasting Corp. and its subsidiary, Cox Cablevision, told IEEE members that national ideas of communications need to be expanded to allow CATV its proper place. Tracing the development of CATV, Reinsch stated that "the transition of CATV to a full grown member of the electronic communications family is in its final stages . . . The impressive growth of commercial television since the end of World War II has largely overshadowed the progress made by all other media of mass communications for instance, convincing evidence that cable communications offer a practical supplemental means for satisfying expanded television needs has been virtually overlooked." He pointed out that many people now believe that in the near future cable will provide nearly all communications services.

Reinsch stated that some television broadcasters see the growth of CATV into metropolitan areas as a threat to their business, due to the offering of an expanded choice of viewing services. The implication, he said, is that CATV will tend to lessen the popularity of any one channel. "Anxiety," he said, "is probably the best word to describe the relationship that exists today between the CATV industry and . . . the television broadcast industry. It is an anxiety born out of the unique affinity one medium has to the other, for the nature of CATV is inexorably bound to the nature of the television medium."

Stating his belief that "CATV's inherent ability to provide expanded broadcast coverage justifies its classification as a major communications device," he noted that "It is an indisputable fact that CATV performs a vital public service by bringing just the basic television fare to people who would otherwise

receive very little or none at all. However, CATV's technical capacity to improve home television reception is not confined to rural and mountainous communities. It has also found application in major urban areas where man-made obstruction and noise make reception difficult. These two reasons alone justify the inclusion of CATV in our national communications scheme. The CATV industry is also discovering that it is able to perform a third important function. By using the creative and production tools of television, it is possible for CATV to serve those communities that are without a means of local television expression."

In summary, Reinsch said that he "would like to see the public service potential of CATV given more prominent recognition, even to the extent of incorporating into federal policies the concept of cable communications. CATV should be recognized as a practical alternate means of local community television expression in towns and cities which do not have adequate local service . . . I, for one, do not accept the premise that competition from other media necessarily threatens the survival of any one of them. I believe competition fosters excellence, and that by embracing new methods and new technology, we ward off complacency."

Schlafly Outlines 18 GHz Tests

Hubert Schlafly senior vice president of TelePrompter Corp., outlined the TelePrompter-Hughes Aircraft tests of the experimental 18 GHz broadcast-relay CATV system in New York City, "which up-converted the entire VHF television band and FM broadcast band between 54 and 216 MHz to an identical frequency segment in the 18 GHz region. At the receiver these transmitted frequencies were down-converted to the exact VHF frequencies which appeared at the transmission point." Schlafly reported that the experiment has been so successful that the FCC has been asked to authorize a nationwide service of a similar nature, and the proceeding is currently under consideration. In bringing the engineers up to date, Schlafly noted

that operations so far "demonstrated that 12 conventional television channels could be received over a six-mile path from a single transmitter during normal weather conditions without noticeable cross modulation or increase in picture noise.

Palmer Presents Concepts

James Palmer, president of C-Cor Electronics, State College, Pennsylvania, presented new CATV amplifier concepts to the IEEE members. Palmer gave a detailed description of cable system design using high output trunk and bridging amplifiers. Sample systems were shown wherein the number of amplifiers required with high output equipment was one-third the number required with conventional 22dB gain amplifiers. Palmer also discussed reliability cost savings and reduced maintenance cost. Special emphasis was placed on temperature design for systems, with automatic level control and nominal design temperatures examined in detail.

ACTI Systems For Sale

According to inside sources, the complex of American Cable Television Inc. systems, owned by CATV veteran Bruce Merrill, have definitely been put up for sale at an estimated combined price of \$12 million. The system and microwave facilities in Panama City, Florida have already been sold to Westinghouse Broadcasting, although FCC approval on the microwave transfer has delayed the acquisition. In addition, there are reports that Continental Telephone Company has agreed to purchase at least one ACTI system, in Pecos, Texas.

Legal Seminar Transcript Available

NCTA General Counsel Bruce Lovett has announced that the transcript of the December 12-13 Legal Seminar is now ready for sale and distribution. The transcript contains 200 single-spaced pages, and is available for \$30 (single copies) /\$25 (two or more copies). Price for individuals who attended the Seminar is \$20 apiece.

FCC Actions—Some Waivers Granted

The Federal Communications Commission glanced favorably toward seven Pennsylvania systems last month, and granted waivers for the importation of distant signals into the Harrisburg-Lancaster-Lebanon-York area. The systems will serve twenty-five different communities.

The Commission agreed to allow Susquehanna Broadcasting to "import the distant signals of Philadelphia network and independent stations, and a network station and an independent station from Washington, D.C." to its CATV system in York. People's Broadcasting Company, which has CATV systems in Lancaster, Manheim, Manor, Warwick, East Lampeter, West Lampeter, and West Hampfield Townships, plus the city of Lancaster, was given the green light "to import the distant signals of two Philadelphia and one Washington independent stations." D & E Cable TV Inc. will be allowed to carry the distant signals of three Philadelphia independent stations to its CATV systems in Adamstown, Akron, Denver, Lititz and Manheim.

Valley Video Company was given the go-ahead for its CATV system in Derry Township to import the distant signals of three Philadelphia network stations and one Philadelphia independent station. West Shore TV Cable Company, which asked for and received a dismissal of a separate application for a community antenna relay service station, was allowed to "import the distant signals of two Baltimore network stations, two Philadelphia network stations, one Philadelphia independent station and one Washington independent station" to its CATV systems in Mechanicsburg, Shiremanstown and the townships of Silver Spring, Monroe, Upper Allen, Lower Allen and Fairview. Lebanon Valley Cable TV Company was permitted to bring the distant signals of three Philadelphia independent stations to its CATV system in Lebanon, and H. C. Ostertag Cable Television Inc. received Commission authorization to carry "the distant signals of one Philadelphia network station, four Philadelphia independent stations,

one Washington independent station, and one Baltimore prospective independent station" on its CATV system in Columbia.

Other FCC CATV Actions

The FCC granted a petition for waiver of the carriage and non-duplication requirements of the Commission's CATV rules that was filed by Buck Hill Falls Company, which operates a CATV system in the private resort community of Buck Hill Falls, Pennsylvania. The waivers apply only to WBRE-TV in Wilkes-Barre and WNEP-TV in Scranton, both Pennsylvania. The Commission denied requests for waiver of the program exclusivity provisions of the rules filed by three other CATV outfits: Total Telecable Inc., which has CATV systems in Anacortes, Bellingham, Burlington, Mount Vernon, and Sedro Woolley, Washington; TV Cable Company of Andalusia Inc., which owns and operates a CATV system in Andalusia, Alabama; and TelePrompTer Corporation for its CATV systems in Johnstown, Pennsylvania, and Elmira, New York.

After a hearing in a CATV show cause proceeding, the FCC cracked down on the CATV systems operated by Twin County Trans-Video Inc. in Ormrod and Freemansburg, Pennsylvania, and warned the CATV owner and operator that it

should not carry "distant signals" in Greenawalds, Pennsylvania. Commissioner Kenneth A. Cox wrote the decision, to which two long-time foes of the FCC's CATV rules, Commissioners Robert T. Bartley and Lee Loevinger, dissented.

Facing the inevitable problem of hearing cases growing, the FCC decided to crack down on CATV Top 100 market cases. The Commission established a cut off procedure, so that once a Top 100 market hearing begins, no other CATV applicant — or opponent — can enter the case.

Four CATV system owners filed at the FCC in opposition to a proposal that the Commission's CATV rules be rigorously applied to CATV systems in their carriage of foreign television signals. Many systems near the Canadian border carry the signals of one or more Canadian stations. That interpretation was asked for in an earlier filing by television station KOMO-TV in Seattle, Washington. The opposition filings came from Jerrold Corp., Colorcable Inc., NewChannels Corporation and Cox Cablevision Corporation. They all pointed out that the FCC's jurisdiction is confined to the United States. The CATV regulations, they said, apply the Top 100 market rules specifically to stations licensed by the Commission, which Canadian outlets are not, and the rules therefore cannot be extended to the carriage of foreign stations.

Phoenix Likes CATV

More than 40,000 residents of Phoenix, Arizona, headquarters city for Ameco, Inc., had their first opportunity to see 12-channel cable television at the Arizona Home Beautiful Show March 30 to April 2. And they liked it. The Ameco display was reported to be one of the most popular among 125 exhibitors. Special authorization was granted by the FCC to set up a microwave link to bring in the four Los Angeles non-network channels for the Home Show. The 12-channel simultaneous viewing included these four, the three local network channels, the local independent and educational channels, a news teletype, weather and time channel, and KTAR-TV's



For four days, from noon to 10 p.m., the Arizona Home Beautiful Show and the Ameco booth hosted throngs like this. Visitors showed a pronounced interest in CATV.

closed circuit colorcast of the Home Beautiful Show itself. Nine color sets and three black/white were loaned by Motorola for the display.

PNCTA Meets In Spokane

The Pacific Northwest Community Television Association held its annual spring meeting last month at the Ridpath Hotel in Spokane, Washington. Attendance ranged from the 175 operators to several "observers" from broadcast and telephone companies. Chief topics of discussion for the two-day meet were: educational television; local origination; and technical aspects of the industry.

Heading the program were ETV directors Dr. Luke Lamb of Orgeon's board of higher education and Dr. Darrell Anderson of KSPS-TV, Spokane. Anderson told the operators to, "Take a long look at the income possibilities of schools for programs they want . . . as a production facility . . . a major source of your income could come from schools within the next decade, if you are smart enough to start working with them now," he said. Lamb spoke of the "generally good" ETV-CATV relationship in his state where 70% of the population is exposed to ETV signals, of which 6% are reached through CATV. He stated his hope that "All CATV systems in Oregon will be able to carry ETV signals."

Luncheon guest speaker was Marcus Bartlett, vice president of Cox Broadcasting Corp. He reminded a receptive audience that "CATV is a vital link in our national communication chain and the service we perform is truly a valuable public service." Noting failure of FCC's television allocation plan to provide the intended outlets for many communities, Bartlett stated that local origination by CATV systems is confronted by some of the same economic barriers which have kept UHF and VHF stations out of many towns. However, he urged operators to seize the opportunity and responsibility for origination of programming of a local public service nature. Bartlett characterized CATV as having "four exciting and challenging" facets: (1) traditional operation, (2) serving larger communities and cities, (3) local programming and origination, and (4) new supplemental services of many types. The latter could include, he predicted, "Such things as newspaper in the home, push button shopping by

cable, home study courses . . . additional services that are limited only by the imagination and ingenuity of man."

Jerry Laufer, association technical vice president, chaired a technical session which featured R. J. Brown, Everett, Washington, Ken Lawson of TeleMation Inc., James Palmer, C-Cor Electronics and Ken Simmons of Jerrold Electronics. A popular session of the meeting for the safety panel which included presentations by Earl Bellinger and Paul E. Davis both of Pacific Northwest Bell Telephone, Wayne Olson of the Washington State Department of Labor and Industries and Larry Carlton of Tele-Cable Inc.

Ohio Leaseback Halted

Efforts by Ashtabula (Ohio) Telephone Co. to extend leaseback service to a non-franchised operator have been held up by a temporary restraining order issued by Common Pleas Court Judge Thomas Lambros. The order was issued after the city solicitor James C. Warren filed to stop further construction by Ashtabula Telephone Co. and Lake Erie Cable Corp. — a firm owned by Time-Life Broadcast Inc. Another firm, Ashtabula Cable TV, holds a franchise in the city and is constructing an underground system. According to Warren, Lake Erie Cable Corp. has sought a franchise but, to date, has not received one.

TelePrompTer-Hughes Fight For Spectrum Allocation

TelePrompTer Cor. and Hughes Aircraft filed a response with the FCC last month to objections to their request for the allocation of 448MHz of spectrum (between 17.7 and 19.7 GHz). The firms want the allocation "for high capacity, local distribution purposes"—chiefly the distribution of television signals via terrestrial microwave. Although they have stressed that the spectrum allocation could be used for numerous other terrestrial (as opposed to satellite) radio communications services.

The original request was opposed a few weeks ago by American Telephone and Telegraph and Comsat on the grounds that they were

considering the future use of the spectrum between 15 and 32 GHz for other purposed communications — chiefly satellite communications.

TelePrompTer and Hughes argued that the "allocation of the requested frequencies . . . will hasten and facilitate the accumulation of the body of experience data sought by AT&T and Comsat." This would result, the filing stated, from the research and development which go into the implementation of the proposed terrestrial communications. Therefore, the filing continues, "There is no better method of eliminating the uncertainties than to establish promptly a useful, operational terrestrial system . . . from which a mass of otherwise unavailable, apparently essential, data can be obtained readily and economically."

TelePrompTer and Hughes labeled AT&T's arguments against sharing the spectrum in question as "nothing but conclusionary, self-serving speculation." In any case, they pointed out, the future use of the 18GHz region "would first require amendment to the Geneva Radio Regulations" as well as the Commission's rules.

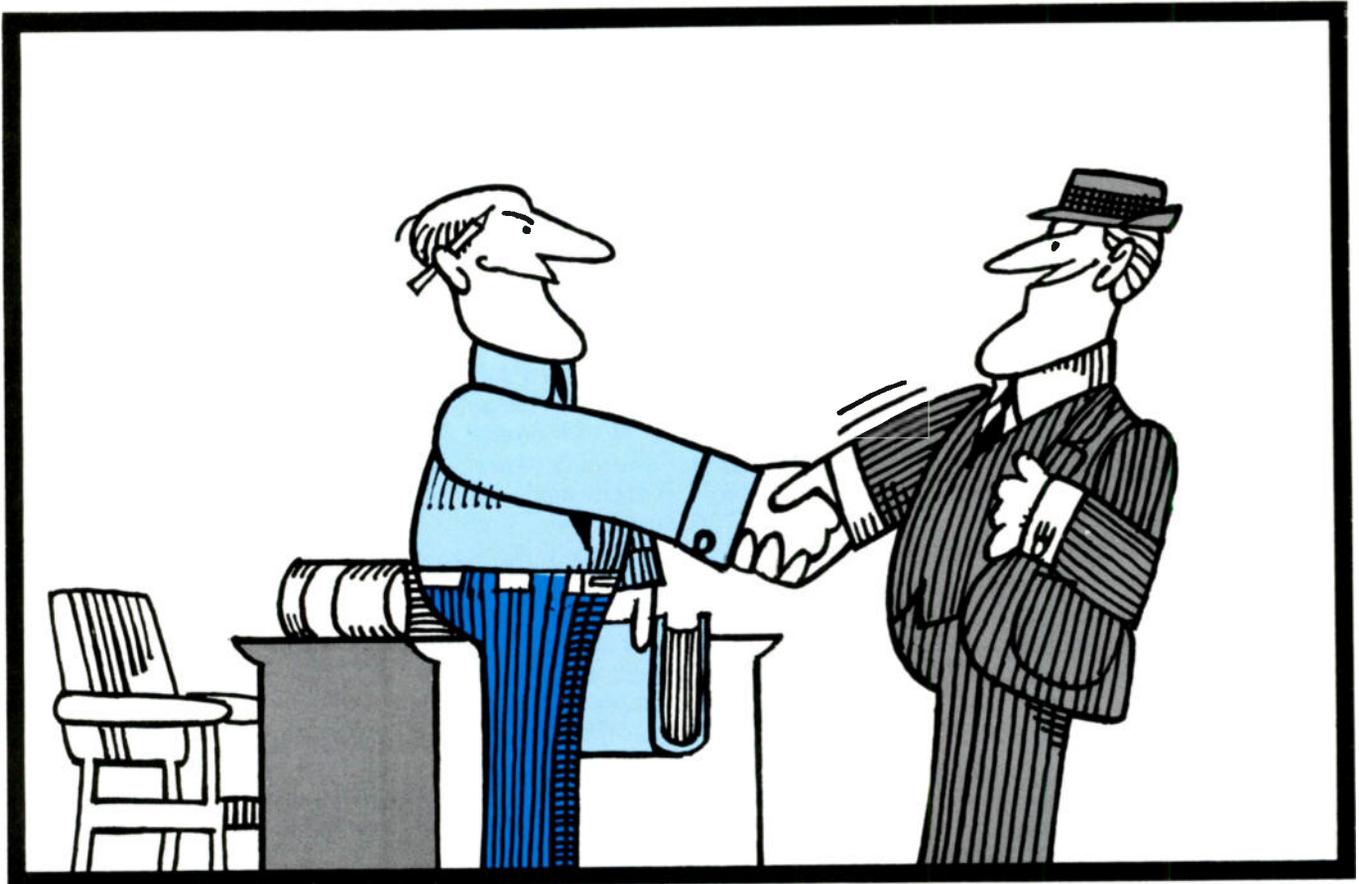
G & W to Acquire Famous Players

A move is being made to meet Canadian Government restrictions on foreign ownership of radio, television and CATV in Canada, by Gulf & Western. Gulf & Western (which recently merged with Paramount) has offered to buy all outstanding Famous Players Ltd. shares in trade for Gulf & Western shares. Famous Players plans to transfer all of its CATV, Radio and TV Broadcast holdings to a new public corporation to be formed.

Commissioner Johnson Aims Spectrum Viewpoints

Speaking at the Carnegie Institute of Technology in Pittsburgh, FCC Commissioner Nicholas Johnson called for a national clearinghouse of communications research to assist all those working in the communications field to keep abreast of advances and possibilities. Johnson said that "we can no longer afford to think of these problems in isolation," and cited the example

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of spectrum allocations as an area badly in need of overhaul. His comments came in a speech before the Carnegie Conference on Communications.

The Commissioner stated that "There are two other problem areas which, although principally involving other policy considerations, have substantial impact on frequency management. One is CATV, or cable television — a system of cables for bringing television into the home (thereby providing a choice between wire or radio waves to carry messages). In regulating CATV the FCC seeks to create the kind of mass communications system that will best serve the public interest. But decisions about CATV also affect the amount of spectrum space that must be used by over-the-air television, and is therefore not available for other uses. Another problem area is the establishment of a satellite communication system — international and domestic. We are, of course, concerned about cost and efficiency. But there is also impact upon presently established systems. One important variable is the effect of widespread use of microwave frequencies by satellites. Potential interference with ground circuits now appears to be a major constraint."

Federal Reserve Board Reduces Discount Rate

The Federal Reserve Board has reduced the discount rate on loans to member commercial banks to 4% — down 1/2% from 4 1/2%. This move should result in a loosening up of credit and thereby free more money for CATV rebuilds and new systems. The Wall Street Journal reports that executives of large banks are divided on the immediate benefits: some feel that the prime lending charge will not be lowered right away, while others feel that "with credit demands slackening, the Federal Reserve action could cause a further reduction in bank loan rates."

Group Owners Meet

Representatives of some of the nation's largest CATV group owners met in Washington last month to discuss common operational

problems. Among those gathered were: GenCoE, Inc.; National TransVideo, Inc.; TeleVision Communications Corp.; TeleSystems Corp.; American Cablevision Co.; American Cable TV Inc.; Cox Cablevision Corp.; TelePrompTer Corp.; and Jerrold Systems Division.

Meeting at the Gramercy Inn, the group shared experiences on a host of operating problems, including: comparative operating ratios, sales promotion, technical training of employees, system expansion, franchise practices, microwave service, obtaining and retention of subscribers, accounting methods and procedures.

Ameco Announces Network Sales Plan

Ameco, Inc. has announced the establishment of a network of sales offices to replace the CATV equipment manufacturer's satellite warehouse system. Warehouses at Dallas, Tex., Atlanta, Ga., and Portland, Ore., were closed April 1 as first step in the series of marketing innovations to provide better customer service. In the near future the Harrisburg, Pa., warehouse will be relocated and revamped into a sales-distribution office on the East Coast.

ATR Fences With More Opposition

The American Television Relay Inc. applications before the FCC to bring the signals of four Los Angeles independent television stations into Texas and New Mexico are continuing to draw a number of filings at the FCC. American Television wants to bring the signals into Texas communities, and therefore is meeting opposition from Texas TV stations. It also wants to bring the signals into Albuquerque, the 100th ARB market in the United States, so it faces a hearing at the Commission as well as opposition from Albuquerque stations.

Adverse filings came in last month from KOAT-TV and KOB-TV in Albuquerque, arguing that the franchise held by Vumore Company, the CATV systems American Television wishes to supply in Albuquerque, expired February

19, and the applications should therefore be set aside. Vumore promptly argued that the Commission has already decided to stay out of local franchise problems, and should stay out of this one. Vumore in yet another filing argued that the hearing should be dispensed with and the application granted, as Albuquerque is barely within the Top 100 ARB markets. Meanwhile, KWAB-TV in Big Spring, Texas, asked the FCC to consolidate all the American Television Relay Inc. applications into one hearing and question such broad issues as whether the firm has the finances to carry out its plans, whether its rates are fair, etc.

Continental/Superior Merger Complete

Superior Cable Corp. officially became a part of Continental Telephone Corp. last month, as the transfer of assets was concluded during a meeting at Superior's general offices in Hickory, North Carolina. Under terms of the agreement, as approved by stockholders of both companies, holders of the 981,203 Superior Cable common shares outstanding will receive 2,011,466 shares of Continental common equivalent to 2.05 shares of Superior. Based on the market closing price on the date of transfer, the transaction involved approximately \$62,858,000. Superior Cable, as the manufacturing and supply arm of Continental Telephone, will retain its name, will operate under its present management with no changes in company policies, and will continue its program of plant expansion and product line diversification.

New ABC-ITT Hearing Begins

The new FCC hearing on the proposed merger of American Broadcasting Companies and International Telephone and Telegraph Corp. began last month, with ITT's entry into CATV as one of the major issues under discussion. Among the scheduled witnesses were ITT officials Robert Chasen, Jack Vollbrecht, Stanley Luke, Robert Kenmore, Hart Perry and Chairman Harold S. Geneen; and Dr. Raymond J. Saunier. □

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FOCUS

... On People

Systems

William B. Adler has left the consulting field and is now serving as vice president and general manager of Capital Cablevision Corp., Charleston, West Virginia, in which he maintains an interest.

Abram E. Patlove has been appointed system development director of Continental CATV Corp., a subsidiary of Viking Industries. Active in the field of CATV for almost a decade, Patlove's latest post was promotion manager for Jerrold Electronics' CATV systems division.

Arlo D. Woolery has been named president of American Cable Television, Inc. Woolery continues as special assistant to Ameco president Bruce Merrill and as Ameco public relations director. Bob Huston, former head of American Cable Television, earlier had announced his plans to leave the firm. Ted Swanson has been named director of engineering at ACTI. Swanson previously was head staff engineer for American Cablevision at Beverly Hills, Calif. and part owner-operator of the Rhinelander, Wisc. system.

John Thomas has been appointed general manager for the Martin County (Fla.) Cable Co., Inc. systems. Thomas previously supervised systems in Montreal, Canada and Santa Cruz, Calif. He most recently served as director of operations for TelePrompTer Corp.

Edward M. Allen has been named vice president and general manager of Western Communications Inc. Allen previously was general manager of Cable-Vision, the system serving a portion of Contra Costa County, Calif. since 1965, and also systems manager for all systems owned by Spencer-Kennedy Laboratories, Inc.

Jim Molohon has been appointed to the new post of vice president in charge of Midcontinent Broadcasting Company's CATV operations in South Dakota, Nebraska and Minnesota. Molohon will be responsible for new business development for the company and construction of cable systems.

Otto Ohland, former partner in Peter M. Robeck & Company, has rejoined Time, Inc., as a project manager in the CATV operations of Time-Life Broadcast. He will be responsible for the overall development of specific CATV projects in which TLB has an interest.

Joseph W. Benes has been appointed general manager of the Cable TV of Santa Barbara (Calif.) system. Benes has been active in radio station management for over 15 years. **John G. Leitch**, vice president of the cable company, who served as consultant and interim general manager, has returned to Philadelphia, Pa.

Harry Deveraux has been appointed manager of Community TV Co. of Greybull and Basin, Wyoming. He replaces **Eddie Johnson**, who has been transferred to Vernal, Utah. Johnson had been acting manager since the death of **Raymond McKim**.

Joseph Taylor has been appointed manager of Ashtabula (Ohio) Cable TV Inc. Taylor, who previously served with Jackson Communication Corp., has supervised construction of systems in Jackson and Cadillac, Michigan, and in Lima, Ohio.

Sheldon G. Miller has been elected president of the Loganton (Pa.) TV Cable Association. Serving with Miller will be **Samuel Summers Jr.**, vice president; **Dennis Schrack**, secretary; **Mrs. Earl Weaver**, treasurer and **Jesse Wait**, trustee.

William B. Chamberlin has been named executive assistant to president Lester Kamin of KXYZ, Inc., Houston, Texas. In the new position, Chamberlin

will have management responsibilities with Southwest CATV, Inc. which has systems in the Rio Grande Valley.

Donald D. Sullivan has been named general manager of Universal Cable Vision, Inc. Sullivan, formerly was vice president and general manager of KVTW, Sioux City, Iowa.

Bill Little has been named manager for Valley Telecasting Cable TV Co. of Holtville, Calif. **Joe Senner** has been appointed resident technician.

Robert R. Morrison has been appointed operations manager for Direct Channels Inc.'s system in Napoleon, Ohio. Morrison was formerly employed as field engineer for Kaiser-Cox.

Ben Irwin has been named manager-technician of the Sallisaw (Okla.) Cable TV system. Irwin was with Fort Smith (Ark.) Cable TV prior to his present appointment. **Miss Pat Martin** will continue her present position as office manager for the Sallisaw system.

Cecil Webb has been appointed general manager of Western TV Cable. Webb has been serving as operations manager during the development of Western TV Cable, which has a franchise in San Francisco.

Carl Berry has been named manager of the United Transmission, Inc. system under construction in western Lancaster County, Pa.

Russell Dodson has been named manager of Dorate Co.'s Springfield (Colo.) TV Cable system. He replaces **Gene Cargal**, who has been transferred to the Fairview, Okla. system.

