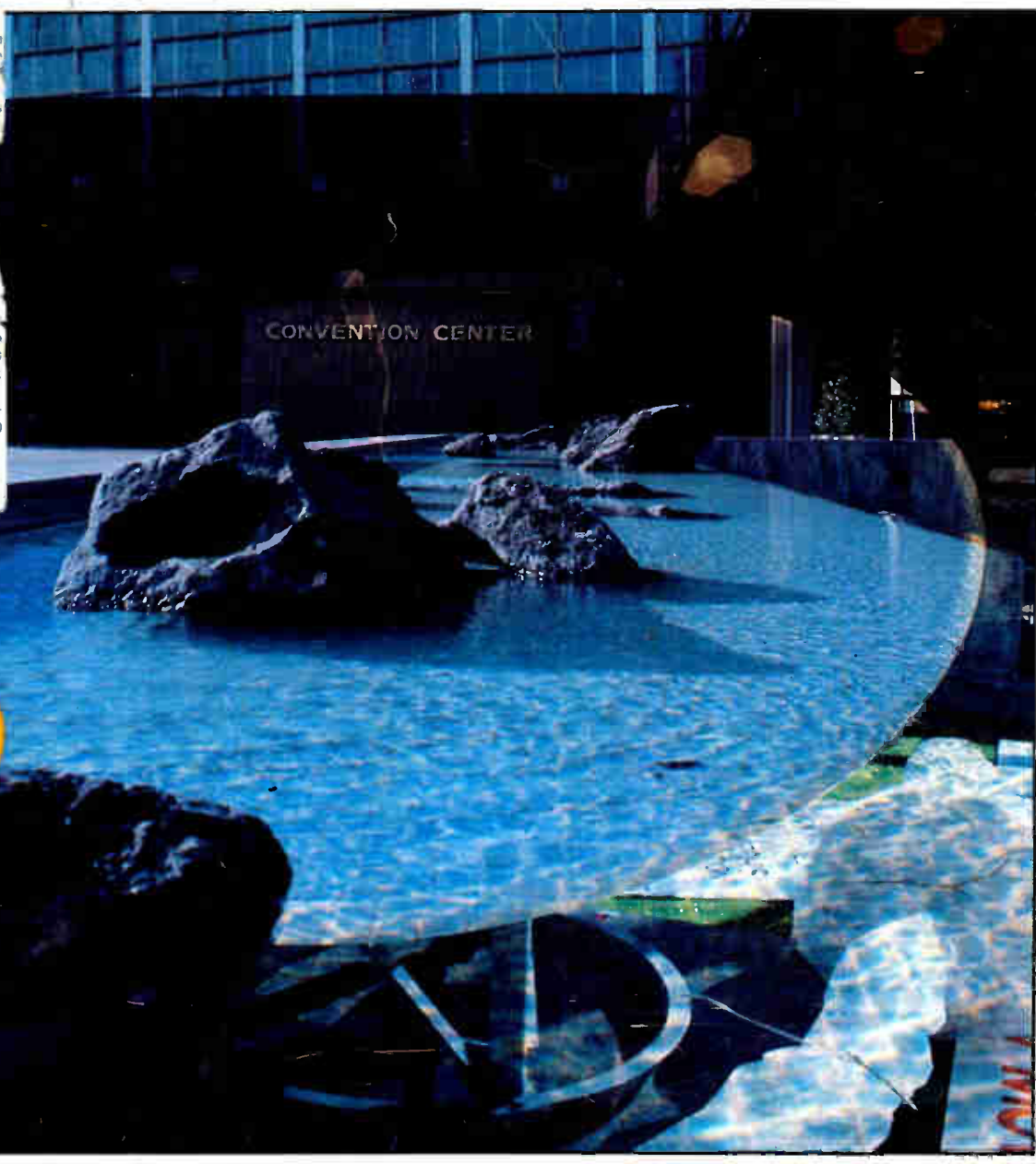


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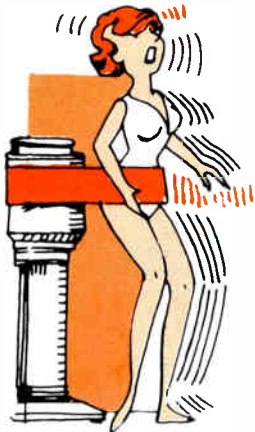
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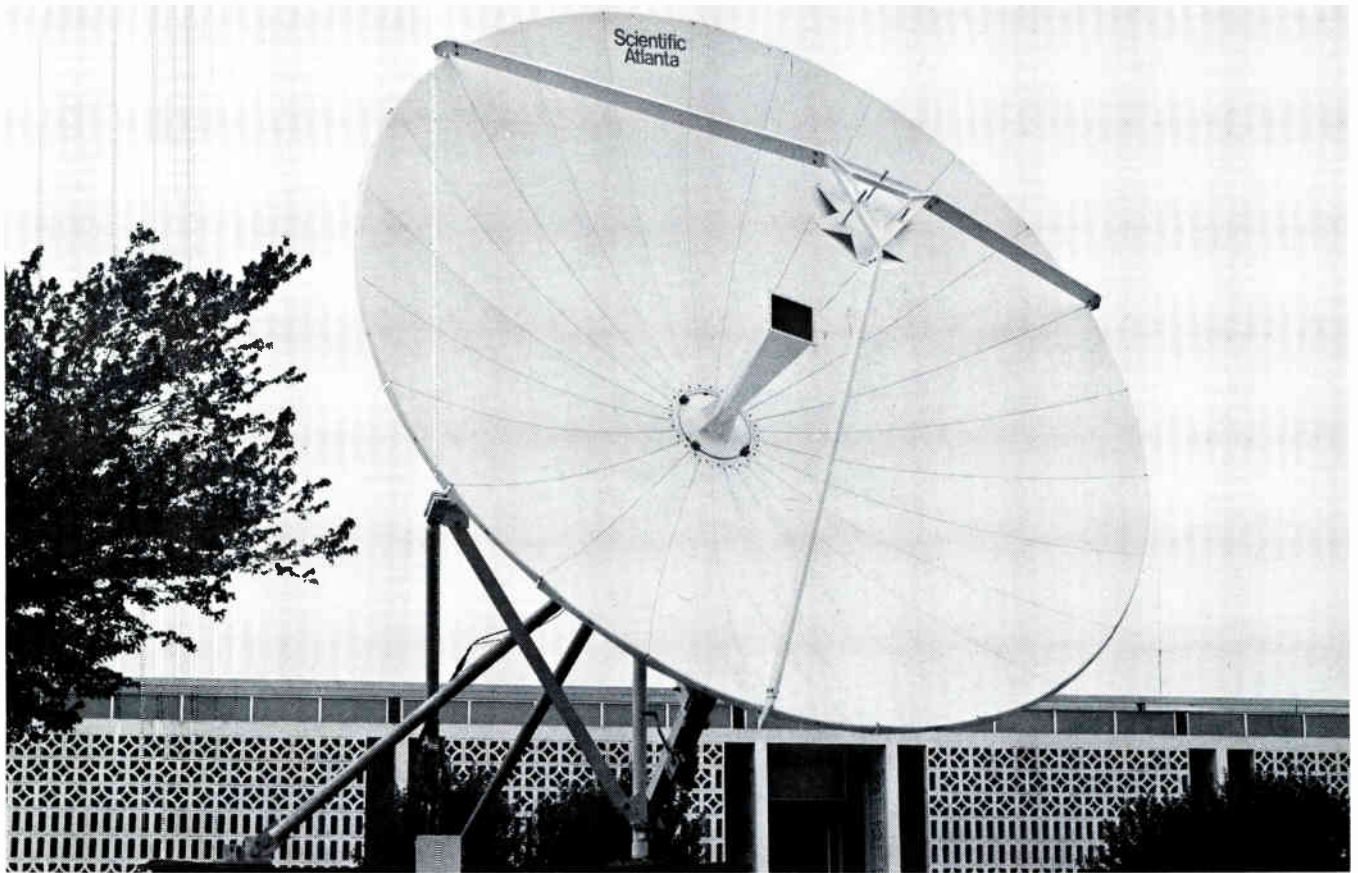


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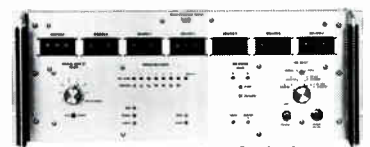
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G-ED News at a Glance

WASHINGTON, D.C.—The **Federal Communications Commission has completed its input cycle to the WARC proceeding.** The next step is the release of the commission's final positions and recommendations to the Department of State for review and possible revisions. The U.S. Proposals are due in Geneva January 31, 1979. Advanced parties of government and industry delegations are already in Geneva. As reported previously, cable's interests in broadcasting, satellites, and microwave seem protected.

WASHINGTON, D.C.—The **FCC and FAA are still in the ground-and-airborne-data-collection phase of its \$35,000 research project to study the relationship between ground signal leakage measurements and actual interference potential at aircraft altitudes.** Preliminary analyses are not expected until just before the National Cable Television Convention in Las Vegas.

Unofficially, the **government team appears to be having difficulty finding a cable system with measurable interference potential at aircraft altitudes.** This could mean a staff proposal to reduce or delete present midband signal leakage requirements.

WASHINGTON, D.C.—The **FCC has initiated a proceeding to update and standardize measurement techniques of TV receiver noise figures.** Last August, in Docket 21010, the FCC ordered the TV set manufacturers to reduce UHF noise figure (snow) from 18 dB to 14 dB by October 1979, and to 12 dB by 1982. In that proceeding, NCTA and others testified that present UHF noise measurement standards were archaic and inaccurate. This proceeding establishes a technical panel of experts, exchange of technical papers, and a Washington, D.C. conference on the subject. The FCC intends to adopt new standards by the October 1979 effective date of Docket #21010.

WASHINGTON, D.C.—As of December 1 there are approximately 970 approved receive-only **earth stations** in the cable industry. The number is growing at a steady rate of four per business day. **By January 1, 1979, an estimated 1,100 will be approved.** The FCC processing time has been holding at a record 14 days after the 30-day Notice period.

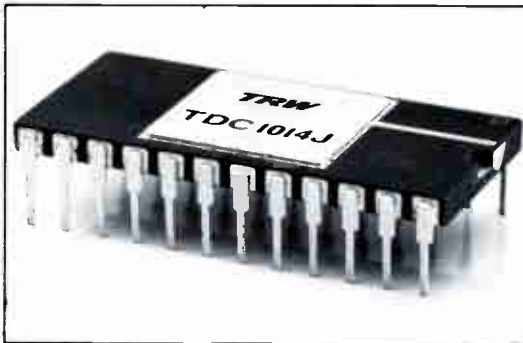
On December 1, the cable industry had a total of 522 CARS authorizations. CARS stations are increasing by one every two days. By January 1, 1979, the CARS service will total 552 stations. The present processing time is 30 days with a considerable back log of applications.

WASHINGTON, D.C.—The **NCTA Engineering Department has inaugurated a new membership service called Tech Line.** **Tech Line** will be used to relay pertinent engineering and technical information to the cable technical community and will be distributed as a separate insert in NCTA's **Firing Line.**

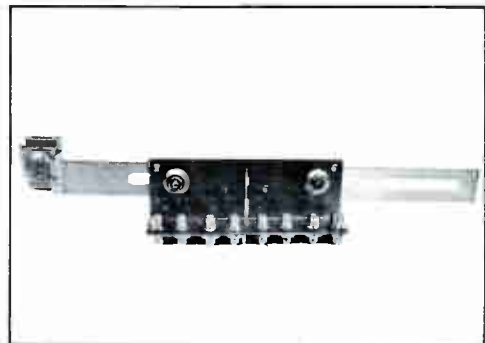
WASHINGTON, D.C.—On November 15, the FCC initiated an Inquiry to study the problems of radio frequency (RF) interference. All industries, including CATV, have been invited to actively participate. The commission wants input including, but not limited to, the seriousness of RF-interference to home entertainment units; the problems and solutions in determining causes of interference; health and safety equipment; consumer awareness of common solutions to interference problems; and the economics of implementing an industry- or government-regulated program to lessen interferences. Comments are due **May 1, 1979.**



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Cover: Our unique January cover of *C-ED* are two separate slides. One slide features Comtech's earth station dish parked in front of the Disneyland Hotel. The other slide is of the Convention Center. We "sandwiched" these slides together to provide a blend of the technology with the convention site.

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Editor's Letter

The Associates have formed their own organization while simultaneously maintaining, for the moment, their affiliation with the NCTA.

Called the Association of Cable Television Suppliers (ACTS), this new organization has one central purpose: to assist suppliers to the cable television industry with more effective selling to the industry. It will not compete, it was quickly pointed out, with any "existing organizations such as NCTA, CATA, SCTE or other state and regional cable television associations. Furthermore, the organization will be a non-political one."

The net effect was to send the NCTA two signals: one that the Associates recognize the importance of the relationship between NCTA and the Associates; the other, to send the NCTA and the industry a message that the suppliers firmly believe that there are additional ways to achieve "more effective selling to the industry."

Whether ACTS does evolve into an "effective selling" tool for the Associates remains to be seen. But what particularly strikes us is the seeming ambivalence of the "decision." What the Associates have done is to choose to support two organizations, and that will be evidenced, in part, through monetary support. Perhaps the suppliers can continue that financial obligation but one has to wonder.

Paul A. FitzPatrick



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Watch Us — We're SCTE

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SCTE, Cable Know-How Makes Cents

By Pat Gushman, Washington Bureau Chief

For most organizations one slogan would be enough, but not for the Society of Cable Television Engineers. The above are but four descriptions which have graced buttons, yo-yo's, banners and booklets in past months as SCTE proudly proclaims its membership has come out of the closet and taken its rightful place among the management and leadership of the broadband communications industries.

SCTE has just completed its first ten years and it has been a long time coming. But, to its credit and to the credit of all

the members and directors and management involved, it perhaps has made more progress as a group and done more for the individual members in the last two years than in the first eight years of its existence.

"Things have changed," says Judith Baer, the persistent, insatiable executive director of SCTE. "Members report that technicians and engineers are being held in good regard by their managers. Times are generally good for the industry and SCTE members are reaping some of the rewards. But it is not a time to look back over our shoulders. It is time to get better, smarter, more knowledgeable and continue to grow," she proclaims, as if speaking of herself as well.

To that end, SCTE has already scheduled more than two dozen seminars and conferences throughout 1981, both independently and in cooperation with national, regional and state CATV organizations. "That's called planning," says Baer. As a result, by booking such meetings well in advance, substantial savings are passed along to the society's membership which will very soon hit the 2,000 mark.

With membership growing and newer, greater challenges facing the industry in the months ahead, SCTE knows it must be prepared. The staff is expanding, from one, to two, to maybe three. Headquarters are enlarging, from one, to two, to maybe three rooms. But, according to Baer, the biggest challenge, perhaps, will have to be faced by the new board which will be elected later this month.

"They (the new board) are really going to be part of something very important and the times of 'inactive' board participation are fast fleeting," she observes. "New faces are cropping up and new people are interested in becoming involved. They are smart enough to realize that they can learn from active participation in this organization and that it also might help them along in their career plans. "That," she muses, "is one of the greatest milestones SCTE has tucked into its bag during 1978."

But that was not always the case, as can well be imagined. If SCTE is not so humble now, its beginnings certainly were. Less than seven percent of its current membership was on hand back in 1969 for its very first meeting. (The complete history of the society is chronicled in a special 226-page edition of the SCTE newsletter, the *Interval*, which comprises the 1978 membership directory.)

Very briefly, the following is how the SCTE evolved to its present state. An editorial in *Cablecasting* by Charles Tepfer

Five Reasons for Choosing the LRC Attenuator Pad



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triggered it all. Tepfer decried the plight of the cable television engineer in terms of lack of prestige throughout the industry. His editorial piece generated enough interest and response to coerce Bill Karnes, then with National Trans-Video, Inc., to assume the post of temporary chairman. When a meeting was finally organized, Karnes was elected president and reelected again and again until 1973.

Chapters began organizing in 1970, but SCTE's efforts at establishing itself were understandably not without problems, including finding an adequate definition of purpose. There were even suspicions and fears that SCTE

technical program time at state and regional association meetings. During this past year alone, Baer has represented SCTE at more than 43 industry meetings.

From what she has seen during the past year, Baer confidently attests to the good health of the industry. She also says that SCTE reflects that good health.

"Probably more than any other organization in the CATV business, SCTE has been a barometer of the times," she states. "Setbacks, bad management, lack of foresight and poor communications and salesmanship are some of the mistakes SCTE has made at the same time the cable industry was making similar mistakes.

"But," she adds, "those times are over."

The end of those hard times were penned and the stage set for 1978 and thereafter, when Bilodeau, recognizing a critical time for the SCTE, formed a study group which revised the bylaws and restructured the SCTE board, changed the terms of offices and redefined its regions. Since that time, SCTE has even had a permanent home at 1100 Seventeenth Street, N.W., Washington, D.C. Membership rolls have been computerized and a seemingly endless number of tangible, "hands-on" membership benefits, the kind you read about in the association management magazines that lay around SCTE's offices, go out to the membership.

But the society's benefits to its members goes much deeper than tokens and trinkets. They only serve as simple



While touring the exhibits at the 1978 Western Show Judy Baer (center) is flanked by her daughter (right) and Mila Albertson (left).

would precipitate union activity. Eventually, it was all sorted out. By 1974, several hundred members had joined the ranks of the SCTE. Bob Bilodeau, at that time with Suffolk Cablevision, was elected president.

Bilodeau, now vice-president and a director of Suburban Cablevision in East Orange, New Jersey, encouraged a national membership drive aimed at "keeping the membership open-ended and at the same time attracting more sophisticated and experienced types, achieving a healthy balance in the organization, lending SCTE greater recognition and combating the 'loosely qualified' systems technician image."

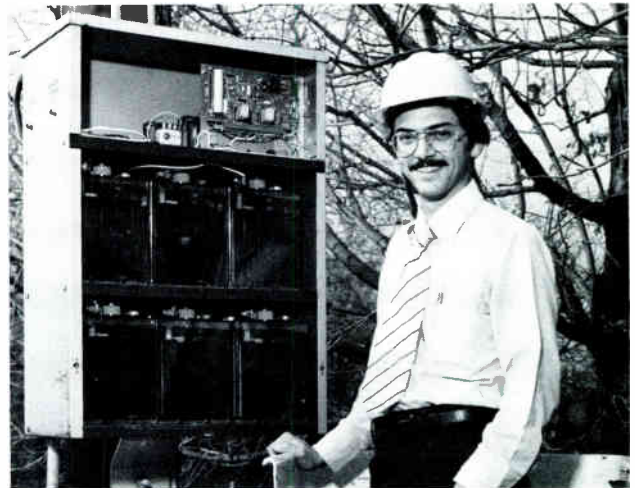
A year later Bilodeau recruited Judy Baer, who at that time was staff to the FCC cable industry Technical Advisory Committee, to "think about how SCTE could improve its communication with the industry and its services to members."

Almost four years later, Bilodeau says that "we have come a long way thanks to our membership's trust and enthusiasm. Our group holds no distinction between a member who is part of the operating side of the industry or part of the supplier side. We welcome the participation of personnel from all parts of CATV," Bilodeau emphasized.