Bill Sutton, principal in CATV of Memphis (Tennessee), has been named one of Tennessee's "Outstanding Young Men" by the state's Jaycees.

Robert L. Smith has been appointed chief engineer of the Houma (La.) Cablevision, Inc. system. Smith was formerly associated with Elmira (N.Y.) Video, Inc. Vestal Video, Sidney Video, and Jerrold.



William Adler



Abram Patlove



John Thomas



Edward Allen



Irving Faye



Glenn Littlejohn



Hugh Buchanan, Jr.



John Jerose

Suppliers

Irving A. Faye, in addition to his duties as commercial marketing manager, has been appointed manager of the CATV sales division of American Electronic Laboratories, Inc. Faye has been associated with AEL since 1962.

Glenn Littlejohn has been appointed northeastern regional sales manager for Entron, Inc. Littlejohn, headquartered in Greenwich, Conn., will be responsible for sales in the states of Connecticut, Vermont, Maine, New Hampshire, New Jersey, New York, Ohio and Pennsylvania. Hugh H. Buchanan, Jr. has been named midwestern sales manager for Entron. He will be based in Chicago, Illinois.

John Jerose has been appointed southern regional sales manager of the CATV

division of Craftsman Electronic Products, Inc. Jerose joins Craftsman after having been with the Western Electric Company in Syracuse, N.Y. for eleven years.

Ed E. Cooper has joined Robert G. Owens, Inc./Cal-Tel Construction Co., Inc., as director of West Coast operations. Cooper brings with him 17½ years experience with General Telephone of California, Subscription Television, Inc., and Daniels Management Company. He will be headquartered in Signal Hill, Calif.

Donald C. Stewart, currently assistant to the president at Superior Cable Corp., has been appointed to the newly-established position of director of corporate development.

A. H. Leader has been elected administrative vice president of Anaconda Wire and Cable Co. W. R. Olsen, formerly

vice president, corporate planning and employee relations, has been elected to Leader's former position of vice president, sales. Olsen will also direct corporate planning functions. W. J. Plate has been elected vice president, wire and cable division.

Mike Seidelle has been named quality assurance manager for Ameco, Inc. Seidelle has been with the firm since 1964.

Richard T. Keyes has been appointed eastern regional sales manager of Alpha Wire.

Professional

Stanley E. McKinley has been appointed Deputy Executive Director of the Federal Communications Commission, subject to the approval of the Civil Service Commission. Prior to this appointment, McKinley served as Assistant Bureau Chief for Management in the Broadcast Bureau.

Carl Spaulding is the new secretary-treasurer of the Pacific Northwest Community Television Association. Spaulding is with Heppner (Oreg.) TV Inc., and succeeds Wayne Aylward in the association post, which the latter resigned because of increased responsibility in his position with H&B Communications. □

Cable System Sales Reports

A. P. Perrucci and Joseph P. Perrucci of San Jose, Calif., have announced the purchase of **Desertronics, Inc.**, which operates in the Desert Hot Springs, Calif. area.

Blonder-Tongue Labs. has purchased **Mel's TV**, Healdsburg, Cal., for an estimated \$400,000. In making the announcement, Mel Williams said that he would remain with the company as manager in addition to holding 20% stock.

Trans-Con Cable, Inc. of Dallas, Texas has purchased Bruce Merrill's **Cable T.V. of Pecos (Tex.) Inc.** Daniels and Associates was the brokerage firm in the transaction.

Bartell Media Corp., New York, has purchased **Dimension Cable TV, Inc.**, which is currently building an 8-channel system in Plattsburg, N.Y.

Storer Broadcasting has acquired the CATV system in **Artesia, New Mexico**. The purchase brings to 11 the number of communities now served by Storer CATV facilities.

James H. Strickler and Meadville Master Antenna, Inc. have purchased Robert J. Tarlton's interest in **Titusville (Pa.) Cable TV, Inc.** Tarlton had served as president and part owner of the Titusville firm since July of 1964.

The Evening Telegram Co. of Superior, Wisconsin, has announced the purchase of **Pacifica (Calif.) Cable Co., Inc.** The news firm recently announced the purchase of another system, **Crystal-Brite Television, Inc.** of Half Moon Bay, Calif.

GT&E Communications Inc., a subsidiary of General Telephone & Electronics Corp., has announced the acquisition of the assets of **Macomb (Ill.) Cable TV, Inc.** The Macomb CATV system serves approximately 1,200 customers.

Ruidoso (N.M.) Cable TV has announced the purchase of the Grants, N.M. system serving the **Milan and Crownpoint, N.M.** areas. Other Ruidoso Cable TV systems are located in Tularosa and Carrizozo, N.M.

Western Video, which serves the Barstow, Calif. area, has reportedly been sold to **Continental Telephone Co.** The system, which was previously owned by American Cablevision, Inc., has over 5,400 subscribers. Estimated potential is 6,500.

Rowley United Theatres has reportedly assumed total ownership of the **Alamogordo, N.M.** system. Rowley previously owned 40% of the system. Purchase of the additional 60% interest was estimated at over \$900,000.

Bettervision Systems, Inc. president Carroll C. Rollyson has announced the purchase of **Community TV, Inc.** of Buckingham, West Virginia. □

BROAD NEW

Photograph shows Model 840 Distribution Amplifier in operation in the new system at Ponca City, Oklahoma. Three of the four built-in directional taps are connected. Note attractive appearance of installation which utilized bendable Anaconda Sealmetic® Cable.

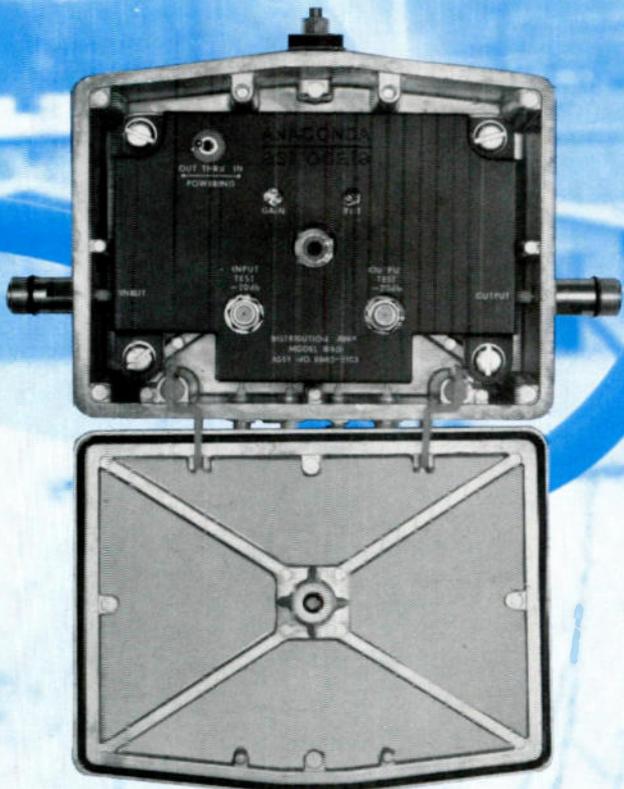


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Shown at the Viking Industries exhibit are Viking representatives Cliff Beyersdoufer (left) and Jay Hubbell.



TVC staffer Jack Jungrath (second from left) talks with Entron's Hugh Buchanan, Ed Harman, and John Russell.



George Barry and Jim Taglia talk with customer at the Kaiser-Cox display, while Walt Baxter (far left) looks on.



Ameca personnel and interested NAB'ers discuss cable television at the Ameca booth.

NAB CONVENTION REPORT

CATV Draws Interest — Less Concern

Running a repeat, this year's National Association of Broadcasters convention was again held at the Conrad Hilton Hotel in Chicago. The weather outside was dismal but once inside the hotel, everything turned to color as numerous manufacturers vied for the broadcaster's attention. And although Visual Electronics, RCA, General Electric and Marconi all had live action sets to display their color cameras, the big talk on the exhibit floor was of video tape. Manufacturers of both tape and recorders drew large crowds, eager to find out what has happened in the VTR field. Ampex showed its one-inch tape and recorder priced at less than \$5,000. Other manufacturers also displayed tape equipment which is well within the price range and usability area of CATV. Other leading manufacturers of tape equipment on hand were Sony, Memorex, 3M, Fairchild, and Tape-Athon. Also evident this year were many closed circuit cameras suitable for CATV applications.

CATV Hit Hard

Drawing considerable interest, especially from the CATV people present, were NAB president Vincent Wasilewski, and Dwight Martin, chairman of NAB's Future of Broadcasting Committee. Wasilewski spoke of CATV as an old problem to the broadcast industry, "which not so long ago seemed to occupy all our waking moments, (but) has not been so much in the forefront lately. There was a feeling that, when the FCC issued its rules regarding CATV and when the copyright decision of Judge Herlands was handed down in New York, our problems were virtually

over. This is not so," he continued, "the FCC left a number of important questions unresolved. Among these is the right to originate programs. Congress has not acted, which means there is presently no restriction on that practice." Wasilewski prodded broadcasters to contact their congressmen to urge adoption of the modifications proposed by the NAB in copyright bill.

Mr. Martin's basic tenet concerning CATV was, that if a system does nothing but provide carriage of local stations, improving reception of their signals, its operation should not be circumscribed by denial of the local station to carry its signal; requirement of royalty payments to copyright owners; or undue regulation by the FCC. Martin did feel that if, in markets "adequately served" by outlets of each of the national networks, a CATV system seeks to introduce the signals of "distant stations" or originate programs other than time and weather announcements, than the stations being carried by the system should be able to refuse to be carried by that system—and that the system should be required to pay full royalty to all holders of copyrights on programs whether or not they are originated by the system. He further stated, however, that CATV has attained stature as a "valuable adjunct to broadcasting."

CATV Large Drawing Card

But even while these remarks were made about the CATV industry, hundreds of broadcasters were stopping by the CATV exhibits located in the Continental Room of the Hilton. Most broadcasters seemed less concerned



Bob Jose makes a point in discussion at American Electronic Labs exhibit.



Jerrold sales representatives are shown at that firm's booth awaiting exhibit opening.

with CATV as a problem than they were about how to get into the business.

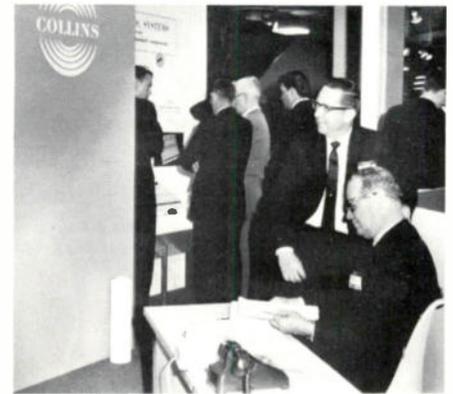
Mainline CATV manufacturers exhibiting in Chicago were Ameco, American Electronic Labs, Entron, Jerrold, Kaiser-Cox, TeleMation and Viking. Other major cable industry suppliers on hand included Advance Industries, Collins Radio, Fort Worth Tower, Lenkurt, Rohn Systems, Trans-Lux, and Utility Tower.

Emphasis at CATV displays was on "total service" to system operators, rather than on individual equipment items. Little new CATV gear was shown, as most manufacturers are apparently holding new lines for release at the NCTA show in June. Ameco did introduce its new "Channeleer" heterodyne head-end unit. Entron showed a new housing for their amplifier line, and Kaiser-Cox introduced a lowband version of the Phoenician amplifier line. Viking featured a new weather display unit, and a modified version of the Futura amplifier series.

The swing to promoting "package CATV services" was unanimous, indicating further movement in this direction since last year's NCTA show in Miami. The last week in June, however, may still hold many surprises for Chicago-bound CATV'ers, as new and modified equipment lines at the Palmer House are sure to outnumber those unveiled at the NAB convention.



Broadcast engineer Walt Davis (left) talks with Johnny Mark'n and Ronnie Stephens at the Fort Worth Tower display.



Jim Whited and Jim Speck are shown at Collins Radio Company's unusual display.



Sony salesmen Hank Hermes (left), Dale Matheny, and John Nutting, with TVC rep. Jack Jungroth (second from right).



Lyle Paris shows off the stock quotation program service equipment recently introduced by Trans-Lux.



Robert Bacon (center) talks with customer George Glenn at TeleMotion's display; Kent Lawson is on telephone.



Utility Tower personnel and prospective client get down to details at that firm's exhibit.



Broadcasters and company representatives discuss microwave equipment at Lenkurt Electric's exhibit.



Al Repsumer (left) and Marion Athens in the Rohn Systems booth prepare for the next surge of conventioners.



Lloyd Graff (sitting), Lou Tokarczyk, and Jerry Chessen prepare for busy day at the Advance Industries booth.



Ampex salesmen Leonard Kowl (left), Bill Johnson, and Al Williams are shown with firm's latest VTR equipment.

Building your subscriber count at the Optimum rate requires thorough knowledge of the . . .

Philosophy of Promotions

By Robert H. Huston

The *raison d'être* for the whole promotional process is indeed an ancient one . . . and it bases its very foundation on one word. That word is "want".

Long before Greek Achilles or Trojan Hector, Roman Horatius or Cincinnatus, Teuton Siefried or English Beawulf wielded their mighty swords . . . thousands of years, in fact, before there were any swords at all . . . the "Eastern Trader" was well established in the Mesopotamian Valley as the promoter of this day. And said promoters' very existence in the business world of 7,000 B.C. was based on one thing . . . *want*.

The East offered spices, silks, and silver. The Western World wanted them. The West had wine, furs, and slaves. The Eastern World wanted them. Thus the Eastern Trader was a man of perception. He first *recognized* . . . then *filled* wants.

The cable system operator's very existence in the business world 9,000 years later is based on this same ability to recognize and fill wants. Years before such illustrious initials as FCC, ABC, CBS, and NBC knew what the initials CATV stood for, the cable system operator had recognized the public's desire for greater television selectivity and discovered that coaxial cable was the way to fill this desire.

Or to put it in the simplest way possible — so simple

that even the FCC *should* be able to understand it — when given the choice of a *few* channels of television "off the air" or *many* channels of television "on the cable", the majority of the public invariably wants the greater variety that cable television provides. Thus *want* is the reason or justification for the existence of CATV today. Keep this in mind every time you plan a promotion . . . for this is the basic philosophy behind any successful promotion effort.

And fear not nor shy away from that word "promoter". For according to friend Webster, "to promote" is "to advance". As a CATV promoter, you are advancing the entire television broadcasting industry (in spite of, and contrary to, what all those illustrious initials may think . . . or at least admit).

If there is any one cardinal rule you must follow in regard to product, without exception, it involves *quality*. When you are given the choice of quality over quantity, take quality every time. Without it, you have no product to sell. You have nothing to promote. You have nothing the public wants.

It makes no difference how *many* channels of television you give the public . . . if you can't give them *better* television, forget about any and all promotions until you solve this problem. For example:

Town "A" receives three channels of television loud and clear off the air. System "A" offers ten channels of television on the cable. But due to antiquated equipment (or new equipment that is not operating properly), all ten channels are of an inferior quality when compared to the three off the air channels. Conclusion: forget about promotions. Concentrate first on solving technical problems.

In a situation such as the one described, don't use direct sales, direct mail, newspaper advertising, or radio spots for promotional efforts. Don't even *let* a customer on this kind of cable if he begs or bribes. Do the customer *and* yourself a favor and say "no" to everyone until your equipment problems are solved.

It really doesn't take much of a promotion effort to sell cable television the first time around (because, supposedly, you have something the prospect does not now have, but something he wants). It's that second time around that's rough, when the prospect has already been on the cable and found that it leaves a great deal to be desired in the way of quality. This time it takes a real salesman, capable of a maximum effort. It takes much more promotional money and time to sell

ABOUT THE AUTHOR



Comments on sales promotion by author Robert H. Huston reflect his experience in a number of top management posts in the cable television industry. He has served as Director of Public Relations and Advertising for Ameca, Inc. Later, he was Director of Corporate Relations for Cox Broadcasting Corp., one of the large group broadcasters and operator of a microwave system and 20 community antenna television companies. For the past year Bob has been responsible for

the management of the 49 cable systems that comprise the American Cable Television, Inc., complex. As Executive Vice President and General Manager of this large, multiple system operation, he has directed a promotional effort which produced 29,000 new cable subscribers within one year. Bob Huston's success as a CATV executive and his knowledge of sales promotion are attributable, also, to his several years as administrative assistant to the advertising and public relations vice president for Lane Star Steel, and as vice president of public relations and advertising—and later president—of a large independent oil company. This article is excerpted from a book on CATV management which Mr. Huston will publish within the next few months.

the ex-customer who can reply, "But I have already been on the cable and your pictures weren't nearly as good as I get off the air." There are entire towns where cable system operators face such a dilemma because they ignored the basic rule: quality first, then quantity will follow *and* stay.

Take town "B" that receives five channels off the air, but none of the pictures on all five channels are particularly good. System "B" may not offer any *more* television viewing, but all five channels on the cable are sharp and true. Here is a system that is ready for promotion. Here is a system that has a product that will sell. Here is a system that has something the public wants.

Psychologically, system "B" has the prospective customers sold before anyone knocks on his door.

Types of Promotions

Everytime I step off an airplane at the end of a business trip, I say to myself . . . "That was the best flight I ever had." And indeed it was, because it got me where I wanted to go safely. So it is with promotion efforts. Everytime you run one that gets results, it is the best one you have ever had.

In this issue, and for over three years now, *TV Communications* has offered articles on the best of promotion programs that have worked in other systems. Lackadaisical cable system operators have found reasons why these promotion programs wouldn't work in their town. Some people seem to delight in being the exception to the rule, even if it costs them money!

The smart cable system operators have, with minor changes or adaptations, been able to use the majority of these promotions. They are the ones who are growing. But regardless of whether you use a tried and true program, or build your own, keep the following things in mind. They are considered basic essentials by the experts, the men who make their living managing promotion programs:

1. Communicate to Promote

Regardless of the media or methods, you must communicate clearly, concisely, and convincingly. Don't attempt to be too "cute" or complicated . . . make your program so simple a ten-year-old can understand what you have to offer.

2. Psychological Barriers to Promotions

Face up to the fact that the suede shoe operators have made the public leary and generally skeptical of promotions and promoters. Don't get this reputation in your town. Keep all promotions straight forward and on a high plain.

3. Arouse Attention

Promotion programs need not be expensive, but they do need to be "conversation pieces." Something that will get word-of-mouth coverage is best.

4. Plan the Program and Follow the Plan

Don't ride off in six different directions at once. Chronologically, and step-by-step, make your plans — then follow them.

5. Budget the Program

Once a program starts to roll, costs can get out of

hand if they haven't been budgeted in advance. More than one cable system operator has added several hundred new subscribers only to wish he had forgotten about the whole thing. An acceptable rule of thumb in budgeting a program is to multiply the total number of (anticipated) new taps by six times your monthly service charge to arrive at the maximum allowable expense.

If you get \$5 a month, for example, never spend over \$30 per new subscriber on advertising, sales commission, bookkeeping expense, credit check, and hookup material and labor. Or to put it another way, if it is going to take you longer than six months to get your "new subscriber investment" back, better take another look at the promotion itself.

6. Control of Sales Promotion Operations

As owner or manager, you and you alone should be in the driver's seat on this one. Keep a tight rein and a rigid schedule or things will either be out of hand or bogged down before you know it.

7. Goals and Quotas

Set goals for yourself and quotas for your people. Check every day to see how your program is going. Let your people know you are following this progress carefully. Let them know you are concerned when they are failing to meet their quota and pleased when they top it. Psychologically, everyone works better when they are striving to reach a standard you have set. This is particularly true in a promotion drive.

8. Coordinate the Promotion Program

Here is where you will really need teamwork. Don't gear a promotion effort to 30 hookups a day when you only have trained installers and bookkeepers to handle 20 such hookups. Chances are, once a family decides they want on the cable, they are going to want on "like right now!" Most will wait a day or two, but after that, the chances of their backing out increase rapidly. Have back-up people you can call on if the promotion results start to snowball.

Above all else, be a doer . . . not a dreamer. You may in the back of your head right now have the greatest idea in the world for getting new cable customers. But nothing is going to happen until you put it to work. There is no better time than right now . . . *provided* you have that all-important ingredient: a quality picture to offer your prospective customers. □

OFFERING . . .

Professional services to the CATV industry? Reach the entire industry with your message in

THE CATV
CLASSIFIEDS Page 80



**Superior's new
COMM/SCOPE DIVISION
provides total
CATV System capability**



Headed by Vern L. Coolidge, well-known and respected systems consultant, the Comm/Scope Division can handle all your requirements . . . from survey to site, from tower to tap-off. This total CATV system service includes preliminary planning, system engineering and system construction.

As investments in CATV systems become more sizeable, it becomes more and more essential to call upon people who are experienced, knowledgeable and practical.

If you're planning to build a new system; if you're rebuilding or expanding an existing system, get the facts from Comm/Scope.



For complete information, write or call COMM/SCOPE DIVISION

SUPERIOR CABLE

SUPERIOR CABLE CORPORATION • HICKORY, NORTH CAROLINA 28601
704-328-2171

Adding Subscribers To Your System Through...

Direct Mail Advertising



By S. S. Street
Director of Membership Services
National Community Television Association

Countless books and articles have been written on philosophies and methods of getting people to buy something. And the variety of such theories and techniques seems almost as great as the number of authors putting forth their views. In CATV subscriber promotion, however, we are primarily concerned with two general approaches: the "shotgun" selling technique, wherein a variety of media are used to reach a large number of people efficiently; and the "rifle shot" technique in which a specific message is aimed at a selected and limited customer group.

Direct mail is the main medium used in the latter approach . . . it is one of your most important CATV selling methods.

The advantages of direct mail advertising are many: it can be aimed; it can be personal; it has little competition; it is quite versatile and flexible; it is easily controlled; and it can be scheduled and timed. Most importantly, direct mail means action.

Important considerations in CATV direct mail are that it must be informative, eye catching, entertaining, and should ask for some kind of action on the part of the reader. In preparing any type of direct mail, always remember that you are making a sales pitch. You are trying to sell a potential subscriber on the many benefits of cable TV. In selling CATV, you should tell your potential customer the variety of channels you are bringing in, the improvement of the picture quality, other video services in-

cluding local cablecasting, the educational values of CATV, and the ease, convenience and status of being on the cable. Also, make the reader aware of your investment

and the resulting technical advantages and public service opportunities you offer with CATV.

Shown here is an example of a letter that could be sent explaining

XYZ CABLE TV INC.

More to see on Cable TV!

Dear _____:

As you probably know, I recently acquired control of the cable television system in this area. XYZ Cable TV now serves _____ subscribers in _____.

Although the cable has been in existence here since _____, we have been spending much time and money to improve the service. Last November we inaugurated a "television first" in this area with Community Channel 4. This Cable TV Channel carries local news and sports each night and also features our popular "Cable-Check" in which we give away free food certificates to lucky winners.

I would like you to see all the benefits that Cable TV offers you and your family. To a limited number of residents, we are going to offer a free home trial for a period of one month. There is absolutely no obligation to buy and no service charge of any kind. If after one month you decide to stay on the cable, we will bill you our regular service charge of \$5.00 per month. You will save the installation charge and the first month's service charge—a total of \$15!

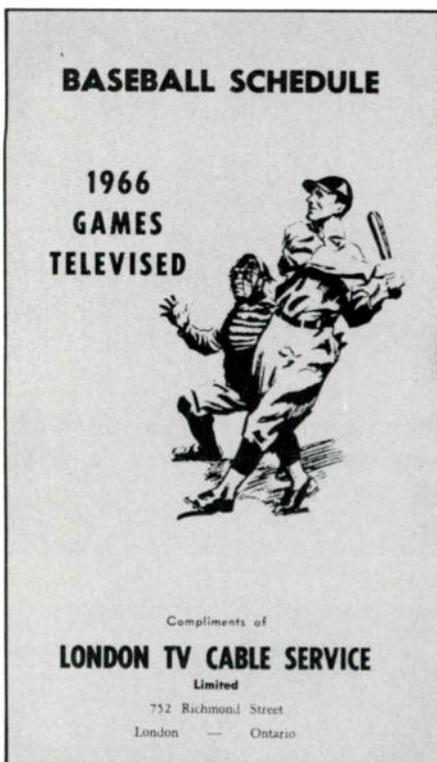
If you are interested, please call our office or fill out the return post card enclosed. Thank you.

Yours for a better community,

President

Personalized letters, such as the example above, make the recipient feel important, thereby getting your message across better. Result: new subscriber!

the virtues of local origination and how the cable company is deeply involved in the problems of the community. This personal appeal on the part of the president of



A mailing piece with lasting impact is this TV baseball schedule used by London (Ontario) Cable Service Ltd.

this company produces a rapport with his potential subscriber, and makes that person feel important.

Where Do You Start?