The ecumenical nature of the society, which really is a result of the involvement of its membership in so many companion organizations and associations, is perhaps one of its greatest assets. Even prior to 1978, which was a banner year for SCTE, the society has staged nearly 20,000 hours of

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reminders that SCTE is there, doing something for them every day. SCTE has published more than a dozen informational and training booklets and recently has gotten into upgrading members' professional skills with a videotape cassette series which so far covers: "Diagnosing Common Cable Television Faults," "Lightning Power and Surge Protection in CATV Systems," and "Grounding, Bonding and CATV Construction Practices."

The SCTE "CATV Health and Safety Manual," a 24-unit series has been sold out, but a second printing is scheduled. And, there is more to come.

Responsible now for many of the existing membership services is Mila Albertson. This past fall she was named Director of Membership Services and Publications by Bilodeau. Already Albertson has taken over the newsletter, *Interval*, and she produced the giant membership directory. Prior to joining the SCTE staff, Albertson was with Television Digest, Inc., as associate editor of the *Factbook*.

Responsible for promotional brochures, training materials, liason with companies exhibiting at SCTE's technical meetings and general administrative tasks, Albertson may soon become as widely known in connection with SCTE as Judy Baer, Bob Bilodeau and the rest of the society's board.

It is being known and being visible which has had such a large part to do with SCTE's success, a very important part. It is that visibility and the new image of the technician and engineer which has had such an impact on SCTE and the cable television industry itself. Members are reporting now that this new image and importance is being reflected in their pay checks. Can there be a better measurement of recognition for professional achievement by business?

"The more SCTE does, the more vulnerable we become," Baer reflects. "Sometimes, it's easier to be invisible and not be important," again thinking of herself, perhaps, as well as the membership. "You're not a threat to anyone. Nobody pays attention to what you're doing and you just slide in and out quietly hoping for the smallest recognition. Now, "Baer stresses, "we are so public and certainly well recognized, by our numbers alone, every move we make—individually and collectively—becomes a chance.

"That is something everyone has got to remember whether it's out in the field, in the office, at a convention or at any industry event.

"But is SCTE doing everything it can for its members?" she asks herself. The answer comes back in the affirmative considering all of the programs must be self-supporting, backed up by only \$20 per year dues for each member. She smiles as she thinks of what can be done as resources grow. In that same thought is no little gratitude for the support demonstrated by the almost 100 industry suppliers which have become sustaining members.

A committee is being formed to address construction practices. A major university is developing an intensive technician training program specifically directed at CATV under the advice and guidance of SCTE. And attendance at SCTE regional meetings currently brings a boost to individual careers and possibly they will bring college credits in the near future if things go as planned.

So, one can only wonder and not want to miss it when, as Bilodeau says, "The year 2008 'set top' converter will be activated by thinking of the channel number and aiming the forehead in the general direction of the 'thought' receiver."

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Industry Mourns Death of Valtec's James Godbey

ANAHEIM, CALIFORNIA—James A. Godbey, 43, founder of Valtec Corporation in West Boylston, Massachusetts, died December 7, 1978 while attending the Western Cable Television Association Convention in Anaheim, California.

Godbey, a native of San Mateo, California, was a graduate of the U.S. Military Academy and of the Army's Signal and Aviation schools. He served as an Army aviator and as a communications and security officer during his military service. After technical management positions with Bendix Corporation and Dumont Laboratories, he founded Valtec, then the Electro Fiber-optics Corporation in 1967.

As president of Valtec, Godbey, widely recognized as a pioneer in communications fiberoptics, led Valtec in practical applications for the new technology of transmission by light rather than by electricity.

Valtec developed one of the world's first fiberoptic voice/video telephone

systems, a major data distribution system for the Grumman Aerospace Corporation, fiberoptic traffic signals and a system to improve communications and reduce weight and possible explosions aboard Navy fighter planes.

In September, 1978, Godbey assumed responsibility for Valtec's international operations.

Godbey will be especially missed by the fiberoptics industry in that he was an effective spokesman on the subject of fiberoptics at many national and international technical sessions and trade meetings. He presented a paper, "The Use of Fiberoptics in Measure-



James A. Godbey

ment," at the first European Electro-Optics Markets and Technology Conference in 1972. In 1978, he established an Israeli manufacturing-marketing affiliate as Valtec's first venture into the international market for fiberoptics.

Valtec management said other executives, who had been working closely with Godbey, will assume his duties.

Memorial services were conducted at the First Baptist Church in Worcester, Massachusetts. Surviving Godbey are his wife, the former Dale MacGregor; a son, James A. Jr.; and two daughters, Cary and Traci.

RCA Formally Announces Plans for Third Bird

ANAHEIM, CALIFORNIA—RCA Americom confirmed at the Western Cable Television Convention that the firm plans to launch a third domestic satellite by the end of 1979. The satellite will be used exclusively by entities offering programming services to the cable television industry.

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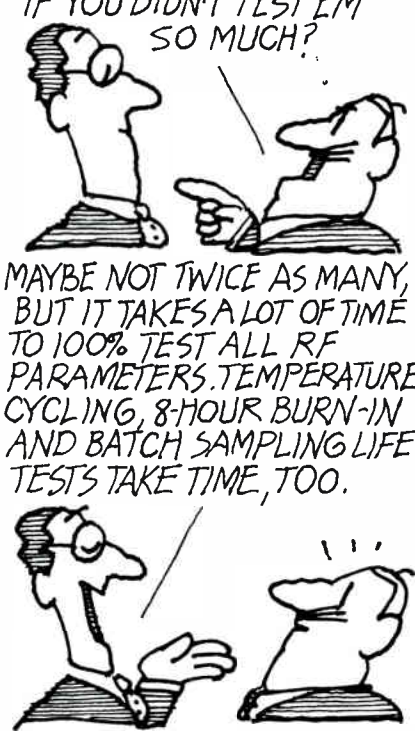
General representative for Europe: Catec AG Luzern/Switzerland, Habsburgerstr 22. Tel. 041-41-75-50 Telex TELFI 78168. IN CANADA: Comm-Plex Electronics Ltd. IN MEXICO: Polytronic, S.A., Av. Revolucion 379, despacho 302, Col. San Pedro de los Pinos, Mexico 18, D.F. Tel. 5-53-77-17 & 5-53-87-00.

RCA plans to make Satcom III exclusively a cable satellite by moving the existing cable services from Satcom I. Satcom III will have 24 fully-operating transponders with four spare transponders. When III is saturated, extra cable programming services would then be put back on Satcom I but with only a limited number—possibly one-fourth of its transponders—available to cable. The advantage to distributors switching to Satcom III with RCA would be the increasing number of protected transponders. As many as five additional transponders will be designated as protected. The rest would be unprotected or at least non-preemptible.

Among the other competitive factors prompting a challenge by other satellite carriers are RCA's plans to park Satcom III at 132° West longitude on the equatorial arc and to move Satcom I from 135° to 136°. Such positioning would then give RCA's two satellites prime position for covering all of the 50 states.

The National Aeronautics and Space Administration has agreed to provide launch support at the John F. Kennedy Space Center in Florida.

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Comm/Scope Awarded Patents on Cable

ANAHEIM, CALIFORNIA—At a press conference held during the Western Cable Television Association in Anaheim, Comm/Scope announced it had received patents on both low-loss foam-injected polyethylene cable and bonded, laminated dropwire.

The patents give recognition to Comm/Scope employees as the inventors of what is fast becoming the CATV industry-wide standard in gas-injected cable. A Comm/Scope employee is also recognized as the inventor of "tiger striping resistant" bonded, laminated dropwire. It is yet to be determined what effect these patents of Comm/Scope Company may have on other cable manufacturers.

Frank Drendel, president of Comm/Scope, expressed personal satisfaction after being awarded these patents. "Over the years Comm/Scope has consistently provided the CATV industry with advanced as well as state-of-the-art technology in coax cable. As the originators of PI, PII, PIII, and Paramedrop cable, we are pleased to have finally received legal recognition as being the inventor of products that are fast becoming an industry-wide standard."

Suppliers Form New Organization; Vote To Retain NCTA Membership

ANAHEIM, CALIFORNIA—The Associates membership of the NCTA has chartered an organization to represent the suppliers to the cable television industry while simultaneously maintaining their affiliation with the NCTA as voting members.

Called the Association of Cable Television Suppliers (ACTS), the new organization will assist suppliers to the cable television industry "with more effective selling to the industry" and will not compete with any existing organizations such as NCTA, CATA, SCTE or other state and regional associations.

This marks the first time the suppliers to the CATV industry have established an organization completely independent from any other organization. According to a press release from ACTS, the organization "came out of recommendations by the Long-Range

Planning Committee of the Associates Committee of the National Cable Television Association."

In a separate but related action, the Associates voted to retain their voting membership in NCTA. The vote came the day after an initial decision was made by that group to remove the Associate members from the NCTA. But, according to informed sources, there was a feeling that the issue had not received a full airing and that the matter deserved more discussion.

Ronald C. Hunt has been named executive vice president of ACTS, which will be headquartered 1800 Pickwick Avenue, Glenview, Illinois. According to ACTS, a membership drive is underway, although no certain plans have been announced.

Western Show — Tremendous Success

ANAHEIM, CALIFORNIA—Appearances can be deceiving. At first glance, exhibits at the Disneyland Hotel convention center didn't seem as large as in previous years. The reason, however, was that all available space had been sold-out and some manufacturers didn't have an area to exhibit in.



Comtech's earth stations set-up outside of the Disneyland Hotel.

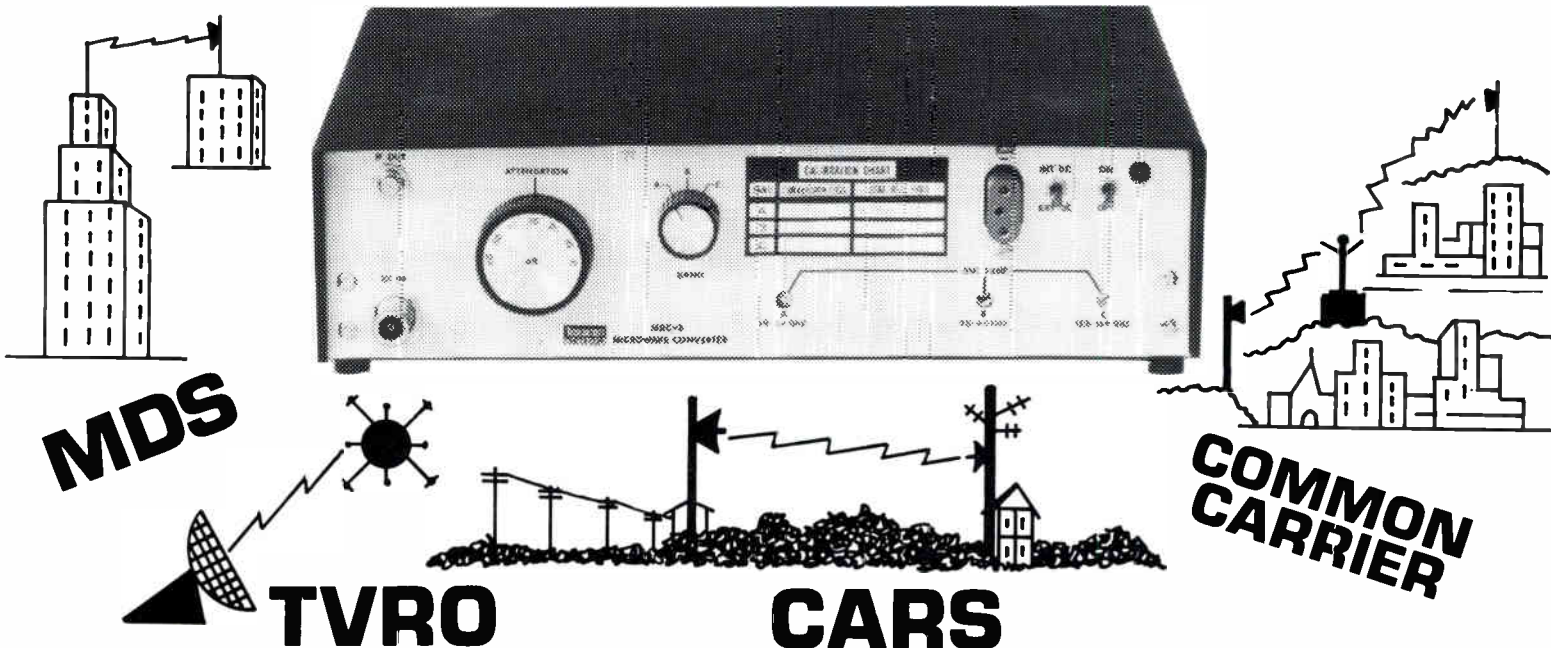
The show and booth traffic were extremely active. The industry is growing by leaps and bounds and many manufacturers were astounded by the high volume of business to be done. Many customers didn't want to talk about orders, they wanted an annual agreement.

Although there were no startling revelations unveiled at the show, it was evident that more companies are branching out into other state-of-the-art equipment lines.

RCA introduced a new line of taps,

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passives and set-top converters. Scientific-Atlanta featured a new low-cost satellite earth station receiver and GTE Sylvania displayed a scrambling attachment for its converter. In addition, AEL showed new life by announcing its new distribution system and Oak unveiled its 30-channel mini-converter.

A definite interest in standby power and test equipment was evidenced by the high volume of traffic in those booths. Wavetek introduced a new system for simultaneous sweep re-

sponse of a distribution system that features an array of markers and a sweep system with storage capabilities. This new system, using a micro-processor concept, is now going into field trial and should be available in the spring.

ComSonics introduced a new system for measuring RF leakage out of a system. The uniqueness of this system is that no additional carriers have to be added.

Century III featured a live demonstration on the improvements to be

achieved using feedforward techniques in the trunk amplifier. (Essentially it would provide a 20-25 dB improvement in distortion out of a trunk amplifier operating at the same output levels.)

Fiberoptic manufacturers didn't wave a lot of banners, but revealed that they are still going strong. The Times' exhibit had a "Today and Tomorrow" theme. For "Today" it showed coaxial cable and fiberoptics in the trunk or super trunk application (Lompoc, California). For "Tomorrow" Times' showed a trunk distortion system with a splitter, drop line and a fiberoptic set-top converter. (This was the first fiberoptic set-top converter prototype seen at a national show.) Times' also demonstrated an eight-way power splitter for a fiberoptic system.

Perhaps the most outstanding improvements to be evidenced at the Western Show were the lowering of prices and the upgrading of functions of the equipment.

NCTA Engineering Committee Meets

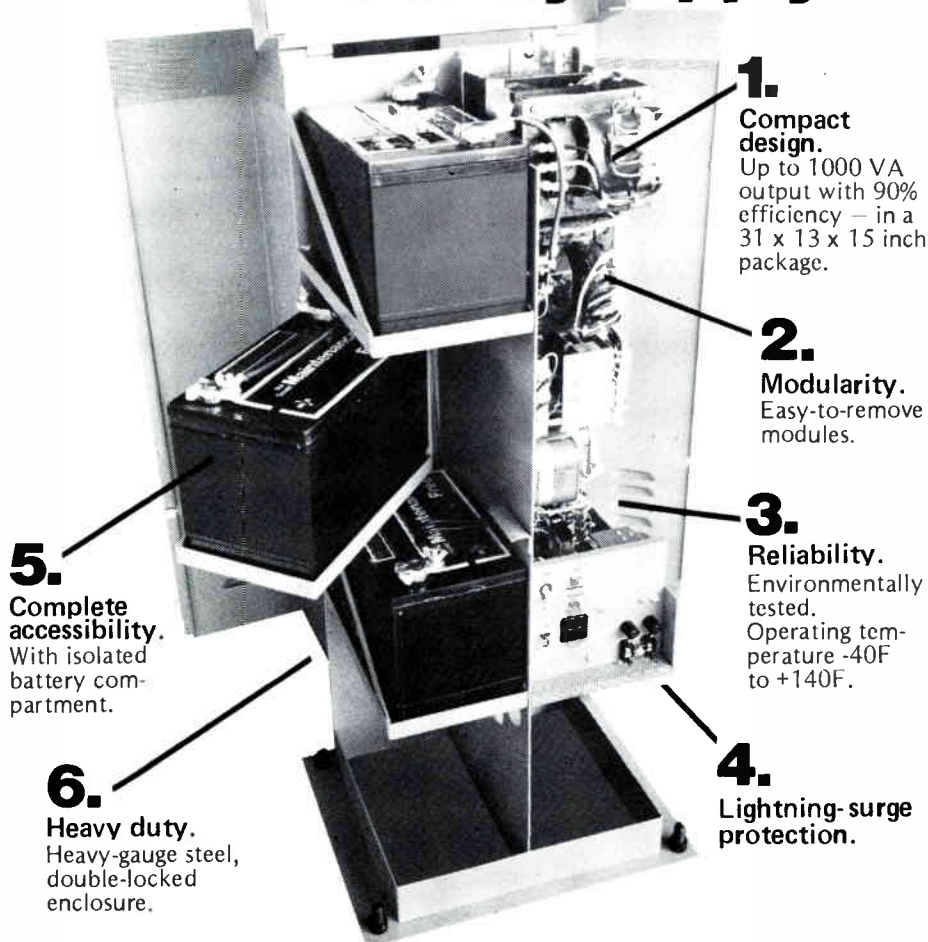
On Tuesday, December 5, NCTA's engineering committee met. Robert Luff, vice president of engineering for NCTA, brought the committee up-to-date on all of the FCC's rulemaking status.

There are a number of new FCC proceedings that NCTA is going to provide comments on. The first one on the agenda is Docket 78253, the low-power TV translator proceedings. For years, NCTA has been urging the commission to analyze and develop a clear-cut policy for translators. In November, the FCC finally released a Notice of Inquiry to redefine what a translator is, or should be, in the years to come. Should they stay as translators, should they be permitted up to almost unlimited program origination and should they be increased considerably in power output?

The engineering committee was asked by NCTA for specific examples of where cable and translators have had technical problems in the environment working together—either due to adjacent or co-channel interference, or where the industry is carrying sub-standard translators that don't fit properly into cable's multi-channel format.

At this time the FCC is asking what the major issues are and what are the overall positions of each of the inter-

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For a technical data sheet and a copy of the TVC staff feature which describes how the SL-300 performed in their actual field tests, write or call AvanteK or your closest representative.

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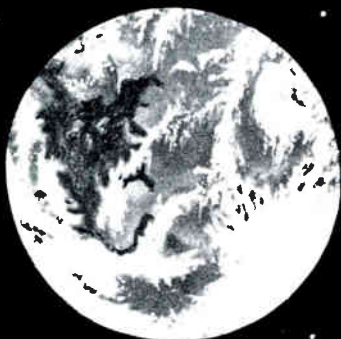
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ested parties? NCTA's goal is to show that improving technical standards is a must.

An important issue—Docket 78307, television receiver grading—was discussed extensively. That proceeding was prompted by the commission's work in reducing the UHF noise figure. The FCC became aware that there are a lot of inadequacies in TV receivers.

NCTA feels that UHF tuners should be improved by lowering the acceptable noise figure at a given signal strength. The present requirement is 18 dB. The FCC voted to reduce that figure to 14 dB within a year's time, then possibly 12 dB and finally 10 dB.

Technical Seminars

Technical seminars were conducted December 7 and 8 and averaged approximately 100 attendees per session.

The seminars on Thursday, December 7, were coordinated by Frank Bias, Viacom; Bill Schiller, Storer Cable TV; and Judy Baer, SCTE.