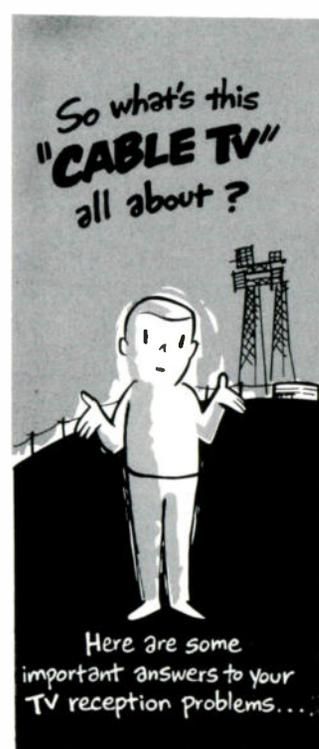
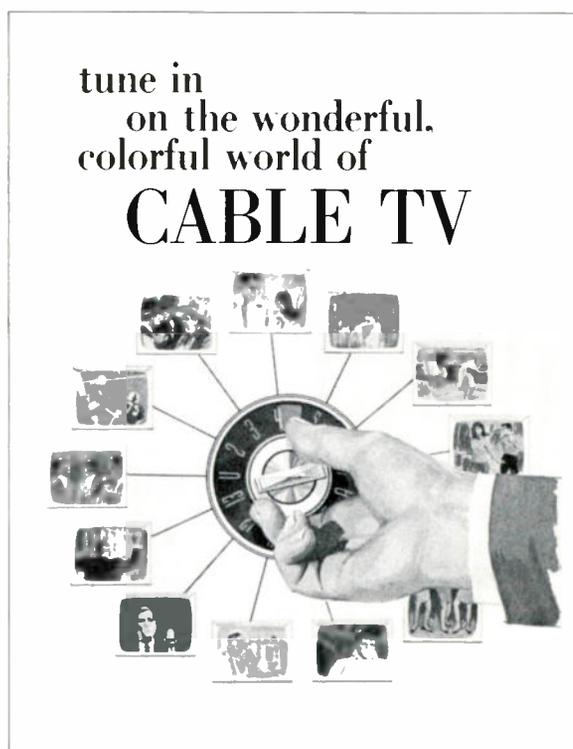
First of all, in order to mail anything, you must have a list of addresses. The mailing list constitutes one of the most important assets of your cable company, and justifies a substantial project in its preparation. There are lists available in your town from various directories and firms — notably the utility companies. By cross-checking your subscriber list with telephone lists and utility billing lists, you will be able to get an accurate list of who is not on the cable. As elementary as this sounds, I have found that most cable companies do not have a good non-subscriber list. A mailing list is an expensive project that requires many hours of research and coordination; it should be properly maintained with periodic up-dating procedures. Installers, while making checks for illegal taps, can also

improve the, list and aid in its development.

Fundamentals Of Direct Mail

Direct mail can be successful if you follow these proven principles: (1) *There must be a need for the product or service being advertised.* Most CATV systems offer the community an important service. However, if you are importing one channel into a four-station market, you'd better have some local origination services as well. (2) *There should be a need for the service being advertised at the time.* Cable TV is a year 'round service. The only slack is in the summer when people generally do not watch as much television. Although summer specials could be instituted, you may well find the fall or spring season much more profitable. (3) *The offer must be attractive to the buyer.* This is rather obvious, but constantly misunderstood. Those of us in the business know the many benefits of cable TV, however, we don't always communicate the obvious to our prospective customers. Pricing should be attractive, and if a price reduction is offered, it should be clearly spelled out in terms of savings to the customer.

Otherwise, the number of cable channels provided should be attractively presented so that the value is readily apparent. (4) *The advertising must be prepared from the reader's viewpoint.* This is another advertising classic. The mere fact that you want to sell a service from which you will make a profit, does not interest your subscriber. He must feel that *he* is getting the advantage in "buying" cable TV. He must understand that he and his family are first to benefit, so write your copy from his standpoint, not from yours. (5) *Direct mail, to be effective, must be sent to good prospects.* Again, we're just talking common sense. You are not going to mail a booklet to someone you cannot sell. Your list must be carefully culled and proofed. If you mail to an existing subscriber, the Post Office Department is making all the money, and you look rather foolish. (6) *The reputation of the advertiser must be good.* It is difficult to sell something that is not sound. Technically, your pictures should be good, and your service satisfactory. It is easy to sell anything once, but in our business retention is the important factor. Having a person disconnect be-



Mass-produced booklets like those shown are especially effective in new community or area, or for new residents, because the complete "CATV story" is set forth colorfully and professionally. Bulk production makes prices attractive, too.

ROHN®

Tall in the tower field

A tower can be loosely defined as any structure used to elevate an object above the surface of the earth to a height necessary for it to perform its proper function. A tower could be a wooden pole, a brick or stone structure . . . or it could be a ROHN TOWER!

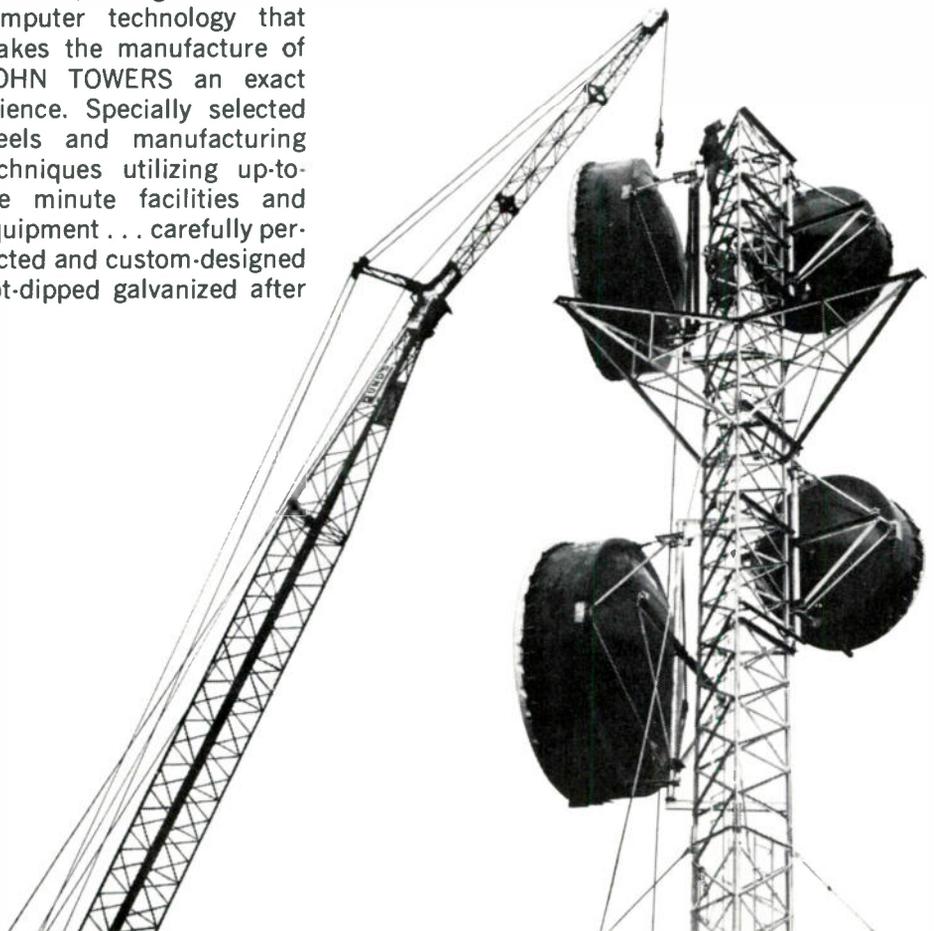
If it is a ROHN TOWER, it has certain distinctive advantages . . . advantages not inherent in other towers that are manufactured for the same purposes . . . CATV, microwave, communications, broadcast, home TV or amateur use.



- UNUSUAL STRENGTH
-
- REMARKABLE DURABILITY
-
- COMPLETE VERSATILITY
-
- OUTSTANDING SERVICE
-
- FUNCTIONAL DESIGN
-
- ATTRACTIVE APPEARANCE
-

These advantages are inherent in ROHN TOWERS and are the result of modern engineering and design methods, using the latest computer technology that makes the manufacture of ROHN TOWERS an exact science. Specially selected steels and manufacturing techniques utilizing up-to-the minute facilities and equipment . . . carefully perfected and custom-designed hot-dipped galvanized after

fabrication . . . are the factors that guarantee COMPLETE SATISFACTION — year after year — when you specify towers by ROHN. In addition, ROHN maintains convenient warehousing facilities in strategic areas for all parts which include, microwave reflectors, lighting equipment, accessories and complete towers . . . plus complete turnkey tower erection service throughout the world.



Representation and Distribution
Worldwide

For further information contact

ROHN®

Home Office
P.O. Box 2000, Peoria, Illinois 61601
Ph. 309/637-8416 TWX 309/697-1488



Experienced CATV operators and professional advertising men have produced a series of new radio spots that effectively sell cable hook-ups. Every single benefit offered by your cable system is presented in one or more of the Series-50 Radio Announcements. Even the instrumental treatment of the "Jingle" is varied in the different spots—to create the ideal moods to sell each of the different benefits of cable service.

This completely flexible package can be readily adapted to any system, of any size, anywhere! Results are immediate—and the costs remarkably low. No more guess work or drab, unproductive promotions. The Series-50 package puts you in complete control of a proven, professionally prepared advertising program. Unquestionably this is the biggest bargain in resultful cable system promotion.

If you've tried advertising gimmicks—and you're now ready to go after those "hard-to-get" customers with a low-cost plan that will really work—ask for further details on the new Series-50 Radio Announcements and Jingles.

Just mail this coupon or call (615) 482-3333.

Gentlemen, please send details on
Series-50 Radio Advertising Package.

Name _____
Address _____
City & State _____

Cable-Promo Co.
253 Main St. E., Oak Ridge, Tenn.

cause of bad picture quality or service, makes it doubly hard to get them back on the cable. Don't sell something you don't have.

Shapes And Forms Of Mail

There are as many different sizes and shapes of direct mail advertising as there are people with

The NCTA booklet, "The Wonderful, Colorful World of Cable TV", makes one very useful type of mailing piece. Accompanied by a personal letter from you (as the cable company manager) and by imprinting the back page with your cable channels — this kind of direct mail piece can be a staple in your



"... I remembered that I'll soon have Cable TV and can sit down, relax and really enjoy all my favorite comedy shows, because ..."

CABLE TV IS HERE!

Whatever your choice of shows, you'll enjoy watching TV much, much more with Cable TV. For one thing, you'll have so many more shows to watch: Cable TV brings 7 STATIONS CLEARLY INTO RANGE! Think what a bonus that is! (And, it costs only pennies a day!) Cable TV provides the clearest, sharpest pictures imaginable. Virtually gone is annoying "snow," and with it a flickering picture and TV "fatigue." Televiewing suddenly becomes fun! For full details just call 586-8700.



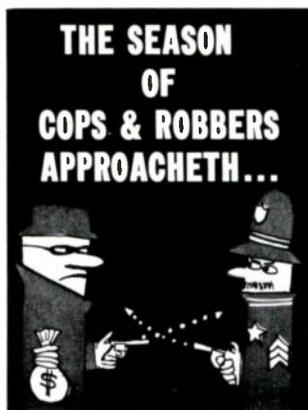
MORRISTOWN CABLE TV CO.

112 N. CUMBERLAND / MORRISTOWN, TENN. 37814
PHONE 586-8700

Installation charge \$25.00

Monthly Rate \$3.50

Antenna Trade in \$15.00



... and this year you can follow the spine-tingling action better than ever before, because

CABLE TV IS HERE!

Got the "poor TV reception blues"? Dispel them now with wonderful CABLE TV! Enjoy a brighter, clearer, steadier picture than you ever thought possible with SEVEN CHANNELS to choose from! Sports, comedy, mystery, variety... Now you can enjoy them all more than ever before... and for only pennies a day! For full details just call 586-8700.



MORRISTOWN CABLE TV CO.

112 N. CUMBERLAND / MORRISTOWN, TENN. 37814
PHONE 586-8700

Installation charge \$25.00

Monthly Rate \$3.50

Antenna Trade-in \$15.00

Shown above are two of a series of eye-catching mailer cards used by Morrystown (Tenn.) Cable TV Co. They fit into standard envelope without folding.

imagination. Since we are not generally in a competitive area in each CATV community, we do not have to compete with companies selling cable TV service. Your prospect knows only what you tell him about CATV.

There are basically four categories of direct mail: *Informative type*. This includes package enclosures, surveys, bulletins, stickers, package labels, streamers, pennants, banners. *Persuasive types*. Printed or processed letters, illustrated letters, folders, booklets, newspapers, action pieces, postal cards, brochures, blowups. *Reminder types*. Calendars, blotters, printed novelties, reprints from random, desk pads. *Utility types*. Letterheads, envelopes, postal cards, reply cards, labels, printed packages, coupons, order blanks.

sales kit. The average cost would likely breakdown as follows:

booklet	.075
envelope	.02
letterhead & Typing	.05
	<hr/>
	.145
postage	.10
	<hr/>
	.245
or 24½¢ per piece	

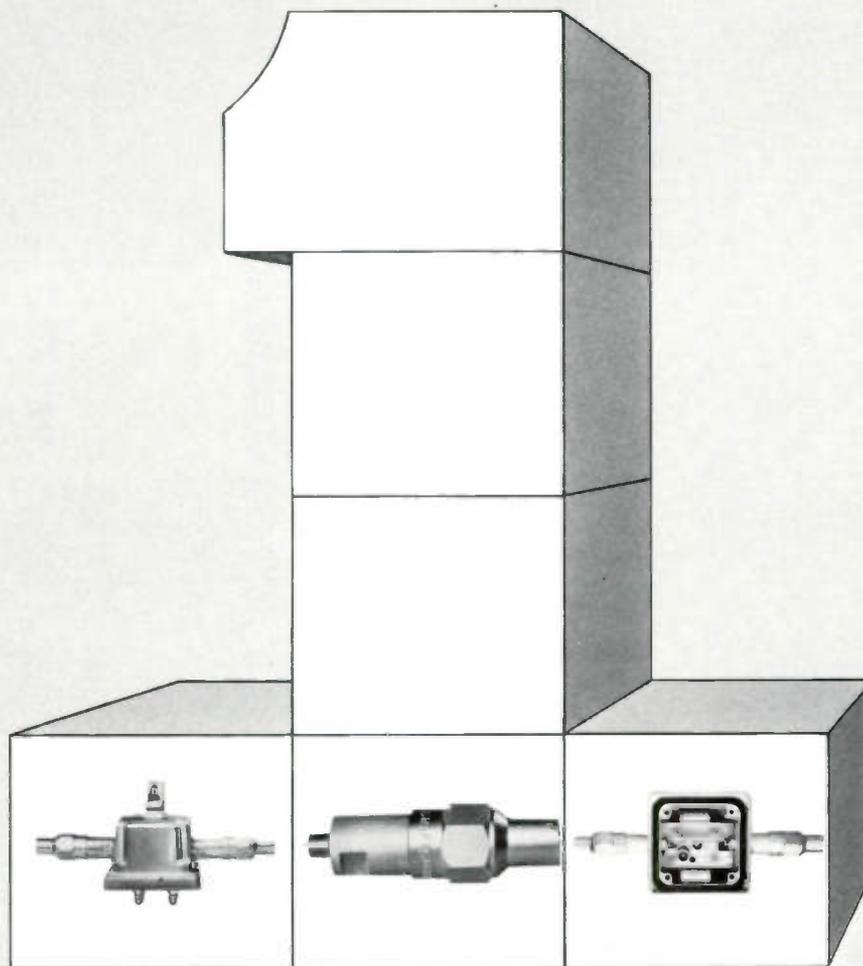
Whether you send a piece of cable, a fancy brochure or a short personal note — tell your story honestly and concisely. And make sure it is getting to the right person! Follow up on the people that don't respond and keep accurate records of the results. If you're going to hit the CATV target — take aim and fire!

WE ARE NUMBER ONE IN QUALITY!

When it comes to designing, engineering and manufacturing better products for the CATV feeder line, CRAFTSMAN is the leader. At CRAFTSMAN we concentrate all of our creative time and effort to produce the finest, most advanced electronic components for the feeder line. That's all we make. That's why our products are the best.

Feeder line components by CRAFTSMAN can help your CATV system deliver a sharper, clearer signal to subscribers. If these components also help to brighten your profit picture—that's another PLUS BENEFIT from CRAFTSMAN.

craftsman
ELECTRONIC PRODUCTS, INC.



VU-SHARP MODULAR DIRECTIONAL TAP

- Precise Cable Match
- High Directivity Prevents TV Set Feedback
- Exclusive Slope Design For All-Channel Uniform Response
- Strip-Line Construction For All-Weather Top Performance

SURE GRIP CONNECTOR

- Eliminates Center Conductor Pullcut
- Tolerance Held to Better Than .001"
- Assures Precise Cable-Pin Insertion
- Eliminates Damage To Connector Pin
- Better Than 35 db Return Loss
- Positive Moisture Seal Throughout

MODULAR AMPLIFIER TAP

- 18 db Gain—Solid State Circuitry
- High Output At Tap Port
- No Additional Booster Amplifiers
- Separate Gain and Tilt Controls

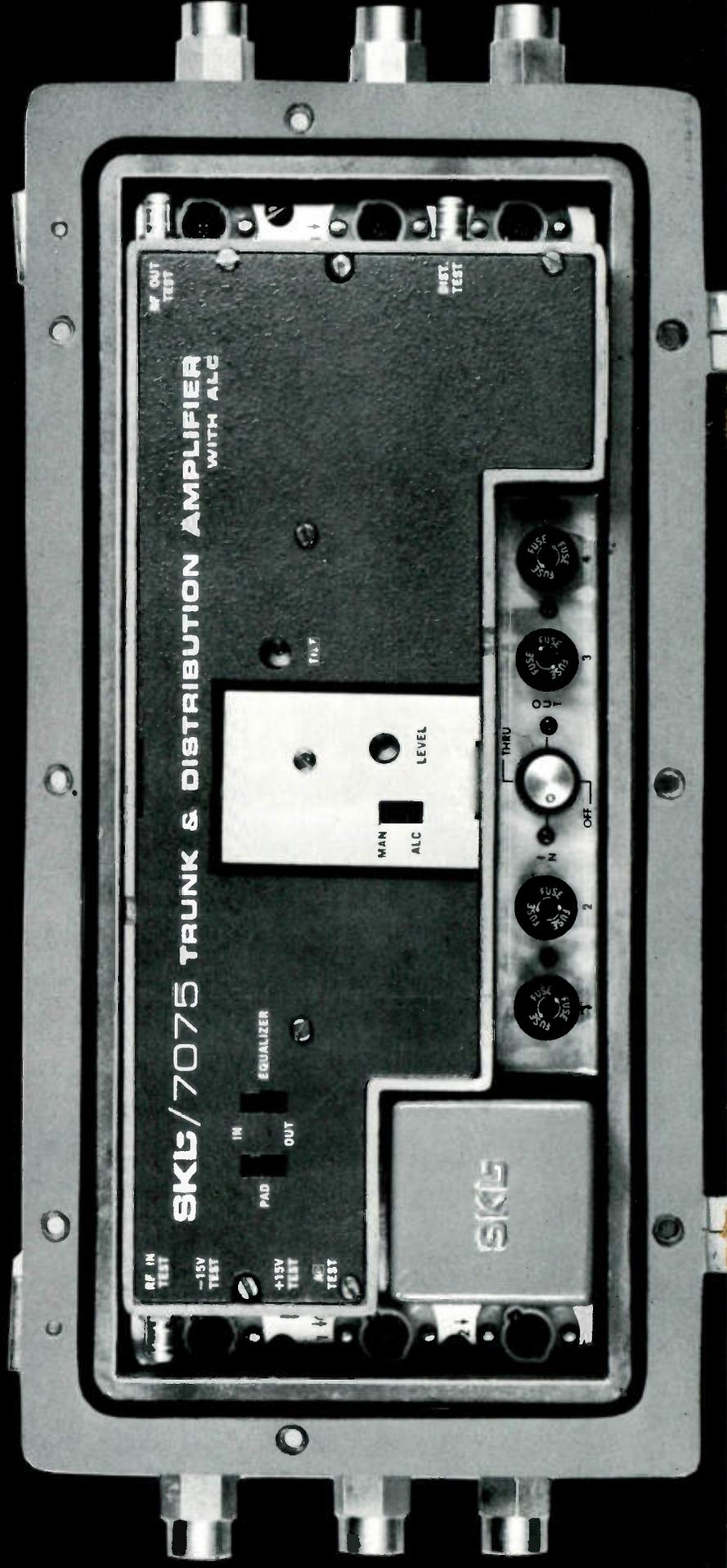
When You Specify Craftsman — Your CATV System Works Better. For Further Information Write To:
Craftsman Electronic Products, Inc., 133 West Seneca Street, Manlius, N.Y. 13104 ● Or phone (Area Code 315) 682-9105

See us at NCTA booths 91-92-93

2 SKLs proudly announces...

NEW COLORBURST AMPLIFIERS

The new Colorburst 7070 and 7075 Trunk Amplifiers make it easy to place your distribution amplifiers where you want them. By eliminating external trunk taps and splitters, they simplify system layout and cut plant costs.



The SKL/7070 is a straight trunk amplifier. The SKL/7075 is similar, but includes SKL's linear, integrated-circuit ALC. Both include a directional tap built into the amplifier module • The tap feeds a signal down 12 dB (max.) to a plug-in splitter on the base chassis. Splitters are available to feed from 1 to 4 distribution amplifiers or short feeders. Minimum full

gain of the amplifier/tap combination is 25 dB • Developed specifically to provide input for SKL's model 262 High-Level Distribution Amplifier, the 7070 and 7075 allow you to put 262s near the center of distribution areas, where they are most effective • Of course, the 7070 and 7075 will find application in any spot where it is desirable to split the output of a trunk ampli-

fier, but where bridging amplifier levels are not required • Assuming an output level from the trunk amplifier of 32 dBmV, the level fed to each of 4 distribution lines or amplifiers is 13.5 dBmV (The SKL/262 requires 8 - 10 dBmV). To one line, the level is 20 dBmV • Output to the trunk would be nominally 31 dBmV, regardless of the number of lines fed.

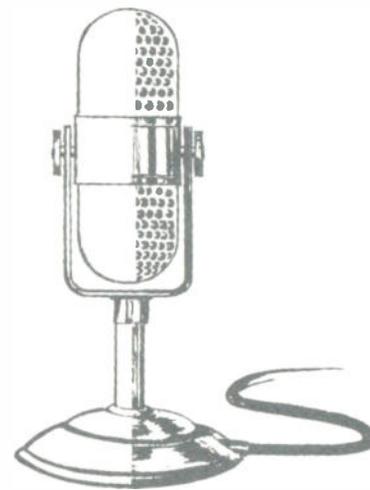
Now there are 7 amplifiers in the Colorburst line, to meet a broad range of applications. And more are on the way. Look to SKL . . . the company with ideas for better CATV.

SKL

SPENCER-KENNEDY LABORATORIES, INC.
1360 SOLDIERS FIELD RD., BOSTON, MASSACHUSETTS 02135

Adding Subscribers To Your System Through ...

Local Radio Advertising



By Virgil Evans
Al-Pine Cable TV, Inc.
Alexandria, Louisiana



Mr. Evans

Flexibility, saturation, low cost... an unexcelled persuasiveness are among the advantages of radio advertising for cable systems. When used with just a basic knowledge of the medium, radio can *excite, invite* and *convince* people to subscribe to your service.

Radio advertising can be an effective tool for both principle types of mass advertising. By selectively appealing to a particular

type of audience, it can be used for the "rifle shot," much like direct mail. Or, by using a saturation schedule with announcements adjacent to programs appealing to all different types of the station audience, it can also become the "scatter load."

The specifics of all good advertising apply to radio ... reach the most people, at the lowest cost, and achieve repetition. Do it often ... say it often. Remember that the public has a very short memory.

Personally, I like radio advertising because:

(a) *It is low in cost.* A spot announcement that costs only \$1.50 to \$2.50 reaches thousands, at a fraction of a cent per listener.

(b) *It reaches large audiences.* Recent agency figures reveal that radio listenership is high among all segments of the population. Children listen, women listen, men listen, sports fans listen, news interest is high, and set ownership is at an all time high. Don't forget to count that very important set in your automobile.

(c) *It achieves repetition with flexibility.* Radio can be the drop on the rock that wears a path bit by bit, or the bomb that blasts out a pathway in a massive burst. Because it costs less per ad, it can achieve repetition more readily than many types of mass advertising. It can be used week after week, month after month, once a day, once a week or 25 announcements per day. Radio is flexible.

(d) *It can back up other media.* \$20 worth of radio, in most markets, can effectively cause the listener to reflect back on the huge ad run in the local newspaper only once.

Used properly, radio advertising can be just as effective as any other medium of advertising alone. But, do

not make the mistake of expecting \$10 worth of radio to produce as much revenue as \$100 spent in some other medium of exposure. Dollar for dollar, radio advertising can be compared favorably with any other medium.

One of the two kinds of advertising, *Institutional* and *Promotional*, radio can do a creditable job in each. Although the purchase of program time and spot announcements can each do a job of both institutional and promotional advertising, sponsoring programs seems best for institutional image building and spot announcements best for a concentrated promotional push.

In program sponsorship, there is a sponsor identity that does not often accrue with spot announcements. An image of the sponsor, is created, and it can bring good will, and create remembrance. You're reaching the listeners with your message, but at the same time you're receiving credit for helping make the broadcast possible. Program sponsorship reaches a select audience persuasively.

The audience listening to your program is reached many times with different advertising. Well-selected program sponsorships can do much to create a good-citizen image for your cable company in your community. It also profits from repetition by reaching the same audience over and over. But choose the type of sponsorship that will best reach the special type of audience you most *need* to reach. No program reaches all types.

One cable company successfully used four 3-minute weathercasts daily. One short commercial was used to sell cable service. A tag-line was used to help overcome the problem of service calls. For example, when co-channel interference occurred, the announcer concluded all weathercasts by saying, "And remember, only freak weather, and nothing else can affect the good, clear reception you get on the cable."

Spot announcements, on the other hand, give you flexibility. They can be combined in different time locations to reach a larger audience cumulatively. One spot near news, one near weather, one near music, one near hillbilly programs, one near a women's show, and one near a kid's show, will reach just about every type of audience a station can offer.

For big events use saturation radio, the equivalent of the newspaper's full page. Ten, fifteen, even twenty spot announcements per day, will reach everyone who listens to the radio station. By this method, you will reach most of them over and over again. To achieve best results, your special offer must be as genuine as the frequency of your ads indicates it is.

And now, let's talk a little bit about your radio copy. Get to the point! In the first few seconds, let the listener know what your offer is. If it interests him, you can hold his attention for the rest of the ad. If the offer is good, make it sound good in the first few seconds.