Jim Stilwell of Communications Properties began the afternoon session on grounding and bonding. He reviewed the National and Electrical Safety Codes and reminded the audience of the responsibilities of installers to adhere to the safety codes.

Henry Cicconi, vice president for Sammons Communications, discussed problems with Satcom I. He stated only Sammons' experiences with the bird and noted that Sammons has 13 operational data five-meter Scientific-Atlanta earth stations. Cicconi also mentioned that RCA is about to present data to NCTA's ad hoc committee. The outcome could conceivably lead to a new footprint pattern.

The third speaker was Robert Tenton of Home Box Office. Tenton spoke on three-quarter-inch cassette standards. He also demonstrated skewing and tracking errors on these cassettes.

The last technical speaker of the day was Robert Bilodeau of Suburban Cablevision. Bilodeau spoke on the economics of system powering. He cited various monitoring and metering (pole) experiments by cable and power companies.

Friday's technical sessions were moderated by Frank Bias. The first session on Friday morning was on addressable taps. Presentations were made from operators and manufacturers using smart taps, and speakers represented the United States and Canada.



Frank Bias

Chris Cohan of Sonic Cable TV presented the first dissertation on addressable taps and how Sonic Cable TV uses them.

Al Varden of Oxnard Cablevision spoke on the advantages of using both Merrill Cable and Delta-Benco-Cascade taps. He noted that there were relatively few problems in using those addressable taps and that the main problem concerned connecting taps in private areas.

David Fear of Delta-Benco-Cascade gave the third presentation and discussed the different concept D-B-C uses in its addressable taps.

Philip Merrill of Merrill Cable Corporation talked about the marketing concepts of addressable taps. He emphasized the economy of house drops done all at once with the assistance of local government and communities.

At the end of the session a very active round-table discussion on addressable taps was held.

The last technical seminar, hosted by Judy Baer and Robert Luff, featured Raymond E. Spence, Jr., chief of the Office of the Chief Engineer, FCC.

Spence talked about cable's relationship to other communications services. He discussed the new standards for the television set and the research and development involved. Spence stated that the FCC will be issuing a Notice of Inquiry on further improvements to TV sets for compatibility with cable systems. He wants the coaxial input to the tuner. In addition, he also wants easy access on the back of the TV set to the actual video signal in the set. This new method will permit video games, home computers and home VTRs to be attached directly to the video portion of the set.

All technical sessions were well-attended with a lot of interest generated from the audience by means of questions and answers.

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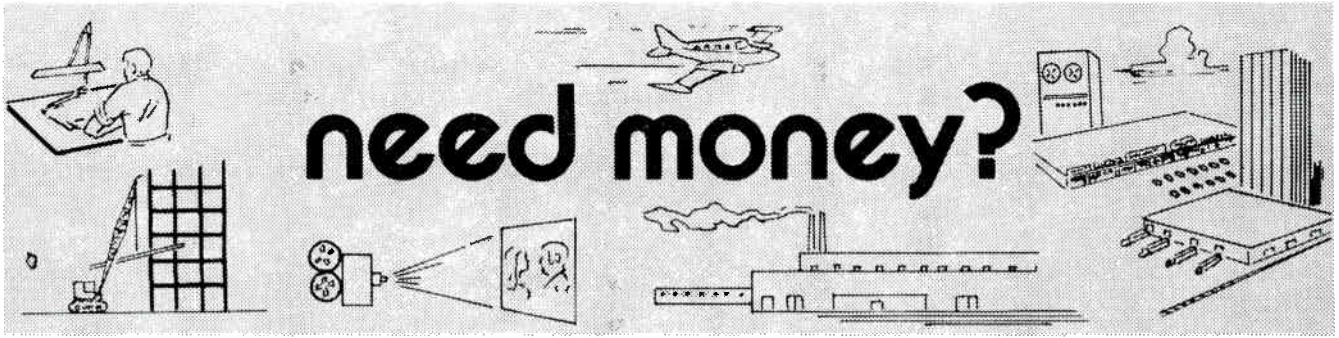
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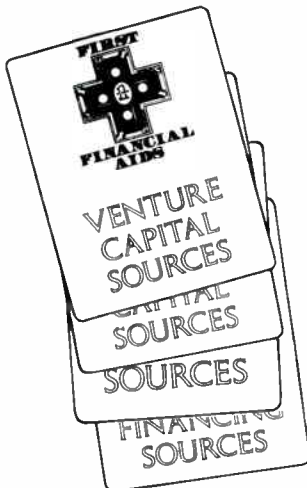
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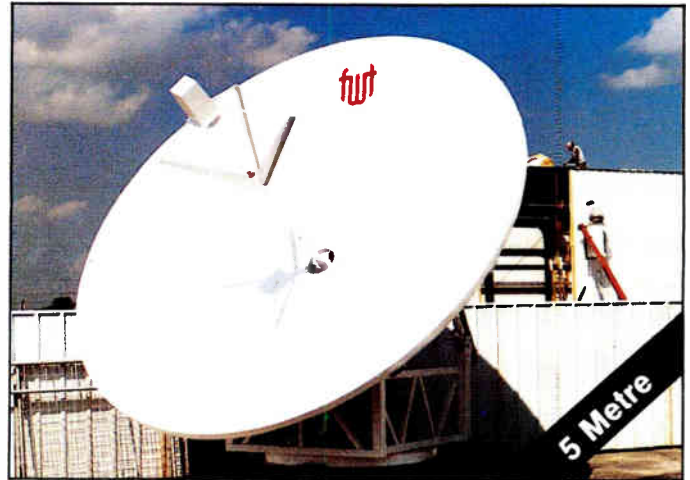
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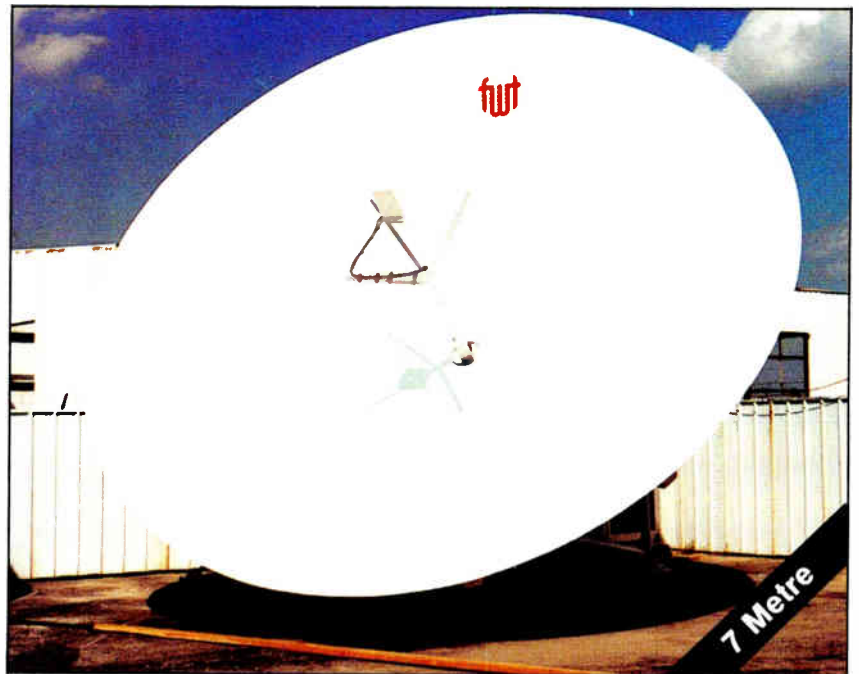
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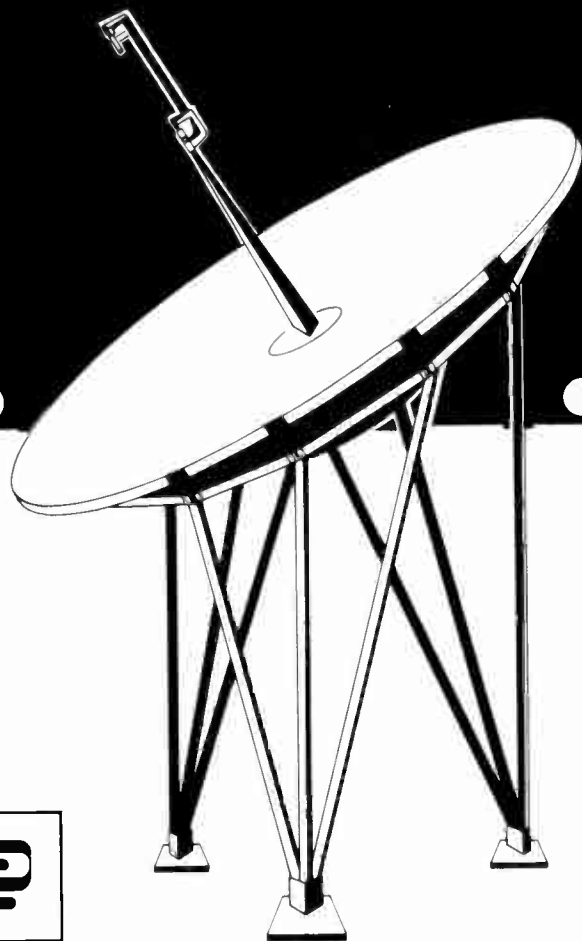
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C-ED Tech Review

This special January tech review features the various types of equipment displayed at the Western Cable Television Show in Anaheim, California, December 6-8. In addition to the new products unveiled at the show, we have included top-of-the-line equipment from major manufacturers.

Below is a handy reference, in alphabetical order, for locating specific equipment for your requirements.

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And a lot of earth-bound areas, too, for that matter.

These people are part of Home Box Office Network Operations. They can handle anything and everything involved with sending and receiving the perfect signal.

Some are engineers and technicians who specialize in the continuing "state of the art" development of video and audio transmission and cable technology.

Some specialize in setting up affiliates with our Earth Station Application Service and handle all of the details.

And others handle the nuts and bolts: scrutiny of film, supervision of film to tape transfers, transmission testing and even manning our "Trouble Phone" when HBO is on the air. They can answer a question in a minute or be on a plane the same day.

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Line and Headend Equipment

AEL's New Amplifier

AEL introduced a new distribution line in Anaheim. Leading off its new equipment is the completely modular AEL 80 amplifier series. Bandwidth in the forward trunk and bridging is 50-300 MHz and reverse trunk and bridging is 5-30 MHz. Noise figure (measured

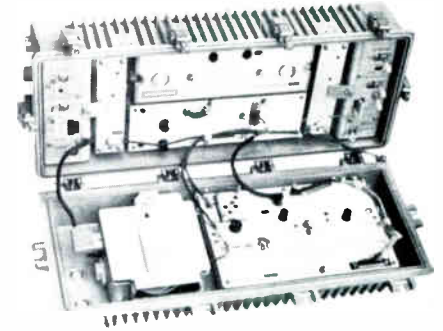
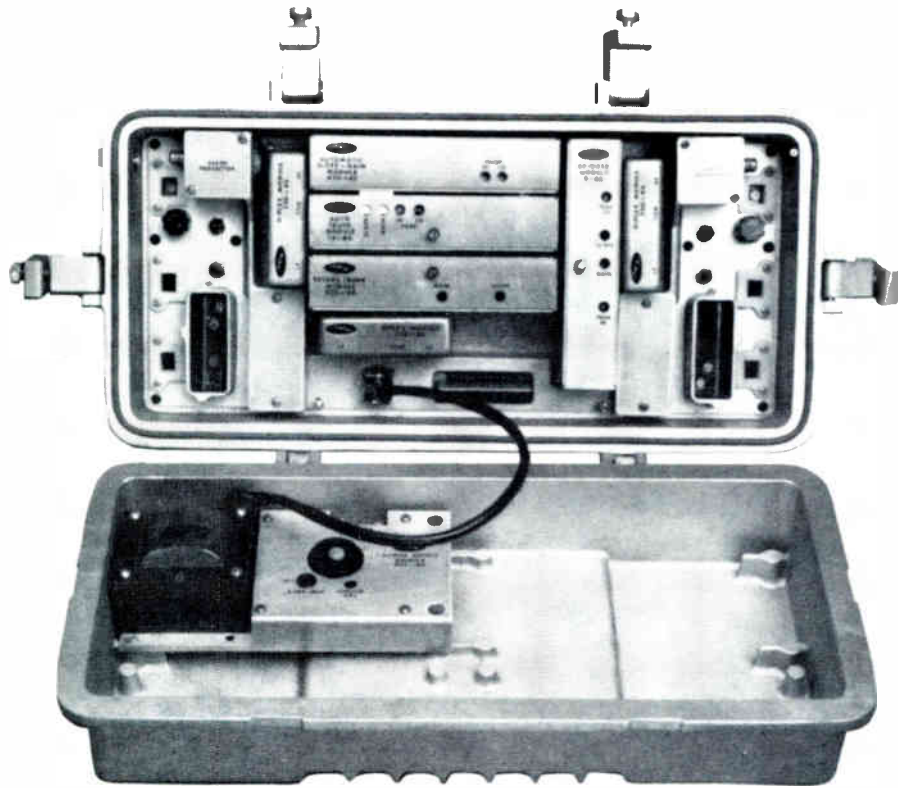
with 0 dB equalizer) in the forward trunk is 7.5 dB, 7 dB in the reverse trunk and 17 dB with reverse bridging.

All modules are heat sunk to the finned casting for greater heat dissipation and features low power consumption.

For more information, call AEL toll-free at (800) 523-5354.

responding either to dual modulated pilot carriers generated at the system headend or optionally to factory selectable video carriers.

For more information, contact Century III Electronics, Inc., 3880 East Eagle Drive, Anaheim, California 92807, (714) 630-3714.



New Main Line Passives for C-COR Electronics

C-COR Electronics exhibited its new main line passives at the Western Show in Anaheim. These devices included splitters for two-, three-, and four-way and directional couplers with 8, 12 and 16 dB values.

The splitters and directional couplers have outstanding electrical performance characteristics with particular attention for performance down to 5 MHz. RFI integrity is ensured via a separate metal gasket. All capacitors are 500 volt minimum rating to ensure freedom from lightning and power surge damage. AC power can be blocked simply without changing the electrical characteristics.

The mechanical configuration of the unit is a new die-cast aluminum housing of corrosion-resistant alloy #A-360. Also available as an option is corrosion protection by chemical conversion coating to spec. Mil-C-5541 (such as alodine and iridite).

There are extended bosses for each coaxial input with a retention lip for the use of heat shrink tubing. The housing is long enough to allow splicing of the device on existing cable without cable extension devices. Up to one-inch diameter cable can be accommodated. The stainless steel cover bolts are

Feedforward Amplifier from Century III

Century III had a live demonstration of the improvements that could be achieved using feedforward techniques in the trunk amplifier. The 3100 feedforward amplifier essentially provides a 20-25 dB improvement in distortion out of a trunk amplifier at the same output levels of older amplifiers operating at the same output levels.

These amplifiers are designed for long-haul super-trunk systems or for high-level distribution applications. This series of trunk amplifier stations provides a wide range of capabilities within a 45-300 MHz bandwidth.

The feedforward amplifiers combine the latest advancements in integrated circuits, coupled with a method of noise and distortion cancellation, to

provide reliability and stability throughout a wide temperature and frequency range. The ability to cancel the distortion products of the amplifier allows the implementation of long coaxial cable systems while still maintaining a quality signal at the far end.

The modularized construction affords numerous amplifier configurations within the eight-port housings and allows easy upgrading—from the standard Century II modules to the feedforward-type modules. A universal plug-in motherboard accommodates combinations of trunk bridger, intermediate or terminal functions in both the MGC and AGC modes.

A built-in AC power inserter is incorporated in all 3100 series housings to provide RF integrity and economy in system design. Also, signal levels are maintained by AGC and ASC circuits,

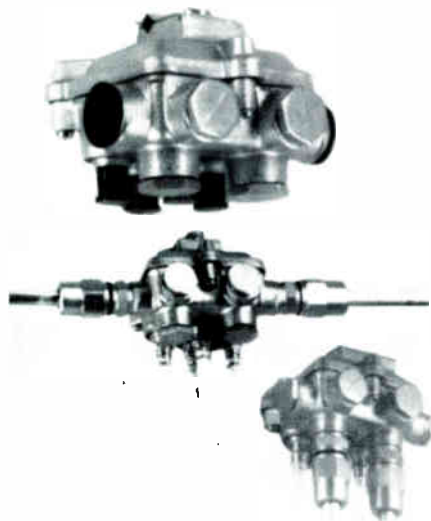
captive and a pivot bolt allows the cover to swing open but holds the cover captive.

For additional information, contact Jim Palmer at (814) 238-2461.

RMS Features Econotaps, Directional Couplers And Hybrid Splitters

RMS Electronics has introduced several new products at the Western Show. Leading off these new products is the Econotap™ series of two- and four-way inline power passing multi-taps. Suitable for both aerial or underground installations, the Econotap™ series is an inexpensive, yet high quality tap featuring 5/8"-24 threaded aluminum cable input and output entry ports on the bottom plate so that standard VSF or chassis pin-type connectors may be used for direct pedestal mounting.

The Econotap™ units have a 5-300 MHz frequency range, 75 ohm impedance at all ports and six amps (nominal) power passing with fixed dB values. Additional input and output feed-thru coaxial cable ports are located on either side of the housing for aerial strand mounting.



Other new products from RMS include the Aqua-Proof series of non-power passing two-, three- and four-way hybrid splitters suitable for 1/4-inch messenger strand mounting.

These splitters are well suited for use with pressure taps for multiple hook-ups from a single subscriber tap.

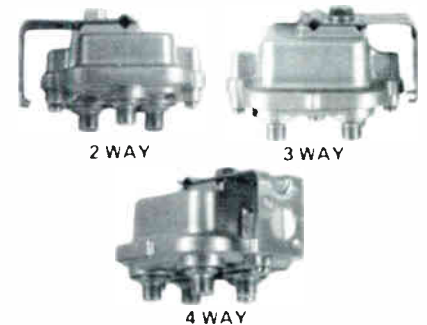
Permatite™ moisture seals are built into each F-61A terminal for total moisture-proof resistance against connector leakage or internal drop-cable water migration. These units can be attached to the sides of buildings or poles. An added feature is that this dual purpose series has all F-61A terminals in a downward position located on the bottom plate.

RMS also introduced the model CA-2090/M series of miniaturized right angle directional couplers. These units are designed for use in electrical wall boxes as small as 1-1/2-inch in width or where right angle configuration makes cable connector installations easier. Suitable for indoor/outdoor use, the totally shielded weatherproof housing is die-cast with chromate plating. The unique design of these directional couplers has both the feed-thru input and output terminals located on the top of the housing with the extra long tap terminal positioned as a right angle on the side of the housing. The CA-2090/M series has a 5-300 MHz frequency range, flat response within ± 1 dB, 75 ohm impedance at all ports, 27 to 35 dB isolation (depending on dB value) and a minimum return loss of 20 dB.

Also introduced at the Western Show are the Raceway Mini-Midget two- and three-way non-power passing directional couplers. All units have total RF shielding.

Adaptable for both indoor and outdoor use, the Raceway Mini-Midget series couplers and splitters are shaped to fit into most plastic or metal moulding ducts for apartment house, educational, hospital, industrial, office, etc. installations. These devices also eliminate the necessity of laboriously pulling coaxial cables through walls and ceilings of multiple installation construction.