If 10 seconds can get your full story across, don't use longer copy. If 10 seconds can't do it, try 30 seconds. Remember, it takes a tremendously interesting ad to hold your listener's attention for a full minute. Good advertising agencies, with the finest production facilities available, can make an ad interesting for a full minute. No all local station copywriters can.

To close, use such phrases as "buy it now," "call us today," "let us show you how much better cable TV can be," "ask your neighbor," "we're as close as your phone, call 3-7274 today." Professional copy writers call this copy essential the "urge to action."

To sum up:

- (1) Know what you want to say.
- (2) Say it often, and repetitively.
- (3) Say it quickly and convincingly.
- (4) Follow all ads with a suggestion for action.

A wise advertiser will tie all of his advertising together. No one medium of advertising can do a complete job. Tie in your radio, newspaper, direct mail and outdoor advertising.

A distinctive characteristic of radio advertising is its ability to *entertain*. Bright, interesting copy—tied in with a catchy jingle that reflects the personality of your company and product—will hold the attention of your audience. If you can create an announcement that is pleasant and entertaining to listen to, as well as informative, your radio advertising is sure to produce tremendous returns on your investment.

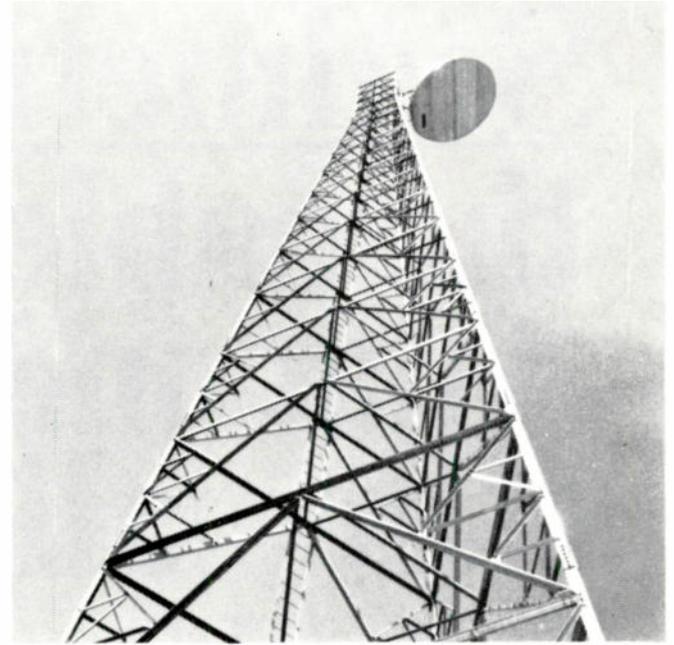
Your radio advertising program can be as flexible and effective as your own imagination can make it. Don't just "buy some advertising." Evaluate your product and your market. With your local station's account executive, work out a schedule that includes the best combination of repetition and saturation to accomplish your specific objectives.

Then let your own ideas and knowledge of cable television take over. Remember that you are selling specific benefits of cable television viewing ... not just a connection to a wire! You're selling the pleasures of greater convenience and wider selection of television programs made possible by the cable hook-up.

With this in mind, let your thinking flow into a few short sentences. It is this personal imagination of yours that will make your radio advertising truly reflective of your own type of cable operation.

By combining your own best mental efforts and imagination with the assistance available from your local radio station, professional CATV promotion companies or local advertising agency, you can sell cable service effectively over the air. □

Why put a round peg in a square hole?



Who uses a round antenna with a square reflector? . . . almost all system designers who haven't heard about Microflect *elliptical* reflectors. We've gotten rid of the corners that add wind load, collect ice and reflect unwanted second zone energy. Our *elliptical* reflectors are designed with *built-in* rigidity that assures original, calculated performance for years on end. They are fabricated of aluminum without perforations . . . in fact, our design department went all out to eliminate the objectionable features found in other tower reflectors.

Please don't confuse our reflectors with ordinary flyswatters . . . Microflect *elliptical* reflectors have full width internal ribs which are bolted to vertical spars, and are *skinned front and back*. You won't find any weldments on the reflector assembly. Methods that aren't good enough for the aircraft industry, aren't good enough for us!

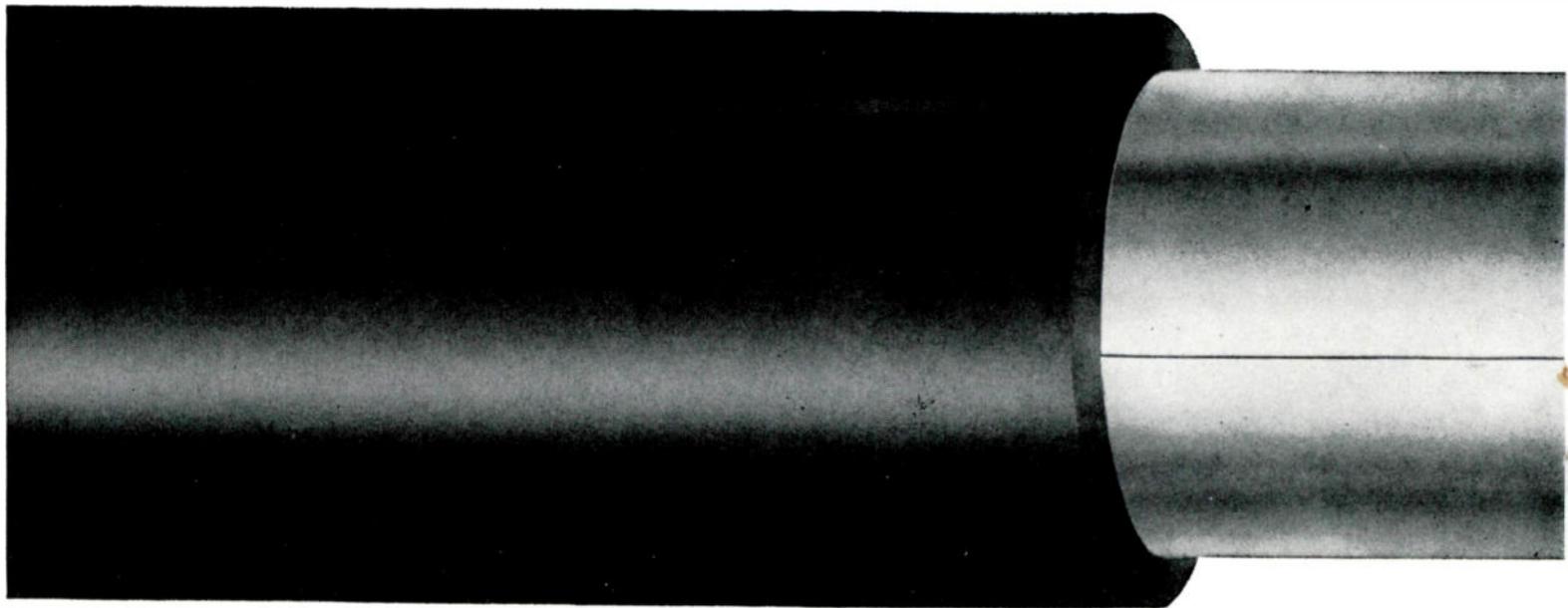
Want more? . . . Let's look at other big features: The gimbal mount and adjusting rods. Here's where they *really* shine! The vertical adjusting rod doesn't support any wind loads or dead weight. The adjusting rods move freely in any position. Turning them by hand doesn't affect any of the support fittings. Microflect *elliptical* reflectors aren't torn apart to make simple optimizing adjustments!

We haven't given you the whole story . . . about how many dollars and days are saved in installation and maintenance, but if we've aroused your curiosity, *write us for more information*. While you're in the mood, also ask about Microflect's billboard *passive repeaters* and quality *tower lines*.



MICROFLECT

**This is
Sealmetic[®] Coaxial-
the cable
Anaconda designed
especially for
CATV**



Sealmetic's positive moisture barrier makes the big difference. The Sealmetic sheath is hermetically sealed at the shield overlap, and is bonded between the entire outer conductor and the polyethylene jacket to form a unitized sheath. Moisture or humidity can't get between the shield and the jacket nor enter the core. The core stays dry and maintains the electrical characteristics of the cable.

Sealmetic Coaxial is the flexible, moistureproof CATV cable—the cable that solves attenuation problems.

More flexible, easier to install than any other CATV cable.

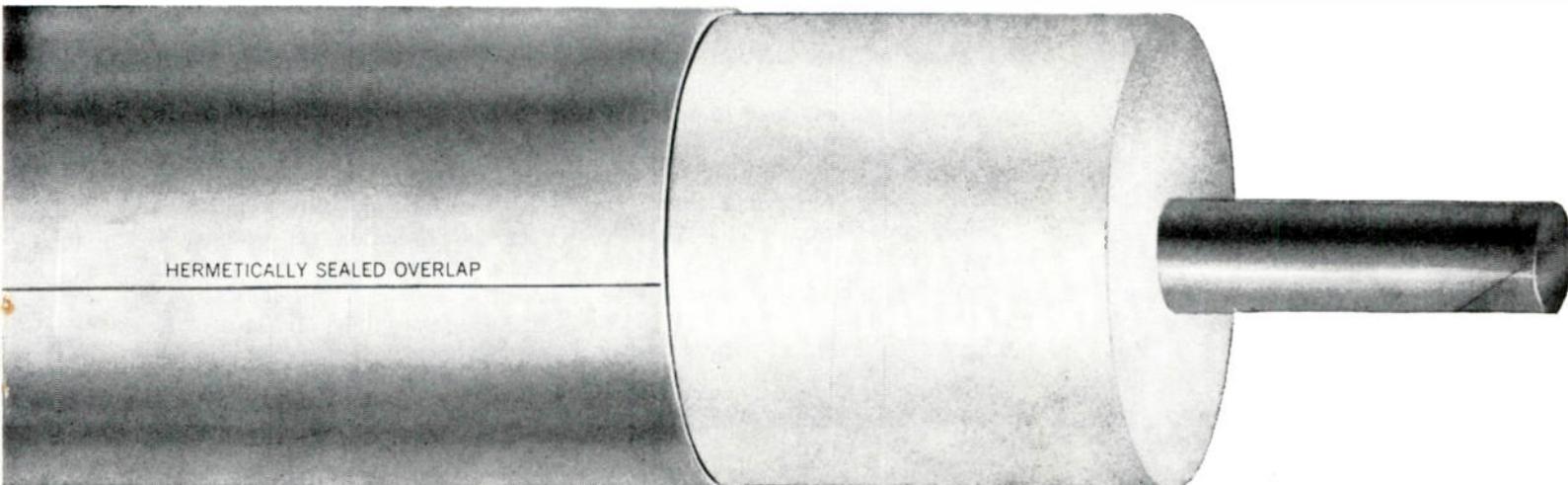
The bond at the shield overlap has been balanced against the bond between the entire outer conductor and jacket, resulting in a completely homogeneous composite sheath. This unique design allows easy bending without kinking, cracking or rupturing of the sheath. Sealmetic is less susceptible to installation damage; installation goes faster and costs less, and the cable will last once it's installed.

When you're considering CATV, you should know about Sealmetic Coaxial. For more information, contact your Anaconda man, or write to Anaconda Wire and Cable Company, 605 Third Avenue, New York, N. Y. 10016. 65221R



©Registered Trademark Design Patents Applied For

OUTER CONDUCTOR BONDED TO POLYETHYLENE JACKET



CO-POLYMER BONDING MATERIAL COMPLETELY OVER SHIELD

Adding Subscribers To Your System Through . . .

Newspaper Advertising



By Samuel Henry

Though good salesmen do not necessarily make good advertising men, the successful copywriter must know and apply sound principles of selling if he is to create effective advertising.

Experienced salesmen have learned to size up their prospects, find out individual wants, tastes and peculiarities—and appeal to those special needs and desires. They also know the value of selling the product or service on its merits—honestly, believably, without gimmicks, half truths or double talk. A prospect once burned by devious claims, or fooled by any means, is usually lost forever.

In writing copy for your cable system advertising, think of how you would go about selling the service to a friend or neighbor. If your CATV service is worth advertising at all, it is probably worth doing it *right*. In cable TV, we are

not promoting some cheap, fly-by-night outfit, or selling shoddy, half-baked merchandise on a one-shot basis. We have one of America's real 'Best Buys' to offer—a superior method of supplying something people want—the greatest bargain in entertainment, news and enlightenment the world has ever seen. *Advertise it accordingly.*

At the same time, don't make the mistake of assuming people in your community know all about CATV or what it has to offer them. Even in areas where they may have been "exposed" to cable service for years, your advertising may have to do a complete job of educating and informing the prospect.

In planning for better newspaper ads, the wise system manager or promotion writer neither *underestimates* his readers' intelligence, nor *overestimates* their knowledge and understanding of CATV. While your unsold prospect may not be stupid, he *is* a human being—meaning he is apt to be forgetful, or lazy, or too busy with other matters. You can be sure he is not exactly waiting to jump at the chance to sign up for your service.

In short, he (or she ... sometimes several family members) **MUST BE SOLD.**

How then do you apply principles of good selling to writing your newspaper ads?

First and most obvious, even though we often tend to forget the principle, is to put yourself in the prospect's shoes. If you find that hard to do, first try it in terms of something **YOU** may be planning

to buy, such as a new auto, vacation tour, or fishing rod. Before deciding, you probably ask your friends, business associates, someone who has recently purchased the same item. In answering your questions, they are creating "word-of-mouth" advertising—people telling others firsthand about the merits of this or that product or service.

Clue No. 2—Make your ad copy sound like real people talking. Have you ever heard your wife telling a neighbor over the back fence about that bargain in dresses she found at Blank's store? Perhaps your satisfied subscribers don't ever get *that* enthusiastic about the cable TV service. They probably take it for granted. So you must build it up a little, as all good copywriters do, to help offset that natural attitude and also compensate for the cold, impersonal quality of printed messages.

What about headlines? Experts often disagree, but you can figure at least one-half the success of your ad depends on getting the right headline. A good headline 'telegraphs' to the reader the basic idea or ideas your copy is trying to get across. But it must do more than that if it is to do its best work. It must stop the eye—capture the attention—of the busy, pre-occupied reader and make him curious to know more.

The exact wording, of course, will first depend on what you have to sell: More channels, better or more dependable picture quality, brighter color, no antennas to blow down, worry over, etc. Often it is a combination of these *plus* free instal-



Sam Henry is president of the Phoenix, Arizona based advertising firm, Samuel Henry & Associates.

lation, low monthly charge and so forth. The copywriter must choose the best one or two of these appeals for his headline, if it is to be specific, simple, easily read and understood (which all headlines should be).

Clue No. 3 then, to writing effective newspaper ads, is to *keep it simple*, be specific—especially in writing the headline.

Unless your budget permits a full page each week, the same principle applies to your over-all ad copy. Don't try to say too much in a single ad or you'll end up with a crowded, cluttered, "busy" looking concoction that'll scare readers away. Here too, is where good salesmanship applies. Your ads, like the successful salesman, perform a useful and appreciated service to customers and prospects (but only if they are honest, informative, understood). Remember, it is not so much what you put into the ad, as what the prospect gets out of it, that *counts*.

Clue No. 4: Gear your advertising to the medium. Since people read their newspaper largely for news, make your ads as newsy and timely as possible. If you can't find something newsworthy to feature, at least in an occasional ad, maybe you can start something. Most so-called promotions are interesting to many people, with their promise of free offers, contest awards, fun and games, etc. You can talk about new network programs coming up, too.

Names make news; people are always interested in the big names seen on TV. Confine your attention to the really Big Names, or to those your sixth sense in show business tells you are destined to become Big.

Finally, *be sure your ad asks for the order*, and makes it easy for the reader to ACT NOW. With all their human, easy-to-read, interesting headlines and copy, with all their attention to customer benefits and self interest, it is amazing how many otherwise creative ads fail in this one essential requirement. They do not ask for action.

Tell your readers just what you want them to do. Make it easy, as well as beneficial for your prospects to do the thing all your advertising is planned and written to accomplish: **SIGN UP TODAY!**

Our line supports your line.



Diamond offers a broad range of weather-proof communication hardware designed and manufactured to highest telephone industry standards.

1. *Diamond Insulated Screw Eyes* with a porcelain ring having a diagonal opening which allows easy insertion of wires. The porcelain is glazed on the interior surface of the ring and on the surfaces of the slot.

2. *Diamond Lashed Cable Support Kits* provide quick, economical installation of aerial cable supports. One hundred feet of stainless steel strap and 75 buckles are packaged in self contained dispensers for immediate use.

3. *Diamond Support Clamps* for pole and crossarm mounting of figure-8 distribution wire and aerial cable.

4. *Diamond Cable Lashing Clamps* are furnished with a double ended pre-peened stud bolt, washers and free running nuts all galvanized by the Diamond process.

5. *Diamond Span Clamps* for multi-pair distribution wire and aerial cable.

6. *Diamond Bridle Rings* with either wood screw or machine screw threads.

Only a sample of Diamond communication hardware is illustrated. For complete line, size, weight, packaging and installation information, write for our 40-page illustrated Catalog SD-5A. Order Diamond communication hardware from your telephone supply distributor.

DIAMOND EXPANSION BOLT COMPANY, INC.
A Division of General Cable Corporation
500 North Avenue, Garwood, New Jersey
07027. Tel: (201) 789-1400



Powder Actuated Tools · Hollow Wall & Masonry Fasteners · Communication Hardware

**New selling methods play an essential role
in feasibility of wiring major urban centers**

Promoting Big City Cable TV

By Charles Wigutow

Selling cable installations in the big cities is different, but not so different that lessons cannot be learned from sales campaigns in the smaller towns.

Big city residents know less about cable television. They have been served by all the major networks plus a number of independent channels. Having all these channels at their command throughout day or night, they have had little awareness of what it means to live in a community limited to one, two or three channels. It is probably true that most people in a city like New York live their lives within the confines of their own community and know little of the day to day problems in other places. CATV may be operating in 2,000 towns over the United States, but it is still an unknown in the metropolis.

The reaction you may get from a bare demonstration of CATV at work is resentment at having to pay for something previously provided "for nothing".

But metropolitan television reception is rarely good on all channels. Buildings with their concealed steel underpinnings bounce signals all around the lot. The electrical emissions from heavy automotive traffic tear across the TV screen. Pictures flutter to the seemingly continuous procession of aircraft overhead. All the nearby electrical appliances bring their own brands of annoyances as they go on and off.

The New Yorker puts up with all these interruptions—while he watches television as much as anyone else in the country—but he will balk at paying for improved reception. Still he is the same person who will choose to pay several times the price for an orchestra seat in the theatre over a balcony seat, or at the sports stadium for a box seat over the bleachers.

Even with television, New Yorkers in the larger apartment buildings have been paying to receive good television by way of master antenna systems. And these master antennas often suffer from being limited to the roof tops of buildings they serve. Few buildings are so located that they offer a clear shot at the Empire State Building where almost all the transmitting antennas are located.

Cable television, if it is to compete with master antennas, has to be superior. Usually the master antenna is available at a lower monthly fee, and in New York, by terms of the franchise the CATV company is prohibited from doing anything that will interfere with the right of the tenant to have access to either a master or individual antenna.

The only way open to cable is to offer so much more, that those who reside in these apartments will voluntarily pay for the new service.

With nine channels currently on the air, and another one due to begin broadcasting (probably before the time this is published), even if the set owner were to receive six out of these ten channels, shouldn't that leave enough choice to satisfy even the most avid television fan? This goes back to a statement made several years ago by a Federal Communications Commission commissioner, to the effect that CATV is not necessary where the community is "adequately served".

Cable television in the largest city faces an educational job. It must demonstrate beyond a doubt that it brings better pictures, that it brings to the consumer all the active channels within the area; and that color reception is of good quality. The consumer must be convinced that this is the case throughout the broadcast hours. And, a case must be made for the extra channels available only on the cable: continuous weather information, plus the equivalent of the newspaper printed in the home by means of the auxiliary services that bring stock quotations and typed news to the cable system subscriber.

While these features can be demonstrated in the system's home office or at a fixed location, this isn't enough. New Yorkers tend to be suspicious of new products which are linked to a fixed charge that goes on month after month. If we remember that CATV is an unknown, we will realize that what is called for is education in the sense of teaching, and not propagandizing by slogan.

"There's more to see on cable TV," may be a catchy phrase, but it fails to answer many questions in these larger communities. Professional advertising people are fond of lecturing to us on eliminating technical expressions from our advertising and concentrating on the end benefits derived from the product. This is fine where it is established that these benefits have been associated with the product or service. But there is no such automatic association between frustration-free viewing and CATV in the big cities.

Individuals feel that in having paid the price of the set and the costs of keeping it repaired, they have made all the investment required of them. Others, with a more sophisticated approach, add the time they spend on commercials interrupting their programs, and the costs of such advertising as incorporated in the prices

chised areas will be completely built. If the newspaper advertising sells the appeal of CATV too well, long before a section is to be wired, then problems are created. People who are sold on cable television too early are apt to complain loudly where it can hurt, that is, in the city council.

While newspapers with city wide circulation are ruled out, the neighborhood publications that have been springing up in the cities during recent years, make ideal vehicles for the advertising message. These smaller circulation papers can be used neighborhood by neighborhood as construction progresses.

Direct mail is probably the best tool of all. With the help of a city directory or telephone book listing residents by street and number, bull's eye solicitations can be made exactly to those addresses where cable is being activated. The message and the timing can be tailored to the circumstances.

Mail is best personalized by name and address and sent out first class. The additional cost is well repaid. One mailing is not enough - a second and third letter should be sent out as follow ups. If there is an inquiry, of any kind of contact, this, too, should be the reason to send a letter. You can hardly write too often.

The same directory, by address, can be used in phone solicitations. Here the approach can be varied. A direct sales closing can be tried on the first call. If that doesn't work well enough, an appointment can be made to have a salesman call. Or an invitation can be extended over phone to attend a demonstration where refreshments are to be served.

Door to door sales may be difficult because of the restrictions on selling in these apartment structures. And there is a very real fear to meet strangers at the door. It is almost mandatory to pave the way for a personal call by letter or phone. It may be necessary to enlist the help of building management in making your visit known.

To do this will require a commission arrangement with superintendents. The sales force, too, should be on a sales and commission arrangement. Selling cable connections in New York or other large cities is not an easy job. Good sales people will expect an incentive scale that will be geared in steps to the number of connections sold within a specified calendar period.

However, all the written and vocal information you can spread still needs to be backed by a living display of cable television pictures. The ideal arrangement is a bank of sets, each turned to a different channel; all the channels on display at the same time. Nothing is as convincing.

An attractive store window can be used for this purpose, with a permanent staff assigned to hosting the display, where meetings and demonstrations can be conducted. Or a moveable display can be designed inside a house trailer as used by TelePrompter in Manhattan. The trailer is pulled up to a prominent corner hooked to the cable system, either through tapping the feeder line in a manhole, or drawing a line from a nearby building. In addition to showing all cable channels, the trailer displays a set using off-the-air pick up for contrast. Salesmen are in attendance to answer questions and take orders.

TV dealers and established repairmen are a cornerstone in a city-wide sales campaign. The stores are given cable connections for demonstration. A commission is earned for referring customers to the cable. This is only good sense. The TV service dealer meets his customer at the point of a television transaction. The dealer is the doctor as far as television is concerned. Why shouldn't the dealer work with a cooperative cable system? Cable TV helps him sell color sets in difficult reception areas. And there is no competition between dealer and cable company. In New York as in other places, the franchise forbids the cable company from entering the dealer's or the service man's field.

While these specific sales activities are necessary steps, something else is required in building up the educational background for the coming of CATV. That something else is an intelligent public relations campaign. The occasions for news stories are plentiful.

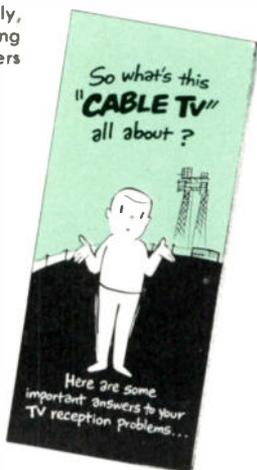
Cable television as a new service for the city may be as momentous as the coming of electricity or the telephone. Who knows just how deep into the lives of metropolitan dwellers this new means of communications will go?

Installing the first subscriber, cable television in the school room; a city official has something to say about the benefits of cable TV; or something unique is turned up in the building of the system—a public relations oriented manager can see news value in many of these events that come up. Properly used, these occasions can make a household world of cable television. At this point CATV in the big city is no longer an unknown. □

Want more "hookups"? Here's your BEST SELLER . .

Already in its fourth printing, this lively, 16-page fact booklet is rapidly winning friends and signing up new subscribers everywhere.

- Shows how broadcast signals and CATV antennas work.
- Pictures a typical Cable CATV home installation.
- Illustrates how a Cable TV Community becomes a Better Community.
- Gives disadvantages and dangers of rooftop antennas.
- Answers frequently asked questions about Cable TV.



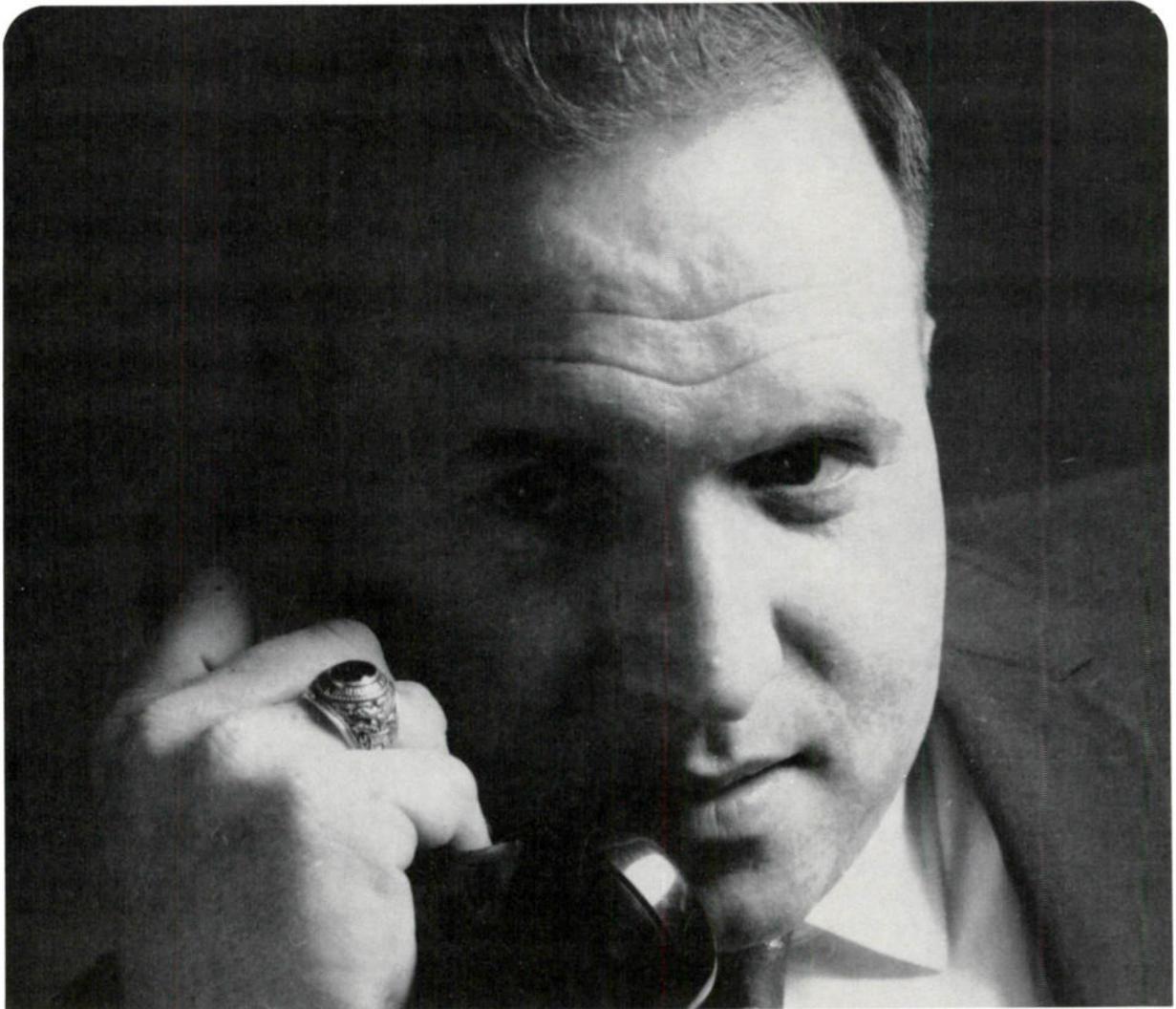
. . . and the entire back cover is available for your local company message (available channels, local coverage, rates, special offers, etc.).

RUSH YOUR ORDER TODAY FOR A FREE COPY AND QUANTITY PRICES OF THIS SYSTEM SALESBUILDER!

Mail to:

**SYSTEM PROMOTION SERVICES
TV & COMMUNICATIONS**

P.O. Box 63992 • Oklahoma City, Oklahoma



“I would recommend **KAISER** !”

“And here's why . . .

— we have thoroughly evaluated and are using Kaiser-Cox equipment in our system which is delivering top quality signals to our subscribers!

— the Kaiser-Cox Phoenician Series equipment works as well as it looks . . . easy to install . . . easy to maintain!”

Richard Conde, President
Unicable, Inc., Oswego, New York

FOR DELIVERY, SERVICE, PERFORMANCE YOU CAN DEPEND ON . . .



KAISER-COX CORPORATION / P. O. Box 9728, Phoenix, Ariz. 85020, Phone (602) 944-4411

A SUBSIDIARY OF KAISER AEROSPACE AND ELECTRONICS CORPORATION

CATV case histories, and accepted advertising philosophy point emphatically to the need for a...

Multi-Media Promotion Program

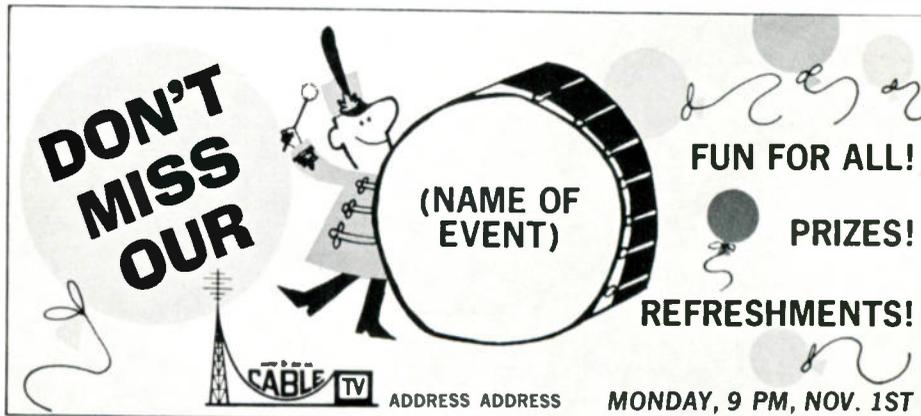
By Peter B. Schust

"Half the money I spend on advertising is wasted, and the trouble is I don't know which half," said John Wanamaker, one of retail's advertising greats. This feeling of advertising being wasted is very prevalent among CATV operators.

In June of 1966, I was reading the results of a national CATV questionnaire which concluded that many CATV operators are not effective consumer salesmen. They have not successfully told or sold the story of the advantages of CATV.

Because of my marketing background, I immediately wondered what methods had been used by the systems that had achieved 60 to 70% saturation and how these methods could economically be employed in a less successful system. In order to get a quick capsule story, I called some of the systems that had achieved spectacular saturation in short periods of time and asked them for their secret of success.

Without exception, every successful system had used a combination of newspaper, radio, billboard and direct mail in integrated campaigns, combined with strong publicity programs and followed up with



Billboard designed for special events promotion—for use in conjunction with system "grand opening," expansion announcements, system anniversaries, etc.

door or by phone. In fact, one system, I remember, had achieved 65% saturation at the time of turn-on by using this technique.

With the thought that possibly a whole new area in advertising might be available for an aggressive advertising agency, Toppino-Golden-Schust then conducted a valid marketing survey to determine if the need was there for marketing and advertising assistance to CATV systems whose growth had stopped short of potential and new systems. Because of the sizeable investment that would be needed to develop the materials and to execute the program, we had to be sure that there was a valid need. There was.

Results of this marketing survey showed that the majority of systems which had stayed around 30 to 40% of potential subscribers had not continued to advertise for a variety of reasons . . . among the more prominent being "after the initial push, the cost was too high in respect to the number of hook-ups they would receive, hold-outs were unsellable and advertising was a waste of money, and word of mouth testimonials from cable users would hopefully get the remainder."

There were others who had found that their promotions were no longer getting hook-ups so they had stopped. Some felt that the only way they could get additional subscribers would be to reduce the monthly rate and this would not do since it would cause a reduction in their cash flow.

It is interesting to note, however, that not one of these systems with under 50% of their saturation had used the combination of multi-media advertising, publicity, direct mail, followed by phone or direct selling *even for their opening*. Yet, over and over again the one comment kept appearing . . . "CATV

ABOUT THE AUTHOR



Peter B. Schust is president of the Phoenix-based advertising agency of Toppino-Golden-Schust. He has previously held several marketing and advertising positions with retail and banking firms in the Southwest, and has managed both radio and television broadcast properties. He is a graduate of the University of Alaska in Business Administration, and has done marketing work at both the University of New Mexico and Arizona State University. The agency he heads has offices in Arizona, New Mexico, and Utah, and is the advertising agency for Kaiser-Cox CATV. The firm also markets a syndicated advertising program to cable system operators around the country.

hook-ups are hard to sell in my town."

These results assured us that there was a market for our advertising and merchandising knowledge. Let me outline here some of our observations and generalizations with regard to advertising and promotional activities for CATV systems.

Every system has the same basic built-in promotional features; some more fortunate ones have more. *But every system has enough!* Remember, the CATV system operator determines what is an adequate reason for a promotion. Every prospective subscriber is willing to accept your promotional idea and proves it when he signs up.

In order to trigger your thinking in the right direction, I will briefly outline three or four campaigns we have designed that can be used by every CATV system.

The first is the "Special Events Promotion." It is designed to be used for such occasions as a system

opening, anniversary, or system expansion. It also is effective when tied in with any national or local date of prominence such as the 4th of July, state anniversary, city birthday, etc. I have just touched the surface of a very large selection of logical reasons that a system operator can use for promoting with this package, to assist him in getting out and beating the drums for more subscribers.

Now with the reason for the promotion firmly implanted, you have to advertise properly so that everyone knows your CATV story. The media that we have selected for all our campaigns are: billboards, (24 sheet); newspaper, (from 4 col x 7" to 2 col x 5"); posters for windows, display racks for lobbies; folders for mailing and handing out; door hangers and radio scripts.

A celebration is what you make it — to put the frosting on the cake you can include many additional items in your celebration. It could logically start with balloons, lollypops, pennants, buttons, key

chains, etc. In addition to this you may wish to serve refreshments and invite many dignitaries to a specific party. All of these items and events are designed to create a strong element of excitement — a very necessary ingredient in motivating people to buy.

Your budget will govern how far you can go in this area. However, I know, because of the specialty items we offer to CATV operators, that they can be obtained at an extremely low cost per unit and it is well worth the expense because of the extra dimension they add to any promotion.

It is my feeling that using the six basic media to tell your story is the truly effective way to project the CATV story particularly when coupled with the direct phone or door to door selling method for closing the sale.

The next universal promotion I would like to discuss is called the "Bonus Programming Campaign." This campaign can be used effectively when your system is or will be introducing a new improvement. These improvements would include such things as: adding a news channel, weather gauge display, new distant signal, FM music local programming, re-channeling UHF, or updating from low-band to all-band.

Each of these is a very logical reason for you to sell to more subscribers. Again the story is told with a multi-media campaign utilizing billboards, newspapers, direct mail, door-to-door, display and radio.

Other profitable promotional areas for multi-media advertising are seasonal periods such as Christmas, New Years and the Bowl Games, the start of the new TV season in September, the start of the baseball season in the spring. Each one of these seasonal promotions is a natural to describe the merits of being hooked up to the cable.

The Ad Budget

Before moving into additional "logical promotional campaigns" I would like to touch upon the area of budget and how it should be spent.

The average monthly advertising budget should be based on five

NOW ON THE CABLE!
(NAME OF NEW PROGRAMMING)
CALL 000-0000 TODAY!

B-2 BILLBOARD, 24 SHEET, display area 104" x 234" bordered by white 19" each end and 10½" top and bottom.

NEWSPAPER MATS

N-2A
4 col x 7"
CALL 000 0000 TODAY!

N-2B
2 col x 5"
CALL 000 0000 TODAY!

N-2C
1 col x 5"
CALL 000 0000 TODAY!

D-2 DOOR HANGARS
CALL 000 0000 TODAY!

P-2 POSTER WITH EASEL
11" x 16"
CALL 000-0000 TODAY!

F-2 HAND-OUT OR MAILING FOLDERS
Front Inside Back
30 & 60 SEC RADIO SCRIPTS FURNISHED WITH ANY ORDER

Program promotion package such as this is can be valuable whenever new or improved service is introduced on the cable. It utilizes billboards, posters, newspapers, direct mail, door hangers, and radio.

per-cent of what the monthly revenue would be if the total potential of that system were signed up. This is a realistic figure for a new system or a system that is experiencing difficulties in closing (this) potential prospectus. However, as a good businessman, this figure should be constantly reviewed to assure it's compatibility with your current economic situation.

A percentage breakdown of the total budget I would recommend is the following: 50% newspaper, 25% billboards, 10% direct mail and collateral materials and 15% for radio.

I strongly urge the use of billboards in the selling of CATV systems. You have the ability to pinpoint to a specific geographic location or traffic flow. For no additional cost you can utilize full color . . . one of the strongest features for hooking-up to the cable. Because of the mobility of our society, billboards coupled with radio allow you to sell to the majority of your potential customers on an audio and visual basis.

Newspaper should be utilized on a general basis with the major placement being in the entertainment and TV sections. And, as I have outlined earlier, the 10% for direct mail and collateral material is necessary to insure selling all your subscribers.

The bulk of your collateral materials will be distributed on a person-to-person basis as part of your direct sales program.

Table 1 presents a *rule of thumb* cost for three different size cities with populations of:

A-500,000, B-250,000, C-35,000.

The next area we will discuss I affectionately term "hard sell" advertising and promotional activities. It is not our contention to imply that this type of advertising is necessary or desirable for all systems. However, it should be considered strongly for new systems in fringe areas or areas where there is a great deal of duplication—or for the system that has employed good promotional efforts and still has not reached the projected potential.

Nothing sells hook-ups like a special offer . . . be it a free hook-

TYPICAL ADVERTISING RATES					
Newspaper	Radio	Billboards	Mail/ Hand Outs	Door Hangers	Point of Purchase, Signs
City A—500,000 population \$6.50 per col. in. includes Mats	\$7.00 per spot includes Production	\$91.00 includes Paper	\$25.00 per M	\$45.00 per M	75c each
City B—250,000 population \$4.00 per col. in. includes Mats	\$5.00 per spot includes Production	\$90.00 includes paper	\$35.00 per M	\$55.00 per M	\$1.00 each
City C—35,000 population \$1.50 per col. in. includes Mats	\$3.00 per spot includes Production	\$85.00 includes paper	\$40.00 per M	\$65.00 per M	\$1.50 each
(All figures are averaged for a 30 day period of time)					
(It should be remembered that the smaller town will use a much smaller quantity, hence their total cost will be a great deal less than the larger communities, even the cost per unit is higher.)					
Table 1					

up, a month's free service, a reduced rate, a magazine subscription, or a gift item . . . any item you feel would motivate your prospective customer. Regardless of the item you use as your premium offer, the story, to be effective, must be sold utilizing advertising on a *multi-media basis*.

Remember that when choosing a special offer gift it is advisable to have it relate to TV viewing or to a family activity—such as the premium items that T-G-S offers . . . electric corn poppers, snack utensils. These are inexpensive impulse items that tie in beautifully with televiewing.

Once you have let your imagination begin working in areas of sound promotional campaigns, a number of very feasible promotions can be created. An example of this is a new "second set" campaign which we will introduce the latter part of May.

Preliminary marketing research indicated the major user of a second set is the under 18 year old group. After a great deal of discussion and work it was decided the most ideal time to launch a second set promotion would be during the summer when the 18 year old and younger would be out of school. In order to insure the hook-up of the second set, the sales promotion must be a complete package. This prospect does not have to be sold on the

merits of Cablevision, but must be convinced that only through the acquisition of a second set can a semblance of peace of mind be obtainable while junior is out of school this summer!

Each system, because of its geographical location, and unique customs or history, has abundant vehicles to promote itself. When these "unique features" are combined with the normal built-in features that every system has, it is conceivable that a promotional campaign could be activated *every month of the year*. And, depending on the potential market, the operator can be reasonably assured of success every time, if advertising is done on a *multi-media basis*.

The CATV industry is developing some very sophisticated and knowledgeable people. For the most part, their experience and knowledge is available to the majority of CATV operators whenever it is needed. The accumulated knowledge of marketing organizations such as Toppino-Golden-Schust, multiple system owners, state and national organizations, coupled with the ingenuity and creativity of the system operators, is more than adequate to complete the job of selling CATV subscribers.

There is no reason why every system, under normal circumstances, can't reach very close to its potential. □



The Fanner Banner

Communications
Edition

R&D PROGRESS: NEW DEAD-END DEVICES GIVE GUYS TOP STRENGTH



Fanner Straight-Bight Fanngrip dead-end (U.S. Patent No. 3,295,311 issued January 3, 1967)

Two Basic Methods Satisfy Engineers

Fanner R&D has developed grip-type (Fanngrip® Dead-Ends) and looped-strand (Superlock™ Clamp) dead-end devices that assure maximum tension and impact strength plus maximum resistance to unwinding. Yet, installations are more versatile and easier.

When the first dead-ends were made by looping the strand and serving, they often proved unreliable because individual techniques and skills differed. Served dead-ends sometimes slipped. An improvement was the use of "U"-bolts and guy clamps. However, clamp pressures required to develop strand strengths were hard to achieve. Strands sometimes slipped or were damaged.

Early-type helical grip was improvement

Following the initial development of machine-formed helical wires for armoring T&D lines, an early-type helical wire grip was introduced. In application, it looped through terminal hardware and wrapped spirally onto a guy-strand. Bulky hardware was thus eliminated and terminal strength improved. This early grip design had several drawbacks. It caused strand twist and induced torque. On guys at high working loads, the grips could untwist enough to permit slippage. Another problem was the difficulty in pulling final guy tension.

Two dead-ends fill construction needs

Many engineers accepted the helical grip dead-ending device. However, many still preferred the looped-strand system which had stronger basic mechanical advantages and was easier to tension. Fanner R&D recognized this dual need and developed both a safer, stronger straight-bight helical dead-end grip and a new helical clamping device to secure and lock looped-strand dead-ends.

To eliminate strand slippage, torsion unwinding and stretching of the loop, Fanner redesigned the earlier helical

grip. The new and different less-than-half-lay design with straight wire loop, called the Straight-Bight Fanngrip dead-end, will not slip, twist or elongate. Its tested strength exceeds strand strength ratings.

Installations can be made on both larger or smaller diameter hardware than the earlier-type helical grip and are easier to install.

New helical clamp for looped-strand dead-ends

For those preferring looped-strand dead-ending, Fanner R&D created a completely new strand-clamping concept called the Superlock Clamp. Extensive laboratory and field tests were conducted to assure performance and reliability. Simple and easy to install, Superlock Clamp dead-ends provide terminal strengths in excess of rated strand strengths, regardless of guy length or loop length. Superlock Clamps simplify construction while completely eliminating strand slippage and cutting by bolted clamps. Final guy tensioning is accurate and fast with the lowest possible cost.

Fanner Straight-Bight Fanngrip and Superlock Clamp dead-ends are available in sizes and materials compatible with every popular strand. With two new Fanner dead-ends, any type guy construction can be specified and installed with complete holding confidence, at a minimum cost.



Fanner Superlock Clamp

Yellow Guy Protectors Are Safety Markers Too

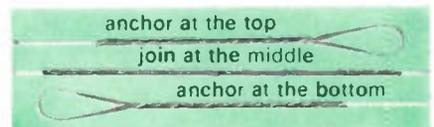
Motorists, off-highway equipment drivers and pedestrians are likely to run into guy wires if they can't be seen. Guys should be clearly marked.

Fanner has the solution with high visibility "Safety Yellow" Safety Guards for use on guys in high traffic areas. Their use on guys at construction sites can also reduce accidental damage to overhead systems.

Fanner Safety Guards are made of strong flexible plastic with metal clamps at three points. Highly resistant to corrosion, they have no sharp, jagged edges hazardous to pedestrians. Available in two widths and two lengths for $\frac{3}{16}$ " through $\frac{5}{8}$ " strands. Also offered in a standard neutral grey.

For Fiberglass Rod Guying: Fast, Reliable, Economical Terminal & Splice Fittings

Communication and power structures guyed with fiberglass rods profit greatly by improved radiation patterns, lowered SWR and reduced power loss. Highly desirable for guying, fiberglass rods are non-conductive, lightweight, corrosion-proof and completely reliable when installed with suitable end fittings and mid-span connectors.



Torque-free Straight-Bight Fanngrip dead-ends and Fannsplice rod connectors are made specifically for torque-sensitive fiberglass rods. The strongest, fastest and most versatile of all fiberglass rod fittings, they are also the most economical. Expense of precision-cut rod lengths with "factory-potted" hardware is eliminated. Random lengths can be used without producing "quarter-wave" interference.

Available for 7.8M, 12M, 20M and 30M strength levels. Send for details today!

8951-A

Test data and catalog sheets available.

The Fanner Manufacturing Company

Electrical Products Division
Brookside Park, Cleveland, Ohio 44109

a **lextron** company

The Promotional Value of A Community Channel

By Ira Kamen, Director
First Illinois Cable TV, Inc.

First Illinois Cable TV in Springfield, Illinois, is proof of the effectiveness of local originations in attracting subscribers. Besides the conventional news, time/weather, and FM services, Springfield is originating a Public Affairs Channel and a film channel until



First Illinois general manager John Stelzer with "local talent" used on the "Doggone Show" which is shown live.

the planned UHF channels convert their CP's in Jacksonville and Bloomington, Illinois, to operating stations. The Springfield system has been operating since January 31, of this year.

Springfield is an unusual CATV city in that it has a relatively large and sophisticated population, most eager to support a local origination channel. The success of Springfield heartily supports Mr. Milton Schapp's recent statements about current legislation, that "the law in fact, should require CATV local originations whenever it is at all possible." The record shows that this channel, as well as the news, weather, and other local originations has been the success of the Springfield CATV system in light of the opposition of two of the three network stations in the area. In fact, it can be said that Springfield's own "Channel 7" is the "talk of Springfield." More people have

wanted to be on this channel than we have been able to schedule. We have captured much of the audience who have had the tuning out habit.

Here is the premise on which "Channel 7" was built. First Illinois Cable TV planned this operation to set a criteria for other local CATV origination. We planned a true community channel. According to Bill Clancy, president of First Illinois Cable TV, "Channel 7" covers all the interests of its community and limits itself to community activities exclusively. "Springfield's own

Channel 7 is run by Springfield citizens, entirely for Springfield citizens" says Clancy. "It deals entirely with matters of interest to people in and around Springfield. These matters may be civic, political cultural, fraternal, religious, or local sports. Topics covered are timely, ranging from the latest local news to stories concerning the history of Springfield."

"Most of all, Channel 7 has become the local, impartial Town Hall in the home. It helps the CATV subscribers gain a more expansive

(Typical Weekly Program Schedule for "Springfield's Own Channel 7" as advertised by First Illinois)

MONDAY

- 4:00-4:30 Avenues To Adventures (children's stories and film shorts).
- 4:30-4:45 The Doggone Show (variety and humor featuring local pets).
- 4:45-5:00 Trading Post (viewers advertising participation show).
- 5:00-5:30 The Happenings (teen-oriented variety show).
- 5:30-6:00 Springfield Calling ("answer-man" format featuring guest "experts").
- 6:00-6:30 Lincoln Heritage Trail (filmed presentation featuring regional history).
- 6:30-7:00 Interfaith Council (local clergy-produced religious show).
- 7:00-8:00 As You Like It (live variety show with viewer participation).

TUESDAY

- 4:00-4:30 Avenues To Adventures
- 4:30-4:45 The Doggone Show
- 4:45-5:00 Trading Post
- 5:00-5:30 The Happenings
- 5:30-6:00 Springfield Calling
- 6:00-8:00 Springfield City Council Meeting (videotape presentation)

WEDNESDAY

- 4:00-4:30 Avenues To Adventures
- 4:30-4:45 The Doggone Show
- 4:45-5:00 Trading Post
- 5:00-5:30 The Happenings
- 5:30-6:00 Springfield Calling
- 6:00-6:30 Lincoln Library Book Reviews (panel format; discussion of literature).
- 6:30-7:00 Far Horizons (filmed interviews with foreign commerce representatives).
- 7:00-8:00 As You Like It

THURSDAY

- 4:00-4:30 Avenues To Adventures
- 4:30-4:45 The Doggone Show
- 4:45-5:00 Trading Post
- 5:00-5:30 The Happenings
- 5:30-6:00 Springfield Calling
- 6:00-6:30 Illinois Historical Library (visit to state civic institution).
- 6:30-7:00 Springfield Jr. College Music Concert
- 7:00-8:00 As You Like It

FRIDAY

- 4:00-4:30 Avenues To Adventures
- 4:30-4:45 The Doggone Show
- 4:45-5:00 Trading Post
- 5:00-5:30 The Happenings
- 5:30-6:00 Springfield Calling
- 6:00-6:30 Illinois State Museum (visit to civic institution).
- 6:30-7:00 Student Forum (discussion format, produced by Springfield Jr. College Students, with emphasis on religious questions).
- 7:00-8:00 As You Like It

SATURDAY

- 4:00-5:00 Filmed Features
- 5:00-5:15 The Doggone Show
- 5:15-5:30 Trading Post
- 5:30-6:00 Bridge Made Easy (local instructors; videotape presentation).
- 6:00-6:30 Culture Forum (local art, musical, and theatrical groups presenting varied art forms).
- 6:30-7:00 Vachel Lindsay Historical Society (historical and biographical information presented by local institution).
- 7:00-7:30 Illinois—Your State (State of Illinois-produced show on advantages of that state).
- 7:30-8:00 United Cerebral Palsy Film (presentation on contributions of that organization).



When you go out into the field ... be sure to carry our

MODEL FM-1 FIELD STRENGTH METER!

This is undoubtedly the finest, most reliable Field Strength meter ever produced! The FM-1 is fully transistorized, and the circuit is extremely stable through the use of silicon transistors of an industrial grade. Shielding is thorough and complete, certain areas being double, and triple shielded. The Model FM-1 features, among other things, one voltage scale, four db scales, accuracy of ± 1.5 db on all TV Channels, battery powered, and a genuine leather carrying case. TV CABLE SUPPLY CO. carries these and most anything else that you could possibly need. Need proof? Our catalog alone covers over 100 pages . . . and it's FREE. Send for your copy today, and treat yourself to the widest selection, fastest service, and highest quality. See us for all of your CATV needs.

Video  nstrument Corp.



Complete with carrying case and batteries **\$295⁰⁰**

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TV CABLE SUPPLY CO.



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and intimate knowledge of local events, and encourages participation." The record speaks for itself. In less than 30 days of operation, in an area served by three networks, we signed-up over 1000 subscribers in the areas currently wired (*About 20% of the potential*).