For more information on these new products, write to RMS Electronics, Inc., 50 Antin Place, Bronx, New York 10462, or call toll-free, (800) 223-8312.



Scientific-Atlanta Upgrades Line Extender

Scientific-Atlanta series 6500 line extender has been upgraded to allow a cable operator to increase gain by simply changing a hybrid chip. This method allows the cable operator to extend service to new homes that are built in his system by changing a small hybrid chip rather than adding a more expensive module or line amplifier.

Also new from S-A is the model 68-14 Combining Network that provides CATV operators with an efficient, labor-saving method of connecting the signal outputs of a CATV headend to the distribution trunk cable.

The Combining Network consists of a series of directional couplers that provide 14 input ports. All inputs are accessed from the rear. Four feed-through connectors are provided.

For further details, contact Scientific-

Atlanta, Inc., 3845 Pleasantdale Road, Atlanta, Georgia 30340, (404) 449-2000.



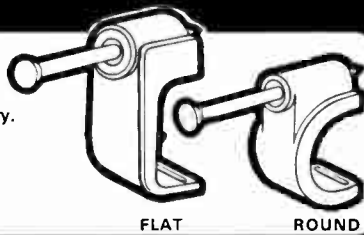
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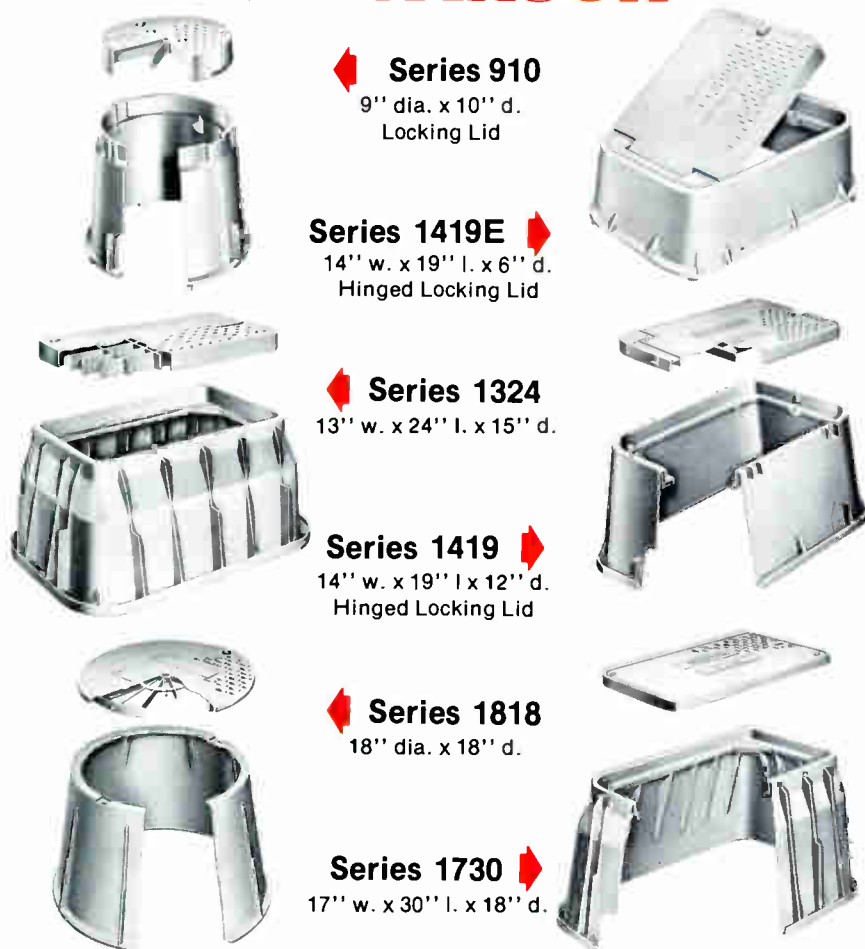
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New Products from TEST at Western Show

In Anaheim, TEST Inc. presented a new addition to its popular residential/commercial MDS downconverter line—the "Mini-Combo" model MDSC-MC.

While retaining the sensitivity of the MDSC-FB and MDSA-36 package, the size of this new antenna-downconverter combination has been reduced to a lightweight, convenient single package of only 10" x 5-3/4" x 4-3/4".

Designed specifically for high and medium MDS signal reception areas (up to 15 miles from the transmitter), the small size contributes to low wind loading.

TEST also introduced the model SB-1 scramble booster amplifier. Because apartment and hotel MATV systems often require input levels in excess of one volt for signal distribution, TEST has provided the 15 dB scramble booster amplifier.

The broad bandwidth and low distortion characteristics of this amplifier makes it useful in other headend applications. The internal power supply is highly filtered to maintain high isolation from the AC line.

This amplifier features the following specifications:

Gain	16 dB
Bandwidth	50-300 MHz
1 dB compression point	+76 dBmV
Impedance	75 R, 16 dB return loss
Power consumption	6 watts

For more data, contact TEST Inc., 16130 Stagg Street, Van Nuys, California 91406, (213) 989-4535.



(Cont'd on page 34)



1925 "A" Street,
La Verne, California 91750
(213) 339-3617 • (714) 593-2112

Out In Front...

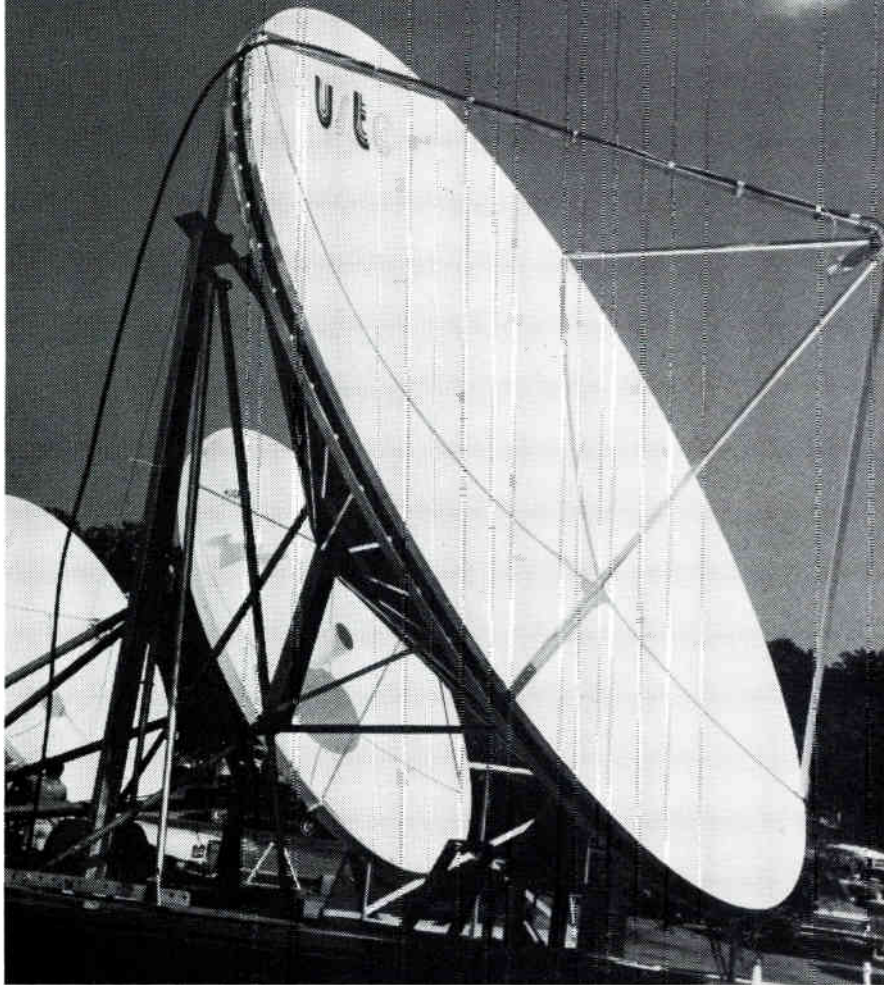


PHOTO BY JAY CONRAD STUDIO

Because We Have The Most Cost-Effective TVRO Terminal Available Today!

A recent study of FCC data provides the proof that USTC six meter TVRO terminals cost less-per-channel to construct than any other large terminal available. Cost-per-channel delivered is the best way we know to compare competitive terminal prices. Cost-per-channel delivered takes in all factors . . . the cost of the antenna (installed), the cost of the LNA and the cost of the receivers provided. **FCC published data proves it!**

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**United States Tower and Fabrication Company
P.O. Drawer 'S', Afton, Ok. 74331**

Call Danny Weathers at 918/257-4257.

(Cont'd from page 30)

TRW Features Amplifiers

TRW RF Semiconductors offers a varied line of high-reliability thin-film hybrid amplifiers utilizing an all gold metalization system.