As a means of making studio operations effective PR-wise (in a highly trafficked area) the Holiday Inn-East in Springfield was chosen



Drawing total crowds of over 4000 residents, First Illinois netted 400 subscribers from CATV preview showing.

as the First Illinois Cable TV headquarters. Over 4,000 Springfield residents attended the opening presentation in the Holiday Inn-East, and 400 committed immediately for service at time of opening. Either of two, one-hundred-dollar bonuses (a \$100 set of encyclopedias or a \$100 set of records), or a waiver of the \$20 installation price were offered to "charter subscribers" in February. Peculiarly, half accepted books or records, and half waived the installation price. Obviously, the books or records deal was the better offer if it filled a subscriber's need. The book deal was made with the Illustrated World Encyclopedia, one of the leaders in the low-cost encyclopedia market.

CATV suppliers and the local TV service industry supported First Illinois Cable by advertising in a 12-page Sunday supplement to the local paper, and the interest of the Springfield residents was high in viewing 40 sets displayed in the Convention Room of the Holiday Inn. Thirty of these sets were in color, and ten in black and white. The books were shown and given to those who signed. The Mayor of Springfield and the comely wife of the Public Works Commissioner

initiated the ribbon-cutting ceremonies, and buses drove Springfield residents to the Holiday Inn-East where they saw the CATV system in operation and were given an opportunity to subscribe.

The reaction to a public affairs channel with professional equipment and interesting personalities guiding good talk shows, was excellent. The show which created the most interest was the "Doggone Show" run by the local animal warden and the general manager of First Illinois Cable TV, John Stelzer, who has long experience in promotion work, as well as a background as an ETV station performer and operator. So far the belly laughs and excitement have been created by a puppy who sprayed our announcer; a frustrated dog owner who could not make his animal perform on camera; and a cat who scratched Mr. Stelzer, so that he needed first aid on a live show. We have a new test going forward to check the principles of a dog food commercial in which we will be broadcasting an electronically simulated dog whistle to see how many Springfield dogs will go to the



Springfield's Mayor and Public Works Commissioner's pretty wife officially open the Springfield system.

TV set when called. A noble experiment for man's best friend.

The success of Springfield CATV will hopefully increase the initiative of the industry in activating franchises where the "plus services" represent a significant percentage of the entertainment service offered to subscribers. Additional local origination interest and entertainment service has proved to be more important than the ease of tuning, reduction of lightening hazard, appearance, etc., which are the accepted features of CATV. □

BACK DOOR SELLING

What could be termed "high pressure selling" in most other businesses does not always work in cable TV selling programs. Often, what could be termed "back door selling" is the best alternative system promotion. Instead of sending a salesman to the front door, as in most selling jobs, the salesman is sent to the back door. And not in a suit! The salesman is dressed like an installer and uses a soft sell approach.

The program goes something like this. While installing new lines, a salesman is attached to the crew, dressed in the same manner as they are. While the regular crewmen are installing the line or making other taps nearby, he approaches the back door of the house and makes his pitch to the housewife. The pitch is usually done in the manner of, "We are installing a new line through your neighborhood for the convenience of some of your neighbors who have expressed interest in our system, and we thought you might like to get on the cable now also." Of course many questions will follow and the salesman should be able to handle these.

The big selling factor in this type of method is that the housewife doesn't feel like she is being pressured — and at the same time, realizes it is not a gimmick of some type because she can see actual work in the process. Then too, she doesn't feel bad about being seen in her "everyday housedress" because the workman is not "dressed to the hilt."

Some cable firms and many public utilities have used this method for years, and it has worked out most profitably for them. You never see a "salesman" but, the man who comes to install your phone is always ready to install another line, put in a colored phone or even sell you a longer telephone cord. And since it is so handy — well — why not?

So why not give it a try next time you install more plant, and see if it doesn't pay off. □

Foremost In CATV

FORT WORTH

Job-Engineered Towers and Support Equipment

Fort Worth's craftsmen have only one standard — to give you the best towers in CATV. This includes not only the tower, but the entire construction project. Twenty years of tower design and manufacturing experience assure you of a completely reliable product.

More . . . in addition to job-engineered towers, Fort Worth offer a complete array of support equipment, including head-end buildings, microwave domes, elevators, and many other related items. You get maximum performance with a perfect match of equipment and accessories.

With this extra quality, Fort Worth CATV towers cost no more than other towers. There's no reason why you should have to pay extravagant prices for tower equipment and construction services. Let us give you our quotation on your tower project. You'll be interested to know how economical good CATV towers can be.

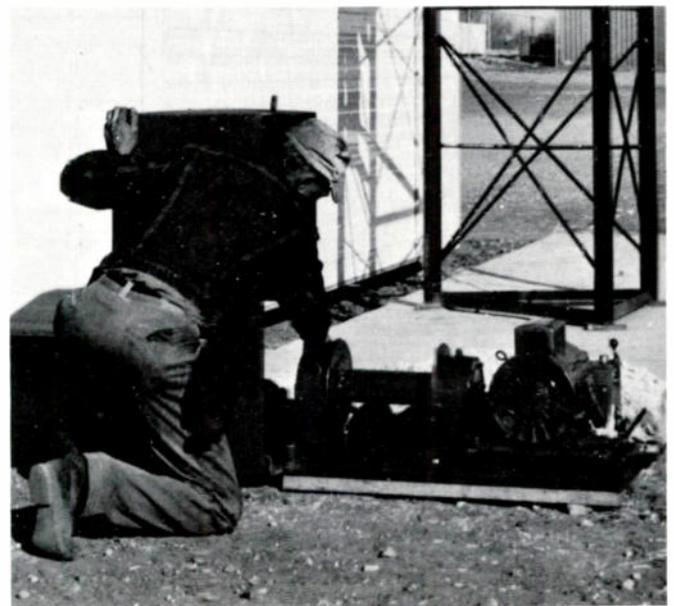
Fort Worth towers — the standard of quality in CATV.

INQUIRE ABOUT OUR PARABOLIC TROPO-SCATTER ANTENNAS
WRITE TODAY FOR OUR NEW BROCHURE

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TV Communications



Pioneer Supplier Talks CATV Language,
Credits Fast Growth To Customer Service . . .

Profile: The Pruzan Company



Three floors of office and warehouse space hold millions of separate items and enough cable of various types to stretch from Seattle to Denver.

A simple, six-word promise — “Don’t worry, it’ll be shipped today” — is made dozens of times daily by Jack and Herb Pruzan, Bill Keilwitz, Lloyd Hannah and 30 others at Pruzan Company. In fact, a recent visit revealed that the

Pruzan organization carries out its “same-day service” motto more than 100 times each day, in the distribution of CATV, communication and power line supplies.

“Wherever cable system operators know the name, they associate

Pruzan with fast, personalized service — even if they do not yet do business with us,” claims vice president Herb Pruzan. “But as much as we advertise, it still takes that first order to prove this to the customer.”

The company’s recent activities feature an increasing amount of CATV counseling — advising customers on construction, technical considerations, financing and CATV promotional activities. These services, which are very helpful to systems of up to 1,000 or so potential customers, are provided at no extra cost.

“We believe that larger systems should employ specialists in these fields, and we will naturally recommend these professionals,” Pruzan said. “Smaller systems sometimes can’t afford these luxuries, however, and we’re in a position to offer help in getting them on the right foot.”

“This brings us back to our basic point,” Herb explained. “About six out of every ten orders come by long-distance telephone. Customers have grown to depend on deliveries as promised. There’s nothing more frustrating to a system operator



From left, Jack Pruzan, president and Herb Pruzan, vice president.



The other name on this cable is Phelps Dodge.

That means something extra.

It seems to us that when you buy a cable for your CATV system you want something more than just a method to carry your signal. How about the need for absolutely reliable cable performance?

As a source, only Phelps Dodge offers a unique combination of years of cable manufacturing experience, an in-depth staff of trained technical people, unfailing service from a country wide network of sales offices and warehouses.

You can easily see that when you've made up your mind about the cable you want, who you buy from becomes very important. That's why, when you choose us you get a certain something extra. That's the comforting assurance that we have the size, strength, capability and willingness to stand in back of our cable from the moment your order is received. We do this simply because we can't afford not to.

One of the cables we sell is Foamflex, an all-purpose jacketed aluminum sheathed cable available in nominal lengths of 4,000 feet at a cost competitive with unjacketed cable. To you, this means one cable usable for all types of installation, aerial, buried, or duct.

Foamflex, the original aluminum sheathed foam dielectric coax offers average VSWR of 1.05 on all channels, uniform electrical properties over a wide range of temperature variations, low loss, no radiation, stable attenuation at high band frequencies, light weight for easy installation, long-term operating life.

For complete details on new Foamflex and listing of our sales service stocking centers across the country, write, wire, TWX or telephone Phelps Dodge Copper Products Corporation, 300 Park Avenue, New York, New York 10022. Telephone (212) 751-3200. TWX (212) 867-7455.

PHELPS DODGE COPPER, ALUMINUM AND ALLOY PRODUCTS 

than to have men standing around ready to work and no materials to do the job. It's our responsibility to see that this doesn't happen."

Pruzan makes a continuing effort to develop and market new products for the cable television industry. These include the galvanized Stand-off Bracket, designed to meet telephone company clearance requirements and the TV-S Grip for deadending RG-59/U.

In total, the company has 30,000 square feet of office and warehouse space here, an equal amount of rented space nearby and is moving into 24,000 square feet in an adjoining building purchased this year. "At our current rate of growth, that should hold us for about four years," Herb calculated. The new building will house CATV division offices, and a new catalog department which was established to supply catalogs and technical data on the more than 7,500 different items in stock.

Since 1947, when Jack Pruzan founded the Seattle-based organization, it has focused on the same principle — that customer-oriented

service is the best tool ever invented.

Much of the firm's success is attributable to the fact that employees, throughout the company, speak CATV language. In many cases, they're called on for long-distance advice. With hundreds of items ordered daily, dozens of product lines to cover



Jack L. Ross, with Pruzan Co. field showroom.

and a variety of customers to serve, the company realized at the start that its people must be as knowledgeable about materials as the man ordering the supplies.

This knowledge and the willingness to serve pays off in speed and customer satisfaction. Supplies, equipment and customers become more than numbers. And the problems of automation that sometimes beset other companies are overcome through personal attention.

Fifteen years in CATV give the company a thorough knowledge of construction requirements, plant design, public utility coordination and system maintenance. Pruzan got into CATV by supplying hardware for the Astoria, Oregon cable system back in 1952. Later they supplied the line materials for Harbor TV in Aberdeen, Washington, at that time the largest cable system in the United States.

Today, CATV activities receive an increasing amount of attention with about 25 percent of company volume in this one area. The remainder is divided among telephone, power line and industrial sales throughout the nation. This figure is up from ten percent of 1965 volume and only four percent

Introducing

CATEL TV MODULATOR

It Can't Talk...

But It Sure Gets The Picture Across

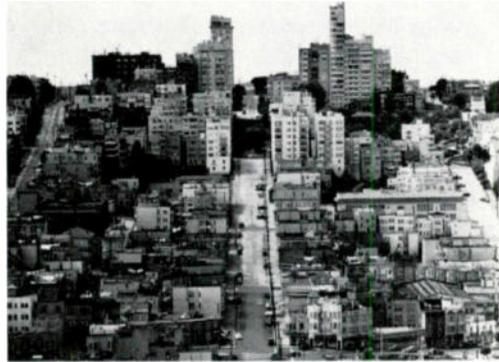


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PRICE \$625.00

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To pre-lash 7,000 feet of coaxial cable in one day along streets like these...



you need two good men and Telsta



It began as a self-imposed dare. We challenged ourselves to string a mile of CATV co-ax and strand to final tension in a single working day using a TELSTA aerial lift, TELSTA job-engineered tools, and TELSTA overhead production-line techniques. San Francisco qualified for this all-TELSTA operation on two counts: Proximity to our plant, and streets supplied with a generous quotient of traffic, hills, short spans, and congested poles.

To set up the test, we gave two thoroughly inexperienced men a limited training in the TELSTA art of cable placement—an art that fuses men, lifts, tools, and techniques into a supremely efficient aerial assembly-line operation on wheels. Then, we turned them loose.

Our fledgling crew more than rose to the occasion. After only a few weeks on the job, they installed over 7,000 feet in one day. (Cutting no corners, observing sound safety practices.) And their daily average approached 5,000 feet!

TELSTA lifts, job-engineered tools, and production-line techniques have been paying dividends of increased productivity to cost-conscious users for more than twelve

years. That's one reason why more than 75% of all aerial lifts in service today for strand and cable placement bear the TELSTA insignia.

Write today for full particulars. And, ask for details on TELSTA's new "Thrift-Lift Purchase Plan"—a budget pleaser that could put you into a high quality aerial lift, mounted on your own chassis, for as little as \$11,500!

For a complete rundown on tools and accessories engineered to cut drilling, hardware fastening, and cable handling times in half, write today for the 1967 Telsta Tool and Accessory Catalog.



A DIVISION OF GENERAL CABLE CORPORATION

1700 Industrial Road, San Carlos, California 94070
Telephone (415) 591-7611



Bill Keilwitz, sales coordinator, checks the cable stock board. Each tag represents a reel of cable in stock.

of 1964 sales, indicating a positive drive by the company for greater CATV involvement.

During the past year, a separate CATV division, under the direction of Lloyd Hannah, has been set up. Hannah, who has had considerable experience in CATV, has expanded the inventory to include electronic components and coaxial cables,

complementing the complete stock of pole line hardware, tools and general supply materials.

With 80 percent of its customers located outside of Washington state, Pruzan Company doesn't rely solely on its Seattle distribution center. Pole line hardware, for example, is shipped from a dozen different warehouses strategically located throughout the country. "The key to a successful drop-ship program is the daily telephone contact we maintain with our factory sources and the knowledge we have of where the materials are located," Herb said.

Pruzan has long been an advocate of strong CATV safety standards. "CATV systems have an even greater responsibility than the utility companies to develop a strong safety program and a near-perfect safety record," Jack Pruzan said. "It's essential for both the security of their own men, and their image with the public." He noted that recent articles in *TV Communications* have pinpointed safety tips, and the NCTA has adopted a strong program of safety education.



Lloyd Hannah manages new CATV Division.

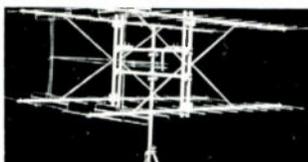
One of Pruzan's newest innovations, and a most successful idea (TVC, September, 1966) has been the Field Showroom Van, now operating in Seattle and Sacramento, and soon to start in the Rocky Mountain area. Jack Ross, the Seattle "man with the van and a plan", like his counterpart, Gene Wright in Sacramento, has a wide background in the line construction field. Both use their knowledge to good advantage in translating problems into the materials customers need.

"These fellows are the key to success of our Van program," Herb said, "not the idea itself. They dig in. What they don't know, they find out, and relay back to the customer immediately."

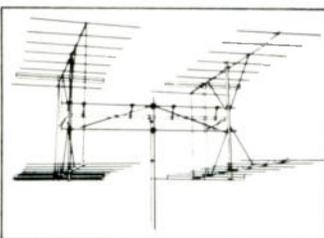
In a typical day, Ross and Wright will call on several customers, meet with three or four groups of linemen, get acquainted with a new CATV franchise holder and take orders for everything from a lineman's belt to a truckload of cable.

For the Pruzan Company, the new vans are just another part of a continuing program of service that means more than speed alone. They typify the way forward-looking suppliers are meeting the needs of CATV system operators in many locations.

Service to customers will obviously continue to be a way of life with the Pruzan Company — an aggressive, imaginative outfit that is tuned to the accelerating pulse of the cable television business. □



Model No. SHD 48-4 Channels 7 to 13



Model No. SHD 32-4 Channels 2 to 6

These antennas have been improved with sleeve strengthened SOLID BAR elements, larger diameter brooms, heavier reinforced braces, and improvement in aluminum alloys.



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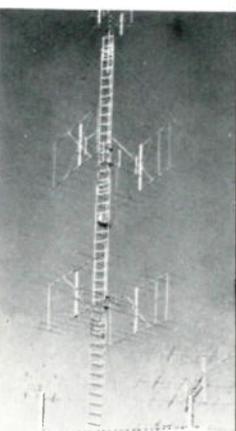
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and extreme
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requirements.

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The Sitco Models SHD 32-4 and SHD 48-4 Quad Mount Antenna Arrays are designed to produce high gain, high front-to-back ratio and large aperture to weak signals. A completely balanced system which reduces noise pick-up and greatly improves the signal-to-noise ratio.



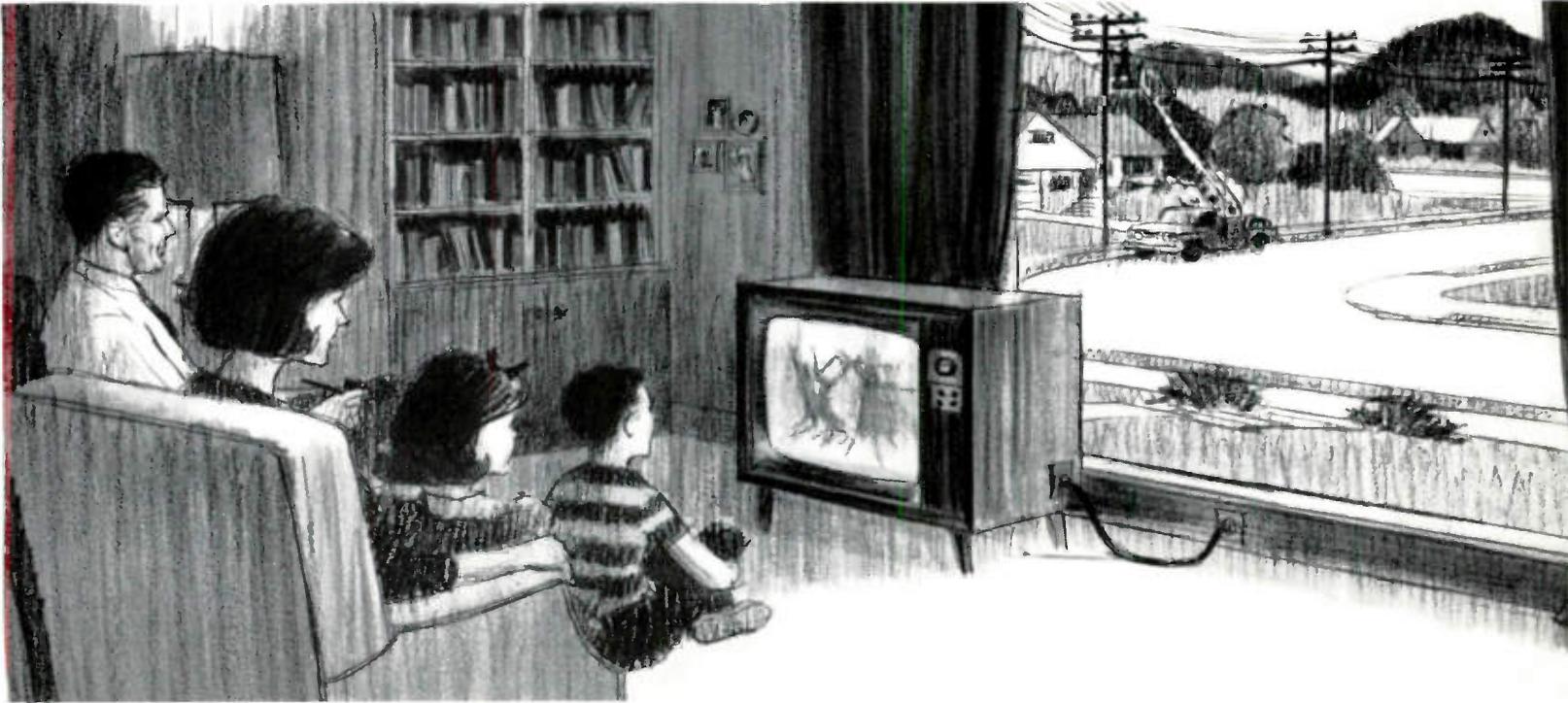
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SITCO *Antennas*

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This is CATV Show Biz

...or how to make your system a box-office hit



Cable: Available in seamless lengths up to 1/2 mile

Timatch[®] perfect match connectors

Putting a good show on the home screens of your subscribers is one part of CATV show business. Having the equipment to back up your programming—with clear, dependable pictures that don't ghost, fade or give up altogether—is another.

Times 30db CATV cable—and instantly-installed matching connectors—delivers award-winning performance to your subscribers' homes year after year. It's the surest way to keep them happy and put profits in your system's picture.

Times cable is trouble-free because of the way it's made:

in continuous seamless lengths up to 1/2 mile. This means fewer splices, fewer trouble points, less maintenance . . . and less labor cost. And because it's seamless, it's water and vaporproof . . . won't stop the signal short of target. All in all, you get improved electrical performance from Times cable and matching Timatch connectors. Long after so-called economy cable has been replaced, Times cable will still be a top performer, even while you're upgrading your system.

To take advantage of this direct way to assure your system's pay-out, contact Times or your local Jerrold sales engineer.

TIMES
CATV CABLE & CONNECTORS



Here are 4 prime reasons why
COMMUNICATION SYSTEMS CORP.
is your best choice for
CATV turnkey construction:

1. Engineering

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2. Construction

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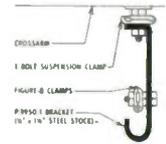


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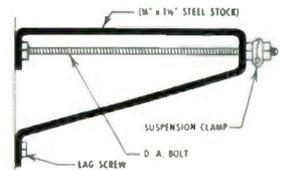


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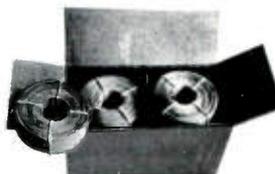
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Microwave Passive Repeaters

By Ray D. Thrower

Field Services Engineer, Microflect Co., Inc.

Today, passive repeaters are being used in more microwave systems than ever before. Whether the system is common carrier, Community Antenna Relay Service, industrial, government or Educational Television, if it uses microwave, chances are good that a passive repeater will be installed.

The new emphasis on use of passive repeaters in microwave systems is due to one major factor, economics. By placing a passive repeater on a mountain top and the active repeater down near existing access roads and existing power, the system operator can forget about the costs of access roads which may reach as high as \$30,000 per mile in difficult terrain. He can forget about running several miles of power line up a mountain top and he doesn't have to purchase specialized snow vehicles to get to the mountain top in the winter when access roads aren't much good anyway. And, of course, if the access road, power line and snow vehicle aren't a part of the installed and operational inventory, they don't have to be maintained.

Figuring the costs of maintenance over a ten year period, individual situations may justify relocation of an existing facility, and installation of a passive repeater, to make the active station more accessible and cut down on "running" maintenance costs. System engineers who orient themselves to the technology of passive repeaters find they are able to do a better job for their employer or customer - and at less cost.

Engineering the right size passive repeater is not difficult. (Microflect's Passive Repeater Engineering Manual #161 details the technique used.) To determine the correct size passive repeater, the following information should be available to the engineer.

- (1) Transmitter power output.
- (2) Frequency of operation. (General band is okay)
- (3) Required received signal input level or required fade margin.
- (4) Length of path from passive repeater location to distant rf terminal.
- (5) Length of path from passive repeater location to near rf terminal.
- (6) Approximate length and type of waveguide at both rf terminals.
- (7) Whether or not radio equipment will use hybrids and duplexers.
- (8) Horizontal included angle (the projection, in a horizontal plane, of the true angle between the incoming

and reflected beams, referenced from the location of the passive repeater).

(9) Whether radomes will be used on parabolas.

Figure 1 shows a typical calculation for a passive repeater path using the Microflect Path Data Calculation Sheet. Calculations for individual paths will vary, but generally, using the right size parabolas, passive repeater and spacing, signal levels to accommodate a full 960 voice channel or video communication system are available. (Less critical signal levels can be provided by smaller system components.)

After the size of a passive repeater has been selected, including the required ground clearance for the particular site involved, the next problem is to determine the cost of installation of the passive. Installation costs vary widely depending on several factors, among

MICROWAVE PATH DATA CALCULATION SHEET									
CUSTOMER Common Carrier Video Systems/TV-Communications									
PROJECT NO.	FREQUENCY		6.0 GHz						
SYSTEM	Typical Passive Repeater		EQUIPMENT Industry Standard						
LOADING	dbm0 (1		CHANNEL# OF Video)						
1 SITE	A	B	C						
2 LATITUDE	-	-	-						
3 LONGITUDE	-	-	-						
4 ELEVATION	Ft.	-	-						
5 TOWER HEIGHT	Ft.	30	8	30					
6 TOWER TYPE	S.S.	S.S.	S.S.						
7 AZIMUTH FROM TRUE NORTH.		180°	5°						
8 PATH LENGTH	Mi.	30.0	0.25						
9 PATH ATTENUATION	dB	141.7	Near Field						
10 RIGID WAVEGUIDE	1 Ft.	50	-	50					
11 FLEXIBLE WAVEGUIDE	Ft.	5	-	5					
12 WAVEGUIDE LOSS	dB	1.4	-	1.4					
13 CONNECTOR LOSS	dB	0.5	-	0.5					
14 CIRCULATOR OR HYBRID LOSS	dB	3.5	-	1.2					
15 RADOME LOSS, TYPE *	dB	0.7H	-	-					
16 NEAR FIELD LOSS	dB	-	-	-					
17 CLOSE COUPLING LOSS (DOUBLE PASS.)	dB	-	-	-					
18 TOTAL FIXED LOSSES	dB	6.1	-	3.1					
19 TOTAL LOSSES	dB			150.9					
20 PARABOLA HEIGHT	Ft.	30	-	30					
21 PARABOLA DIAMETER	2 Ft.	10	-	6					
22 MICROFLECTOR HEIGHT	Ft.	-	2	5					
23 MICROFLECTOR SIZE, TYPE	Ft.	-	20	X24 -8					
24 PARABOLA-MICROFLECTOR SEP.	Ft.	-	-	-					
25 NEAR FIELD GAIN	dB	-	-	+4.0					
26 ANTENNA SYSTEM GAIN	dB	43.0	-	38.7					
27 TOTAL GAINS	dB			85.7					
28 NET PATH LOSS	dB			65.2					
29 TRANSMITTER POWER	dbm			+30.0					
30 MED. RECEIVED POWER (± 2 dB)	dbm			-35.2					
31 RECEIVER NOISE THRESHOLD	dbm			-87.0					
32 THEORETICAL RF C/N RATIO	dB			51.8					
33 FM IMP. THRESHOLD	dbm			-77.0					
34 FADE MARGIN (To FM Imp.Thresh.)	dB			41.8					
35 RELIABILITY	No SPACING ?	%		99.99+					
36 POLARIZATION				As Required					
37 PROFILE NUMBER				-					
1. Waveguide is Andrew EWP-59.									
2. Parabolas are Andrew PL10A-59 and PL6A-59.									

Figure 1

which are: site accessibility, site topography, soil conditions, site elevation and proximity of the site to a source of ready-mix concrete. Microreflect passive repeaters lend themselves well to helicopter installations where there is difficult access or inability to obtain a right of way to the selected passive repeater site. A standard procedure which has worked well to assure proper passive repeater installation involves the following steps:

First, arrange to have the passive repeater site surveyed, and include in the survey report a topographic map of the passive site, showing contour intervals of two feet. Include on the survey report the path bearings to both antennas. These path bearings should show the vertical angles of both paths as well

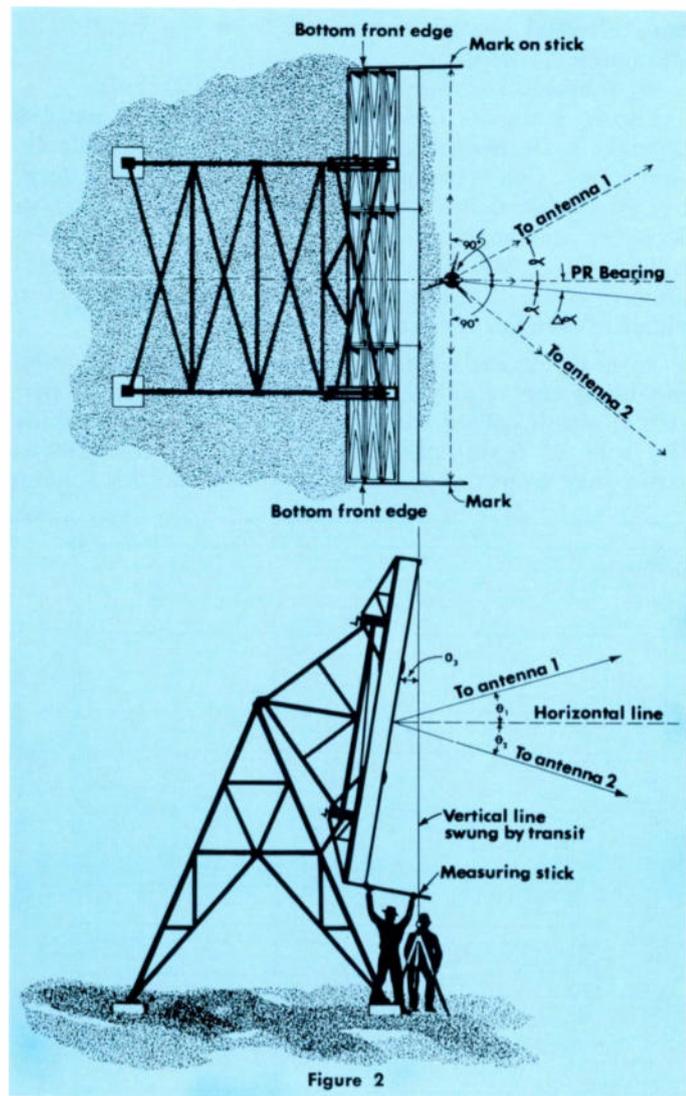
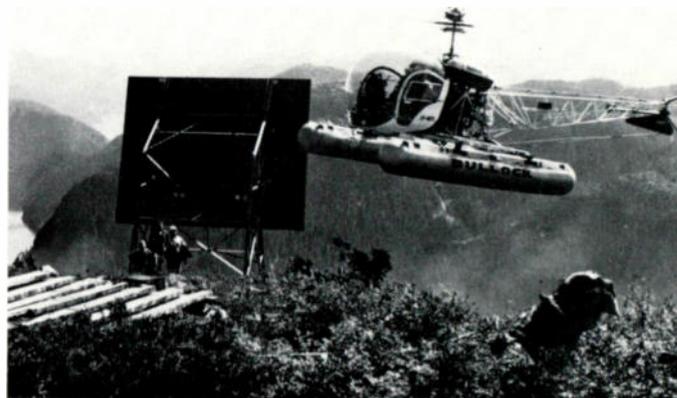


Figure 2

Alignment of the passive repeater. All the angles shown must be measured and calculated prior to ordering the passive repeater. They must be available to the construction and alignment crew for installation of the passive repeater. Alignment is done by setting up a transit in front of the passive repeater. Set the transit on the bisector of the horizontal angle and apply the correction factor, $\frac{1}{2} \Delta \alpha$. Rotate the transit 90° . This makes the transit sitting now parallel with the face of the passive repeater. Adjust the horizontal adjusting mechanism until an equal distance is measured on the measuring sticks on each side of the passive repeater. The vertical adjustment is then made by hanging a plumb line over the face of the passive repeater and measuring the distance from the lower edge of the passive to the plumb line. The vertical adjusting mechanism may then be operated to provide the proper face angle. Standard trigonometry calculations provide the distance from the bottom edge of the face of the passive repeater that correlates to the required face angle.



Final pickup! A 24 x 30 passive repeater has been completed and aligned. The helicopter is making one of its last runs to pick up the construction crew from improvised landing pad on remote mountain top. Imagine trying to get to this site to replace a blown fuse in an active station during the winter!

as their bearings relative to True North. A vicinity map showing access roads is also helpful. All of this information can be shown on one drawing.

Upon receipt of this information, the passive repeater supplier is able to prepare a proposal for the installation of foundations and the erection of the passive repeater. The pertinent information shown on the customer-furnished survey report will be incorporated on foundation layout drawings for the particular size reflector involved. These drawings are then forwarded to the customer for his approval. The customer may elect to arrange for the installation of the foundations by a local contractor, and in this case the foundation drawings supplied can be used to obtain prices.

It is extremely important that the passive repeater bearing be accurately staked at the site and that the contractor installing the foundations locate each pier accurately and in strict accordance with the foundation drawings. In this connection, the passive repeater bearing should be staked by the surveyor, with the stakes placed in such a location so as not to be disturbed during the construction.

After the foundations have been installed, the actual erection of the passive repeater is a fairly simple operation and requires only standard wrenches and a hand operated winch. It is most important to study the drawings that are shipped with the passive repeater. Use good, safe steel erection practices and you will have no difficulty.

Before starting the steel assembly, carefully check anchor bolt layout to insure that the top of each footing is level with the other footings and that the bolt spacing is correct according to the foundation drawing. This is very important since the internal bracing in the steel structure will not fit properly if anchor bolt footings are not level and correctly spaced.

Shoe bases are installed first by placing them over anchor bolts and tightening the nuts. Shoe inserts are then installed using only the outside bolts at this time. These bolts act as hinge pins when the sides of the structure are ready to rotate to the vertical position at which time the other bolts are to be installed.

The steel is assembled on the ground. You have a choice of erection methods, depending on manpower and equipment available. If you have a truck with a power winch, you may want to assemble the side frames on the ground. This way, you can use a gin pole to winch the entire assembly up to the vertical position. If this is done it will be necessary to place a timber diagonally under the steel structure and tie the winch line to the timber to prevent bending the steel. If a winch is not available, assembly only the basic triangle of the side structure. Leave it light enough so the crew can push it up by hand. Then the second set of bolts are positioned in the shoe inserts to hold the sides vertical while the internal bracing is installed.

After all the steel is in place and the panel lifting outriggers are installed, the panels are ready to lift into position. First, the bottom row of panels are assembled on the ground in front of the structure, and are lifted into position and secured. The passive repeater's turnbuckles are adjusted to align this row of panels with the front channel to insure the next row will be set in the proper position. Then the next set of panels are assembled, lifted and secured, until all panel rows are complete. After assembly is completed, check all nuts tight and remove panel lifting outriggers.

Passive Repeater Alignment

After assembly the passive repeater is ready for alignment. Our company's passive repeaters are supplied with the designed vertical face angle built into the structure of the passive repeater, so that when the passive is erected on the site in accordance with the foundation drawings and the adjusting mechanism set to place the face of the passive repeater parallel with the supporting structure steel, this position is theoretically perfect. In actual practice, slight errors in the original path survey or in the actual placement of the foundations will necessitate minor alignment after the radio equipment is energized.

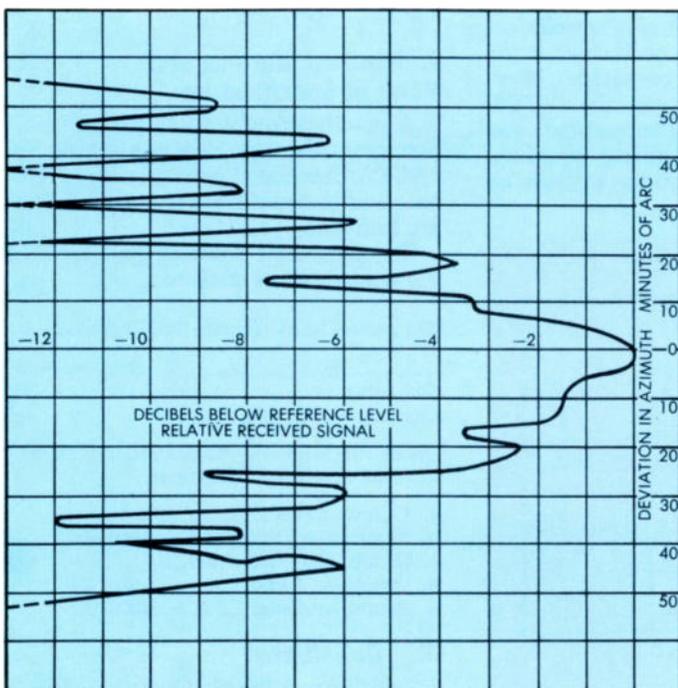


Figure 3 Horizontal Reflection Pattern of 20' x 24' Passive Repeater

In nearly all cases, a measurable signal will be received when the radio equipment is turned on and all that remains is to peak the signal by moving the face of the reflector both horizontally and vertically to insure that its final setting is on the major lobe in both directions. The mechanical alignment of the passive repeater is fully explained in the drawings supplied by the manufacturer with each passive, and involves the use of only standard wrenches. It can be accomplished by one man with the help of another man operating a portable two-way radio to maintain communications with one end of the path. *Extreme care* should be taken in adjusting the passive to insure that the horizontal and vertical positions are actually on the *major lobe* and not on one of the minor lobes. The face of the passive should be moved very slowly so that changes in signal level can be detected and the major and minor lobes *clearly defined*.

Optimizing the path is not complete until the antennas are adjusted for maximum gain. The antenna can be set to look directly at the passive by sighting along a square, one leg of which is held against the outside rim of the antenna. This must be done for both the vertical and horizontal axes. The antenna feed horn should be rotated slightly to maximum signal point. This will assure that the feeds are co-polarized.

A well-built, properly installed passive repeater will give many years of trouble free service. One of the first passive repeaters installed by Microflect eleven years ago in Montana is still in operation with negligible maintenance having been performed. It is a good idea to go to the site on an annual basis and check it over for soil erosion around the foundations, vegetation growth that might cause the path to become obstructed, and vandalism. Once installed, the passive repeater will probably be forgotten except by the radio maintenance man who used to have to go up the snow-bound mountain to replace a blown fuse! □

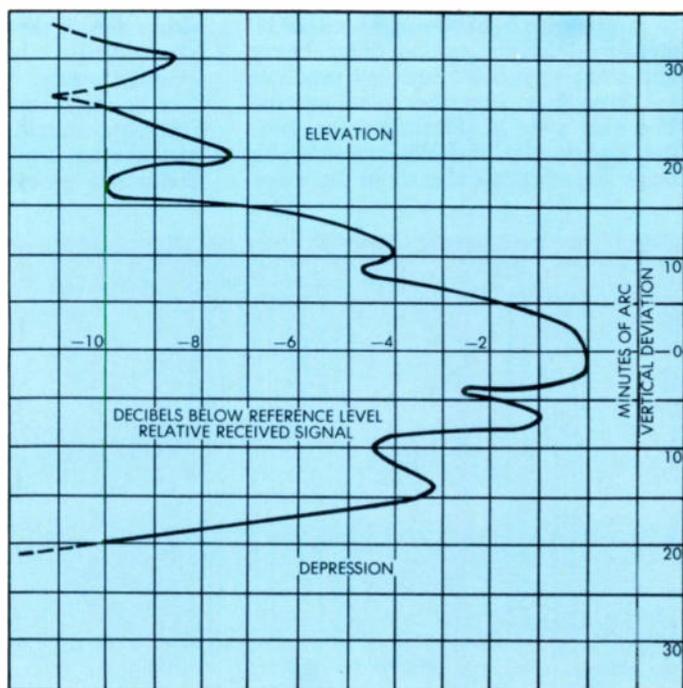


Figure 4 Vertical Reflection Pattern of 20' x 24' Passive Repeater

Amplifier Distortion¹ Characteristics

I. Comment

This amendment supercedes and replaces the Proposed NCTA Standard on Output Capability of CATV Amplifiers published by NCTA October 28, 1966. In accordance with the directive of the NCTA Board of Directors, a number of valuable comments on the Proposed Standard have been received and evaluated in depth by the Standards Committee. Several members of the Engineering Sub-committee have reported on actual experience with the application of the Proposed Standard. It was the unanimous judgment of the committee members present that major substantive changes in the Proposed Standard would be required.

In addition to a need to clarify certain of the language and procedures, two basic problems appeared to exist with the Standard as originally proposed.

First, serious problems of definition and measurement result from the failure of the originally proposed Standard to distinguish between third order cross-modulation, second order beats, and other spurious frequency products resulting from amplifier non-linearity. The wide band (4 MHz) detector specified necessarily includes considerable noise and spurious signals in the wave-

form to be observed on the oscilloscope. Instead of reading a well defined trace, then, it has been found necessary to make a judgment of the "average" value of a trace on which is superimposed a jumble of rapidly moving periodic waveforms and random noise. If a meter were to be used to determine this value, its ballistic characteristics would become important. Furthermore, the reference in the standard to an envelope detector in the measurement procedure is confusing with regard to the possible effect of detector characteristic on the standard specification.

Second, the proposed Output Capability rating for a single amplifier at -57 dB combined distortion can lead to significantly incorrect extrapolations in a practical case where several such amplifiers are operated in cascade. The Standard could be safely extrapolated only for amplifiers whose distortion level is proportional to the square of the output level. There are enough known examples of departures, with serious enough consequences, to require reconsideration of this method of specifying an amplifier's characteristics. After lengthy study, the Committee determined unanimously that the NCTA Standard should describe methods for measuring and specifying amplifier distortion, under conditions as close as

practicable to actual recommended operating practices . . .

The amended NCTA Standard, therefore, is entitled CATV Amplifier Distortion Characteristics, and no further attempt will be made to define Output Capability, a term which the Committee believes should be abandoned as obsolete.

The Committee wishes to call special attention to two definitions in this Standard for terms frequently used loosely and interchangeably. It is hoped that the distinction which has been drawn between "Tilt" and "Slope" will help reduce the considerable confusion which has existed in specifications.

Tilt refers to the actual signal levels from channel to channel.

Slope, on the other hand, refers to amplifier gain from channel to channel. Cable attenuation can be considered to be "negative gain." Thus trunk amplifiers will normally have positive slope equal in magnitude to the negative slope of the associated cable span.

II. Standard Wording and Form of Specification

A specification of Distortion Characteristics may be designated as an "NCTA Standard" only provided *all* of the conditions set forth in this Standard are fulfilled.

The Standard wording and form of the specification shall be:

Distortion Characteristics (NCTA Standard):

_____ % (_____ dB) cross-modulation ratio, and _____ % (_____ dB) spurious signal ratio.

Under the following manufacturer's recommended operating conditions:

- Output Level: _____ dBmV.
- Number of standard TV channels: _____.
- Output Tilt (describe).
- Amplifier Slope: _____ dB.
- Amplifier Gain: _____ dB.

III. Definitions

(A) *Output Level*: Output Level is the ratio expressed in decibels of the

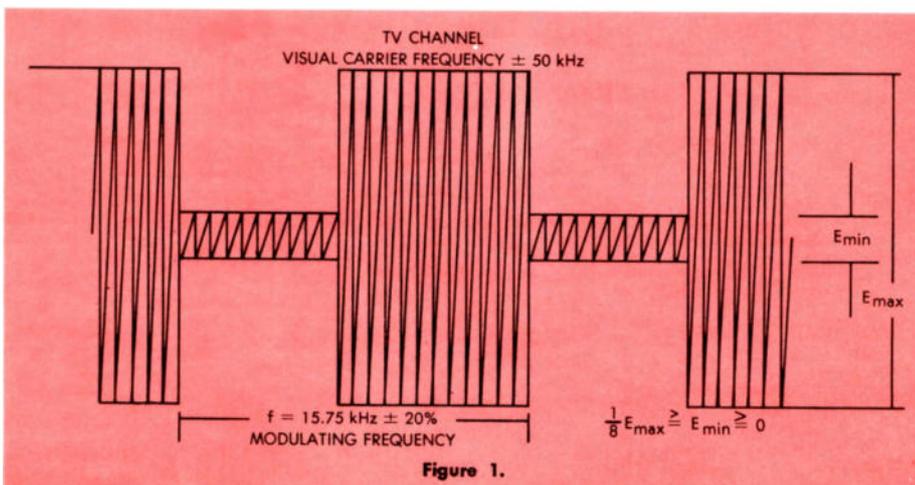
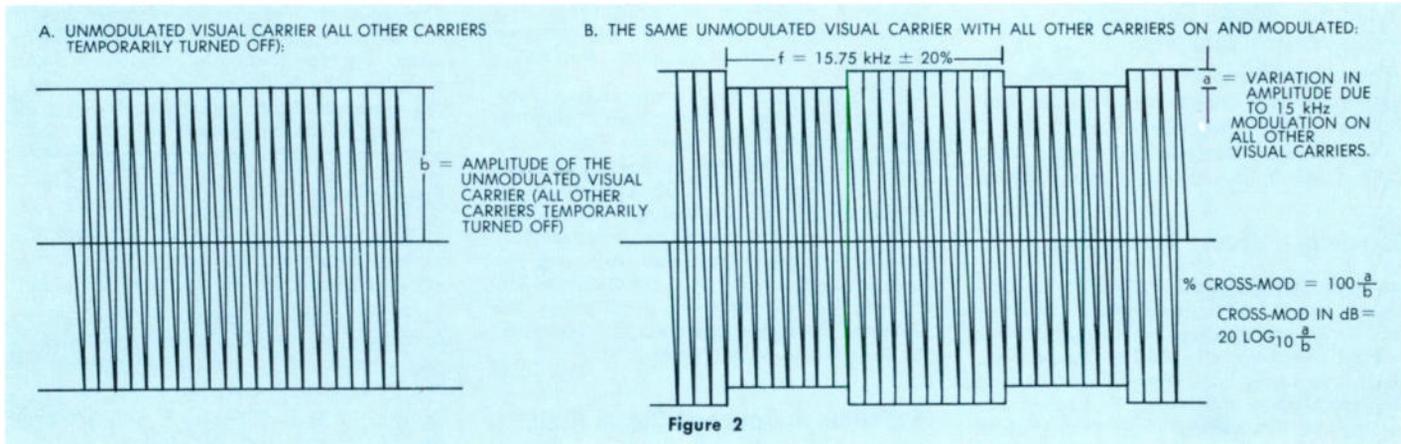


Figure 1.



peak envelope power $\frac{2}{3}$ to that power represented by one millivolt rms across 75 ohms. The unit of output level is designated dBmV. Unless otherwise specifically indicated, Output Level is assumed to be stated for the highest frequency visual carrier.

For 75 ohms impedance, the Output Level can be expressed as: Output Level = $20 \log_{10}$ (rms output voltage at peak modulation, in millivolts)

(B) *Distortion*: Two forms of distortion are recognized as acting to limit the useful output of a CATV amplifier; they are defined as follows:

(1) *Cross-Modulation*: The transfer of modulation from one channel to another.

(2) *Spurious Signals*: Signals occurring within any of the test channels at frequencies differing from frequencies of the test carriers.

(C) *Output Tilt*: The Output Tilt (condition c) is the variation in recommended output level from channel to channel. It shall be fully described in words or by a curve.

(D) *Gain*: The gain of the amplifier (condition d) shall be the operating gain in dB for the highest frequency visual carrier.

(E) *Slope*: The slope of the amplifier (condition e) is the difference in dB in the gain at the highest and lowest frequency visual carrier.

(F) *Input and Output Terminals*: The input and output terminals designated for the NCTA Standard specification shall be the cable terminal fittings; and all internal pads, equalizers, and bridging couplers, shall be included as part of the amplifier in accordance with the manufacturer's recommendation for normal operation.

IV. Method of Measurement

(A) *Source and Load Impedance*: All measurements shall be made with test equipment presenting a source and load impedance having a return loss of 20 dB or more (VSWR of 1.22 or less) based on 75.0 ohms.

(B) *Carrier Frequencies*: 1. For all standard TV channels, the frequency of visual carriers used in the test shall be

within 50 KHz of the values assigned by the FCC. $\frac{3}{4}$ 2. If non-standard TV channels are employed in the test, the frequencies of the visual carriers shall be within 50 KHz of the values specified by the manufacturer (see paragraph IV, C (3) below). 3. Any pilot signals which are necessary for the operation of the amplifier as installed in the manufacturer's recommended system shall be provided during the test with a level and modulation (if any) as specified by that manufacturer. 4. Aural and other FM carriers and the chrominance sub-carrier frequency may be omitted during the test. $\frac{5}{7}$

(C) *TV Channels*: 1. The total number of TV channels (condition b) used in the test shall be specified. 2. Amplifiers designed for *all band* VHF (Channels 2 through 13) shall be tested with all 12 channels. For amplifiers designed for fewer than 12 standard VHF channels, the number and designation of channels used in the test shall be clearly specified. 3. Amplifiers designed for non-standard TV channels shall be tested with the visual carrier frequencies of all those channels, and the frequency of each such carrier shall be clearly identified in the specification.

(D) *Modulation*: All visual carriers when modulated shall be modulated synchronously, by a symmetrical square wave having a frequency of 15.75 kHz $\pm 20\%$. The depth of modulation shall be such that the voltage at the modulation maximum shall be at least 8 times that at the modulation minimum (see Figure 1). The term "synchronously modulated" means that all carriers reach their modulation maxima at the same time.

(E) *Cross Modulation Measurement*: (See Appendix I) 1. The cross-modulation ratio shall be measured separately for each visual carrier, with modulation removed from the particular carrier under test, and all other carriers modulated in accordance with Paragraph IV D of this Standard. Peak levels of all carriers shall be constant throughout the tests as specified in Paragraph II, whether modulated or unmodulated.

2. The cross-modulation ratio for a particular channel is determined by measuring the ratio $\frac{a}{b}$, as indicated in Figure 2. (Several methods of measuring "a" are suggested in the appendix). The ratio may be expressed in percent or dB. $\frac{6}{7}$ 3. The cross-modulation ratio for the amplifier is the ratio measured for the channel having the highest ratio.

(F) *Spurious Signal Measurement*: (See Appendix II) 1. Spurious Signal ratios shall be measured within the pass band of each visual carrier, with all carriers unmodulated. Peak levels of all carriers shall be constant throughout the tests as specified in Paragraph II, whether modulated or unmodulated. 2. The spurious signal ratio for a particular channel is the ratio of the amplitude of the strongest spurious signal, within the limits of 1 MHz below and 4.2 MHz above the visual carrier frequency, to the amplitude of that visual carrier. The ratio may be expressed in percent or dB. $\frac{6}{7}$ 3. The spurious signal ratio for the amplifier is the ratio for the channel having the highest ratio.

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Appendix - Notes Regarding Measurement Technique

The requirements of this Standard will be met by any measuring method that indicates the quantities called for in Section IV. The following notes may be helpful in determining the method.

Appendix I. Cross - Modulation

(a) Although the Standard allows for various depths of modulation, greatest sensitivity, and greatest ease of adjustment will be achieved with 100% modulation, the signal being completely cut off during the modulation minimum. A further advantage of this mode of operation (100% square-wave modulation) is that modulated oscillators may be used since neither frequency modulation nor modulation non-linearity gives trouble. It also allows simple calibration (see below).

(b) An approximate ratio of a/b may be determined by tuning to the unmodulated visual carrier a receiver with a bandwidth of 400 kHz or more (to preserve the waveform of the cross-modulation) and observing the demodulated output on an oscilloscope. The ratio of the peak-to-peak 15 kHz square wave output from the detector, to the DC output is approximately equal to a/b. Correction for detector linearity may be applied when greatest accuracy is desired. When other spurious variations are generated by the amplifier (such as hum, noise, or beats) their effect must be cancelled out in making this measurement either visually or with suitable filters.

(c) The ratio of a/b may be determined with greatly increased accuracy and sensitivity by tuning to the unmodulated visual carrier a receiver with a bandwidth of 31.5 kHz or more (to pass the carrier and first pair of sidebands) and measuring the 15.75 kHz component in the demodulated output with an audio analyzer. With an audio analyzer the 100% (0 dB) calibration point can be determined by temporarily modulating the receiver carrier 100%, adjusting level if necessary so that

its peak amplitude is unchanged, and determining the reading of the analyzer when tuned to the modulation frequency.

(d) Serious errors may be introduced if the receiving detector suffers from "negative peak clipping". This may be checked by observing the detector output on a scope with a bandwidth of 300 kHz or more. If the voltage fall (following the transition from maximum carrier to zero) is decidedly slower than the voltage rise (following the opposite transition) this condition exists. It may be corrected by redesigning the detector for faster operation, for example, by lowering its load resistor.

Appendix II. Spurious Signal Ratio

(a) When a suitable spectrum analyzer is available the spurious signal ratio can be determined by measuring the carrier and spurious signal amplitudes in each channel. With normal tolerances on visual carrier frequencies most spurious signals will fall very close to the carrier frequencies, requiring a high order of selectivity in the analyzer. This requirement can be relaxed by staggering the visual carrier frequencies (within the 50 kHz tolerance).

(b) Alternatively the spurious signal ratio can be determined by tuning to each carrier a receiver with full TV pass-band (from -1 to +4.2 MHz relative to the visual carrier frequency). The output of the detector or the video amplifier following the detector is then tested with a wave analyzer and the amplitudes of all spurious signals between 0 and 4.2 MHz are recorded (excluding fundamental and harmonics of .60 Hz.)

(c) When the second method is used the amplitudes of the spurious signals must be related to the amplitude of the visual carrier. A method of accomplishing this is to introduce at the receiver input an unmodulated signal simultaneously with the visual carrier. The frequency of the unmodulated signal is made to differ from that of the visual carrier by a few kHz, and its amplitude adjusted to some known level lower than that of the visual carrier.

The resulting beat component at the detector output provides an amplitude reference. If, for example, the intraduced signal is set 10 dB below the visual carrier, the wave analyzer should read -10 dB when tuned to the beat.

Footnotes

1. The term includes only non-linear distortion products, excluding such other undesired components as hum, noise etc.
2. Peak envelope power is the power developed by an unmodulated carrier having a peak amplitude equal to that of the modulated carrier.
3. Sec. 73.603 of Part 73, Subpart E of the FCC Rules and Regulations specifies the frequency band allocation of standard TV channels. Sec. 73.682 (a) 2 specifies the visual carrier frequency shall be nominally 1.25 MHz above the lower boundary of the channel.
4. The frequency of all the visual carriers used for the test could conceivably be locked to the frequency of a common master oscillator in such a way that the frequency differences between all high-band carriers, for example, were precisely equal. Such a procedure would cause the frequencies of many of the spurious signals to fall precisely on the visual carrier frequencies so that the spurious signal amplitudes could not be measured. This procedure is specifically not allowed under this Standard.
5. This assumes normal CATV practice in which these carriers are at least 15 dB below the nearest visual carriers.
6. It is noted that these measured distortion ratios have not as yet been adequately correlated with the subjective evaluation of picture quality degradation. Thus, in addition to these ratios, the objectionability of cross-modulation is also related to the coherence and phase relations of synchronizing signals; and the objectionability of spurious signals is also related to the video frequency difference between the spurious signal and the desired visual carrier. □



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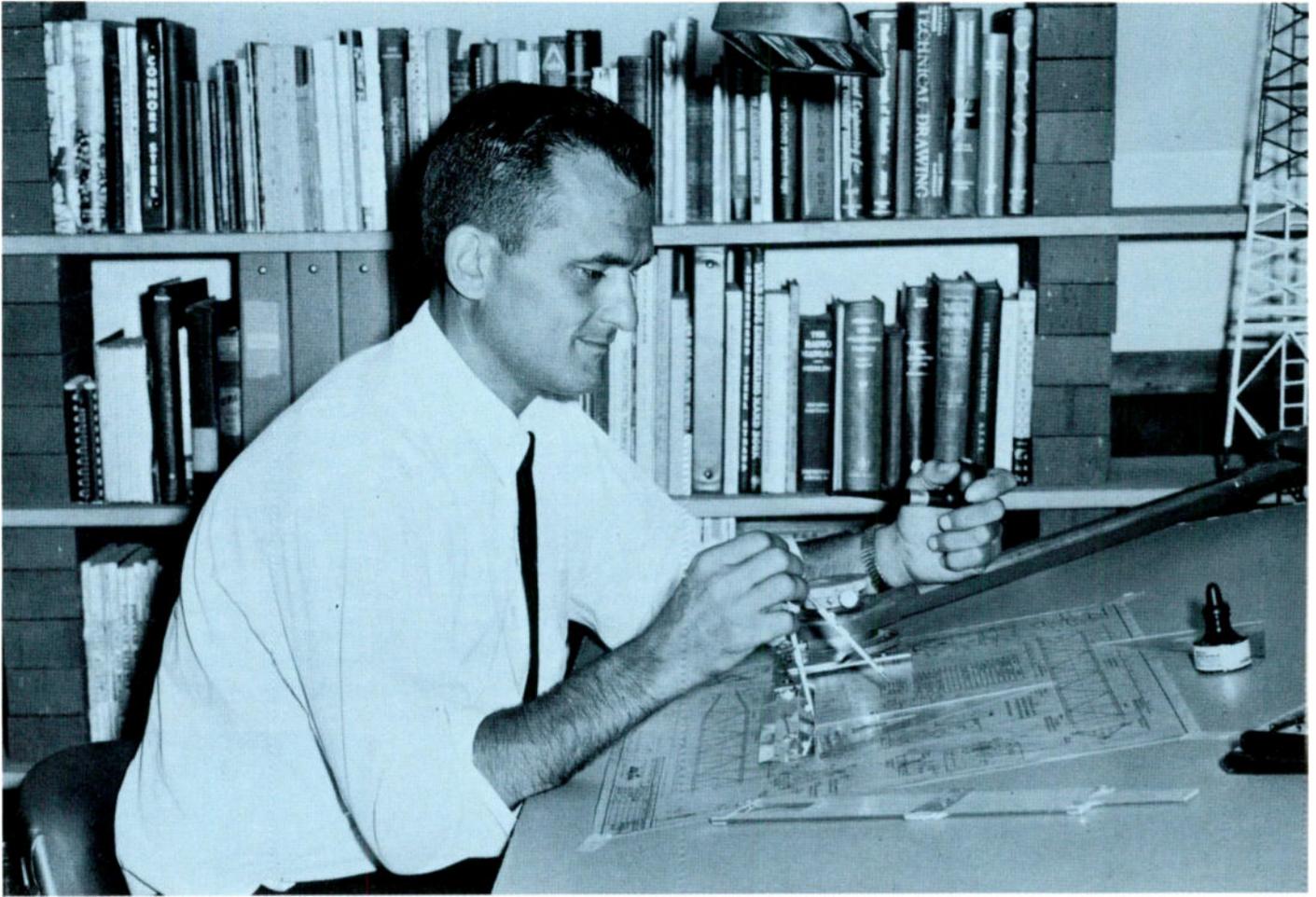
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PRODUCT REVIEW

NEW COMPONENTS FOR CABLE TELEVISION SYSTEMS

COLOR VIDEOTAPE RECORDERS

Two new compact color videotape recorders have been placed on the market by Ampex Corporation. The Ampex model 7500-C for closed circuit use is available for immediate delivery at \$4,495. The higher performance model 7800, with advanced features for production of finished industrial and educational programs, will be available in September for \$7,995. The new recorders use the 1-inch tape, 9.6 inches-per-second tape speed, 1,000 ips writing speed standard of presently available Ampex VR-6000 and VR-7000 closed circuit recorders. Both VR-7500 models include several new features not available on the VR-7000, including variable slow motion in playback, a second audio or cue track and four-minute fast forward operation. A new color processor accessory, the Model AC-924, accepts the closed circuit color signal from the VR-7800 and modifies it to produce NTSC color that meets FCC requirements. The AC-924 is priced at \$1,595. For further information contact Ampex Corporation, 2201 Lunt Avenue, Elk Grove Village, Illinois 60007.

MULTI-TAPOFF BY BENCO

Benco Television Corporation has added Multi-tapoff series to its line of CATV equipment. The directional in-line units are available in two or four tapoff configuration, with a choice of 6 tap attenuations. Both models 2DTM and 4DTM will handle up to 10 amps AC. Standard 412-CH-75 connectors are supplied for use with .412 aluminum sheathed cable. Tap outputs use type "F" chassis connectors. For further details contact Benco Television Corporation, 724 Bugbee St., Jacksonville, Florida 32207.

TELE-SIGNAL PRODUCTS

Tele-Signal Electronic Ltd. has announced availability of a low noise pre-amp. The pre-amp is remote powered and is packaged for mast mounting. Tele-Signal, at the same time, has announced the instantaneous remote switching between input and output of in-service amplifiers is made possible with a new stethoscope. Two switches on the control unit enable the system technician to compare the input and output signal level and picture quality

of any given amplifier. For further information contact Tele-Signal Electronics Ltd., 1915 Stainsbury Avenue, Vancouver, Canada.

HYBRID SPLITTERS

A new series of wall mount hybrid splitters, the models 2WDW-S-F, 4WDW-F, and 1592, has been announced by Craftsman Electronic Products, Inc. The Model 2WDW-S-F is a two-way hybrid splitter which provides two highly isolated RF outputs from a single input, and can also be used to mix two input signals for a single output. The Model



4WDW-F is a four-way hybrid splitter which provides four highly isolated RF outputs from one input and can also be used to mix four inputs with one output. Both models are assembled on a circuit board and encased in a waterproof housing that makes each unit ideal for both outdoor and indoor use.

YAGI ANTENNAS

A series of 26 CATV Yagi antennas covering Channels 2 through 13 and FM band are available from Astro Structures, Inc. The antennas have 5, 8 or 10 elements to provide desired gain at each frequency. Typical gain for 5 element Yagis is said to be 8 db and for 10 element antennas, 12 db. All low frequency antennas incorporate vibration dampeners which reduce overall element deflection and thus contribute to the life of each element. For further details contact Astro Structures, Inc., 220 Demeter St., Palo Alto, California.

WEATHER RADAR FOR CATV

Kaar Electronics has announced the innovation of a low-cost, weather radar applicable to CATV. The Kaar Raymarc radar scans a 100-mile diameter circle and employs a plan position indicator cathode ray tube with a 12-inch diameter screen which can be installed up to 200 feet from the transmitter-receiver unit. Minimum range is less than 20 yards and maximum range is 50 nautical miles. For further information contact Kaar Electronics Corporation, 232 Wescott Drive, Rahway, New Jersey 07065.

STANDBY POWER SYSTEM

Solidstate Controls, Inc. has announced a new line of static inverters and standby power systems for use at antenna site head-end equipment locations. The system consists of a matched inverter, batteries and battery charger. Upon line failure, a solid-state device permits the battery to supply power to the inverter. There is no break in output power since the inverter continues to supply the specified voltage, current



and frequency to all equipment. On return of AC line, the inverter automatically transfers back to line source and the battery charger restores batteries to their fully charged state. For further details contact Solidstate Controls, Inc., 850 High St., Worthington, Ohio 43085.

RCA TV CAMERA

A television camera in the \$3,800 price range has been introduced by RCA. The PK-315 camera has a 5-inch viewfinder and solid-state circuitry. The PK-315 will accept one of three motor-driven zoom lenses, available as options. For further details contact Radio Corporation of America, 30 Rockefeller Plaza, New York, N.Y. 10020. □

CALENDAR

MAY 7-9. The California Community Television Association will hold its annual spring meeting at the Senator Hotel, Sacramento, California. For details and reservations contact Walter Kaitz, Suite 1506, Lathan Square Building, Oakland, Calif. 94612.

MAY 9-10. The NCTA Executive Committee will meet at the Madison Hotel in Washington, D.C.

MAY 15-19. The National Community Antenna Television Association of Canada will hold its 1967 Convention at the Chantecler Hotel, Ste. Adele, Quebec. For more information, contact Convention Chairman Jean Beauchemin, 1010 St. Catherine Street West, Suite 1004, Montreal 2, Canada.

JUNE 25-29. The National Community Television Association will hold its 16th Annual Convention at the Palmer House in Chicago, Illinois.

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FINANCIAL REPORTS

TelePrompTer Corporation has reported that it established all-time highs in 1966 with net earnings of \$794,190. This brought revenues up 16 per cent and earnings up 57 per cent over 1965 results which showed revenues of \$5,686,325 and net earnings of \$504,321. The 1966 earnings included net income of taxes and other deductions of \$371,572 resulting primarily from the sale during the second quarter of a ten per cent interest in its TelePrompTer Manhattan CATV Corporation subsidiary to Hughes Aircraft Company. Irvin B. Kahn, TelePrompTer chairman and president, said that no results from community antenna television franchises that TelePrompTer owns jointly with Hughes Aircraft Company are reflected in the 1966 report.

American Electronic Laboratories reported per share earnings for the quarter ending February 28, 1967 of \$.36, compared to last year's same period earnings of \$.31. The company reported a net income of \$170,341 on sales of \$4,830,182 compared to a 1966 net of \$147,282 on sales of \$3,706,567. The 1966 per share earnings have been adjusted for a 6-for-5 stock split in October of that year.

Plastoid Cable Corp. of America reported November 30, 1966 year-end earnings of \$1,594,302 on sales of \$14,143,893. Per share earnings for the year were \$.68. 1965 earnings were \$297,118 on sales of \$9,332,709, with per share earnings of \$.13.

Storer Broadcasting Co.'s annual report for 1966 announced gross revenues of \$52,727,278, compared to revenues of \$46,492,805 in 1965. Per share earnings for the year were \$2.56, compared to last year's per share earnings of \$2.34. Operating profit for the year was \$15,808,167, compared to \$13,920,416 for the previous year.

United Utilities, Inc. reported a net income for the year ending Dec. 31 of \$18,452,630—an increase of over \$2 million for the same time in 1965. Net income for 1965 was \$15,616,670. Share earnings were reported as \$1.16 as compared to \$1.02 for the same time in 1965.

Reeves Broadcasting reported that net income for the year ending Dec. 31, 1966 was \$698,670 up from \$449,524 reported for the same time in 1965. Share earnings were up to \$.42 as compared to \$.28 the previous year.

Continental Telephone Corp. reported that share earnings were up to \$1.07 an increase over 1965 share earnings of \$.81. Net income for 1966 was \$16,095,598. Net income for the same period in 1965 was \$11,614,085.

Trans-Lux Corp. announced earnings of \$543,232 for the year ending December 31, 1966, compared to earnings of \$466,252 for the previous year. Gross revenues for the 1966 period were \$7,545,336, compared to \$7,935,122 in 1965. Per share earnings rose to \$.76 from \$.65 per share the year before.

Herald-Traveler which holds a 53.2 percent interest in Entron, Inc., had a consolidated net profit of \$2,169,441 for 1966 an increase of \$206,115 over 1965's net profit of \$1,909,326.

General Tire & Rubber Co., parent of Vumore, reported share earnings for the quarter ending Feb. 28 of \$.52 compared to 1966 share earnings of \$.65. Net sales for the same periods were \$210,903,492, and \$225,128,727 respectively. Net income for the quarter ending Feb. 28 was \$9,085,000.

LIN Broadcasting Corp., which operates ten CATV systems among its various other holdings, announced that net profits for the 12 months ending December 31, 1966 were \$368,000 or 73 cents per average share outstanding. Net earnings in 1965 were \$182,000 or 56 cents per share. Net sales in 1966 were \$3,931,000 versus \$1,977,000 in 1965.

Collins Radio Company reported sales of \$206 million for the first half of the company's fiscal year ended January 28, 1967, with earnings of \$5,873,000 or \$2.15 per share on 2,731,301 average shares outstanding. Last year's first half sales were \$175 million with earnings of \$3,283,000—equivalent to \$1.45 per share on 2,246,804 average shares outstanding.

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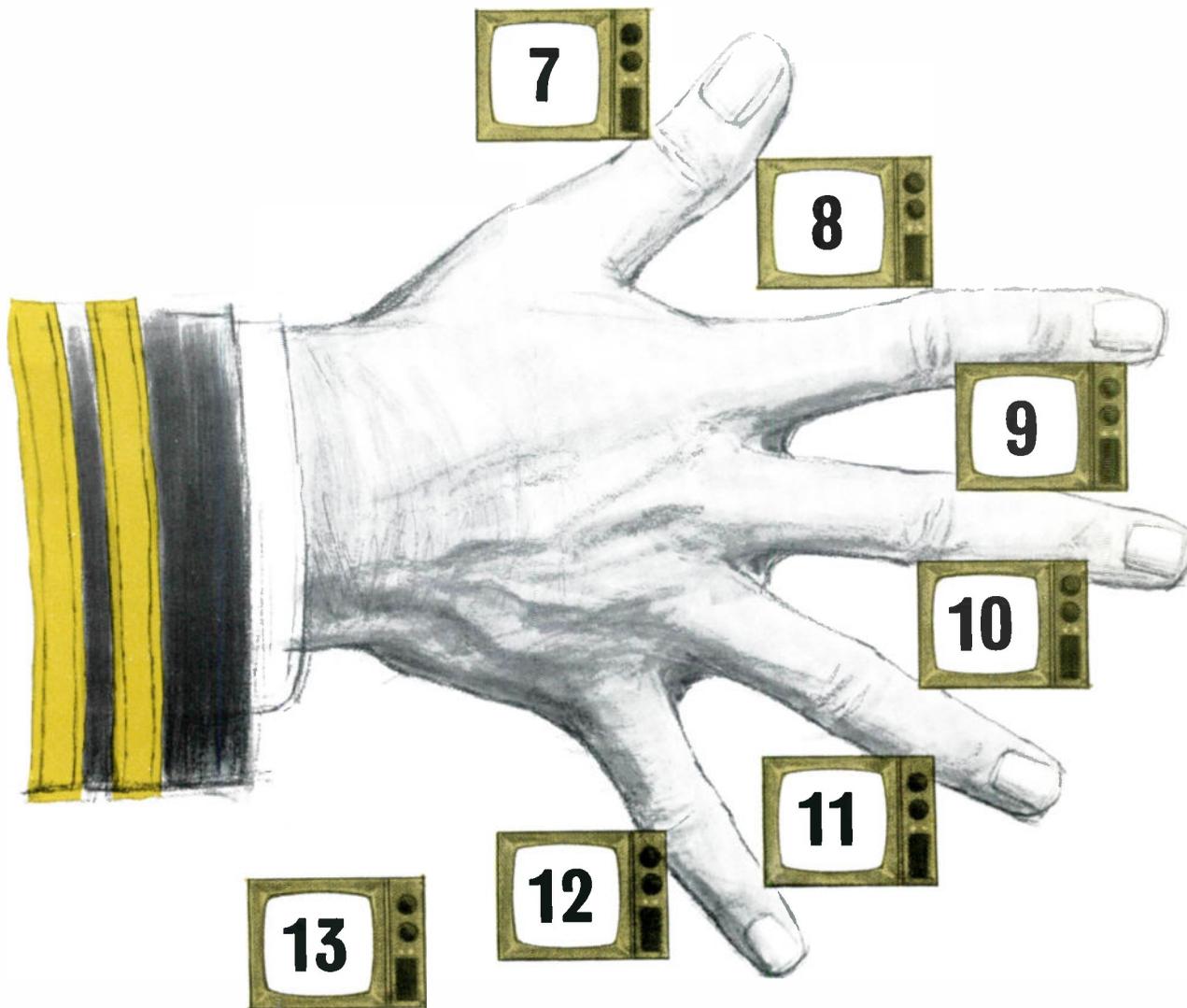
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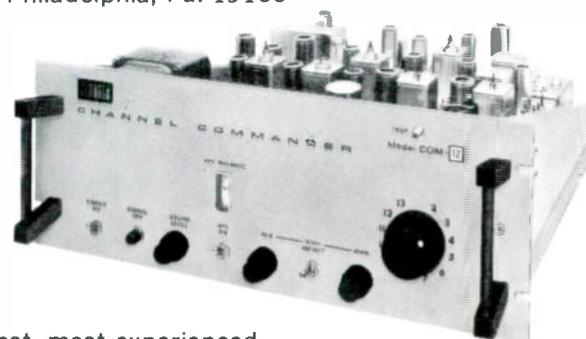
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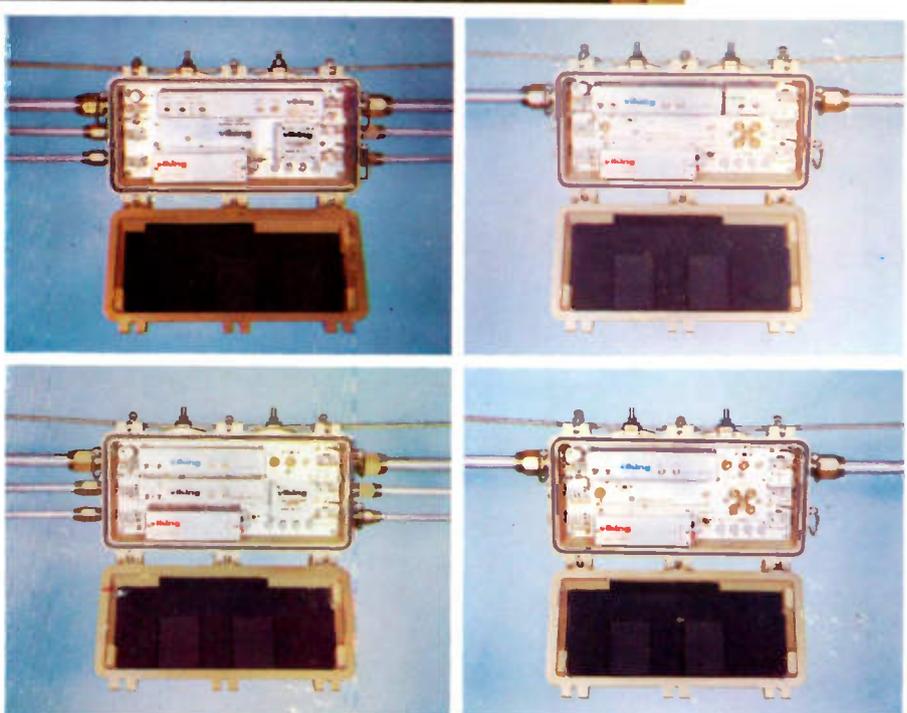
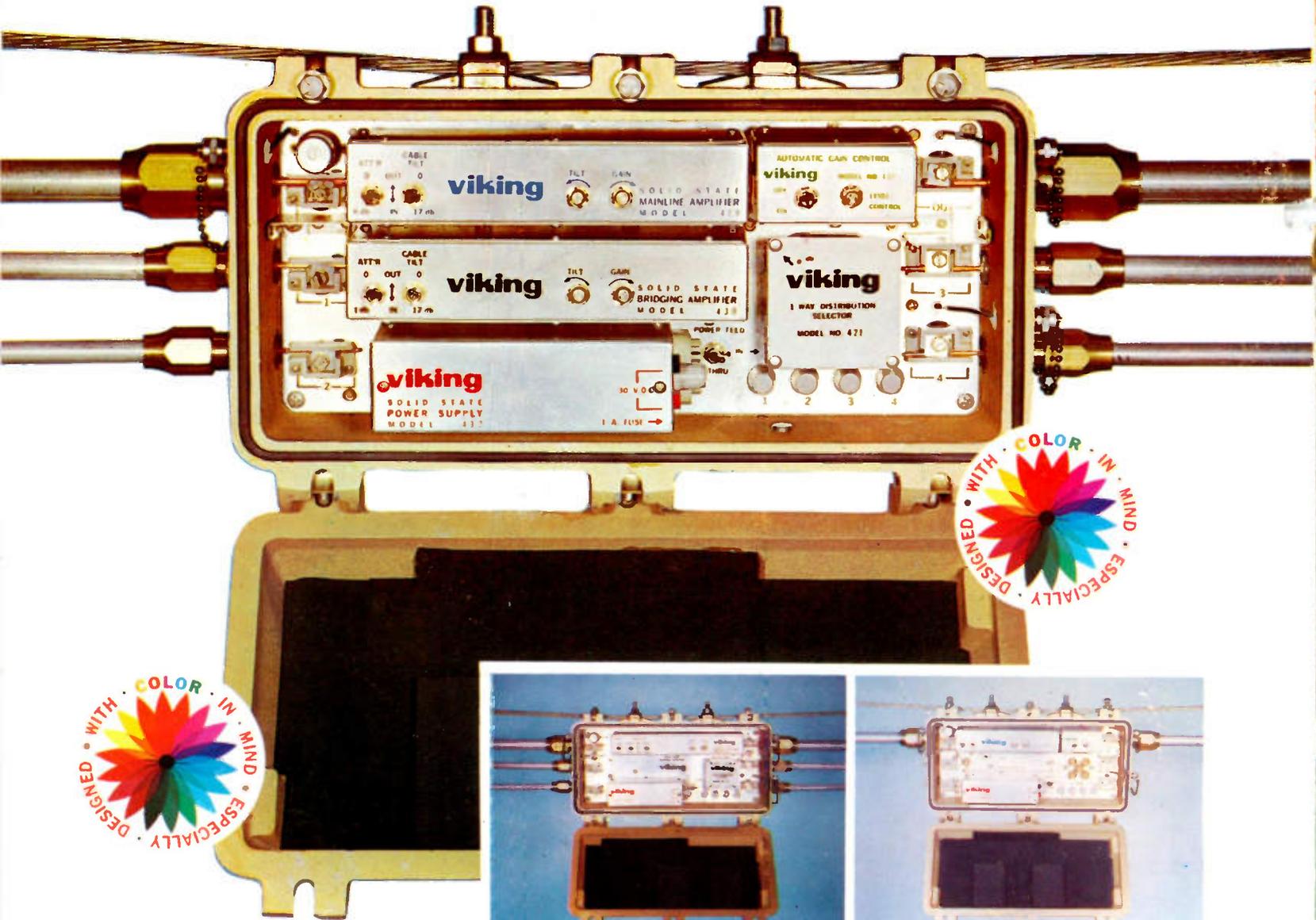
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