The model CA-2800 linear hybrid amplifier is designed for wide bandwidth linear operation in 50 to 100 ohm systems. This hybrid provides excel-

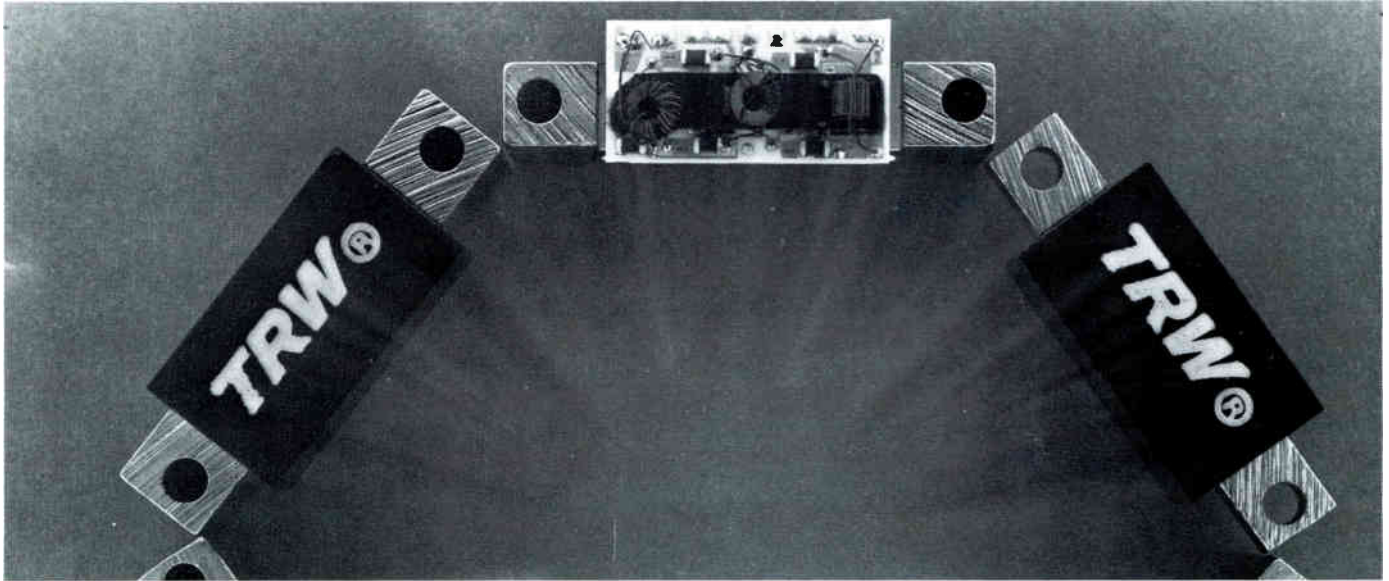
lent gain stability with temperature and very low distortion due to push-pull amplifier circuitry. This module is recommended for wide bandwidth, low noise and linear applications.

Specifications for this device are 800m W power output, 17 dB gain, 400m W PEP @ -32 dB IMD, instantaneous bandwidth—10-400 MHz and a low noise figure of 5 dB.

The latest model from TRW is the

CA-2880R thin film RF linear hybrid amplifier. Key features of this product include: low profile package, 1.5W DC power consumption, 3 dB noise figure, 22 dB gain (low distortion), +36 dBm third order intercept and low VSWR

For additional information on TRW's entire product line, contact TRW RF Semiconductors, 14520 Aviation Blvd., Lawndale, California 90260, (213) 679-4561.



Test Equipment/Power Supplies

ComSonics® SJ200 Sniffer Junior

The ComSonics® SJ200 series "Sniffer Junior" are solid state, dual conversion receivers operating at 217.25 MHz and 108.625 MHz (other frequencies available at special request). These leakage radiation detection receivers are designed for use with ComSonics® model ST300 signal sources. The "Sniffer Junior" is battery operated and equipped with a self-contained antenna and an audio transducer. It is housed in a high impact plastic case and protected against vibration and shock. The "Sniffer Junior" is extremely small, lightweight and designed to be carried in a coat or shirt pocket.

The "Sniffer Junior" uses self-contained, sealed, micro-circuits designed and supplied to ComSonics® to perform the complex functions required for VHF leakage radiation monitoring. Each of these miniature

modules replaces the large number of discrete components normally needed to perform this task. Aside from the obvious space and weight advantage, microcircuits also enhance basic receiver reliability and simplify maintenance.

For more data, contact ComSonics, Inc., P.O. Box 1106, Harrisonburg, Virginia 22801, (703) 434-5965.



New Power Supply From Sawyer Industries

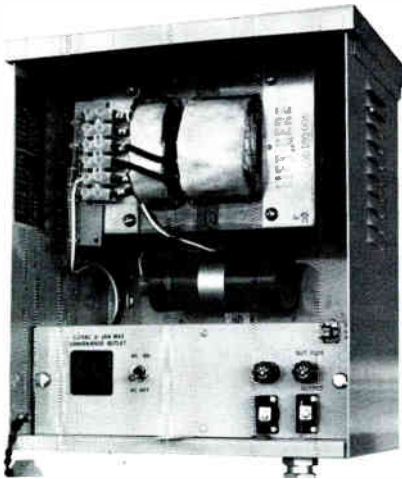
Sawyer Industries has introduced a new CATV power supply, model 1200, that offers a multitude of voltage/current combinations and options.

This unit delivers a full 14 amps of current at 60 volts. All circuitry is fully protected by circuit breakers. This protection, combined with overload and transient protection, makes damage to the unit virtually impossible. Plug-in modular construction makes mounting fast and eliminates field servicing.

Specifications for the unit feature: input voltage—90-135 RMS, 60 Hz; output voltage—57-60 volts RMS, 74 volts peak, 60 Hz from 25 percent to 100 percent of maximum load; output power—360 or 720 V A maximum with a minimum factor of 0.8 leading or lagging. Overload protection for the 1200 feature units that will operate into any load up to a short circuit without

damage, and efficiency is 80 percent minimum.

For additional information, contact Sawyer Industries, Inc., 5649 Peck Road, Arcadia, California 91006, (213) 442-5981.

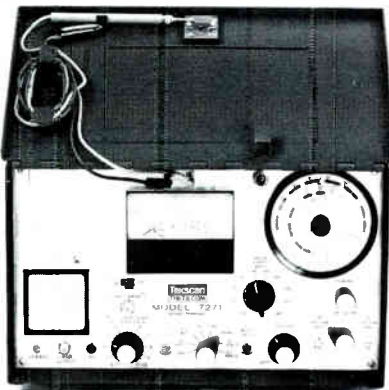


Texscan Features Top-of-the-Line Test Equipment Products

At the Western Show, Texscan presented its line of test equipment, from spectrum analyzers to microwave converters.

One of the newest spectrum analyzers from Texscan, model VSM-5A, is a second generation battery-operated, portable unit that features laboratory performance. The VSM-5A also features digital storage interface, an internal level calibrator, battery saver circuitry and a standard rechargeable gel battery for up to three hours operation on a charge. The unit is contained in a ruggedized housing for field use.

Also featured at the show was Texscan's model 7271 signal level meter. This SLM is a frequency selec-



tive voltmeter covering the range of 5-216 MHz. Optional coverage of 210-300 MHz and 450-960 MHz is available via plug-in adapters.

The 7271 features a new "true peak" detector, patent pending, for outstanding accuracy regardless of modulation levels. Typical accuracy is ± 0.5 dB. The unit also features a 90 dB rotary attenuator permitting measurements from -40 dBmV (98.8 dBm, 10 μ V), to $+70$ dBmV (+21.1 dBm, 3V).

The 7271 is a rugged, field portable unit incorporating nickel cadmium batteries to provide in excess of eight hours continuous use. This unit features a 600 kHz IF bandwidth and 46 dB rejection of adjacent TV sound carrier levels.

Texscan's new microwave down converter is a three-band device de-

signed specifically for CATV service. The MDC-3 permits the use of any field strength meter or spectrum analyzer to perform measurements in three microwave bands: MDS (2.1 GHz), TVRO (3.7 GHz), and CARS (12.7 GHz).

The MDC-3 is a small, lightweight, portable unit capable of AC or DC powering or direct powering from Texscan's portable spectrum analyzers. The optional bandpass filter kit adds increased accuracy and usefulness to the MDC-3. By utilizing these filters and a VHF/UHF sweep generator, a microwave sweep signal can be generated.

For more information on Texscan's complete product lines, contact Texscan Corporation, 2446 N. Shadeland Avenue, Indianapolis, Indiana 46219, (317) 357-8781.



Standby Power for LNAs From U.S. Tower

A new efficiency-type battery powered floating standby unit for low noise amplifiers, the BPS 1208, has been introduced by United States Tower Company.

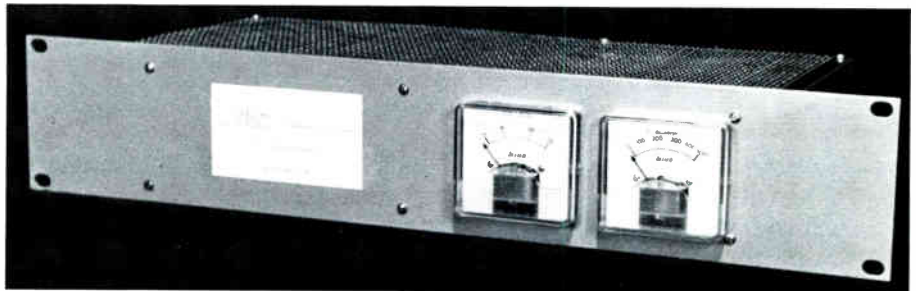
The new unit features constant voltage to LNA's and satellite earth stations from non-corrosive Gell Cell batteries kept at peak voltage by a constant trickle charger.

The standard 3-1/2" x 19" rack

mount power supply has output voltage under full charge at 13.8 volts DC, with a maximum output current of 500 milliamps. Standby capacity is 24 hours at 300 mA and 48 hours at 150 mA. Required input power is 105 to 125 volts AC, 60 Hz.

Other features of the unit include two separate meters for output voltage and current, and one amp "slo blo" fuses for the AC input and battery.

More information is available from United States Tower Company, P.O. Drawer S, Afton, Oklahoma 74331.



Wavetek Unveils CATV Sweep Recovery System

Wavetek Indiana has unveiled its new model 1855/1865 sweep recovery system that makes full use of microprocessor technology and a unique new processed sweep technique to provide a combination of accuracy, resolution and ease of operation for frequency response measurements. This revolutionary system virtually eliminates subscriber interference. Routine performance tests/adjustments, FCC proof-of-performance flatness tests and troubleshooting can be accomplished day or night.

In addition to reliable performance, the system offers the following standard features: minimum front-panel con-

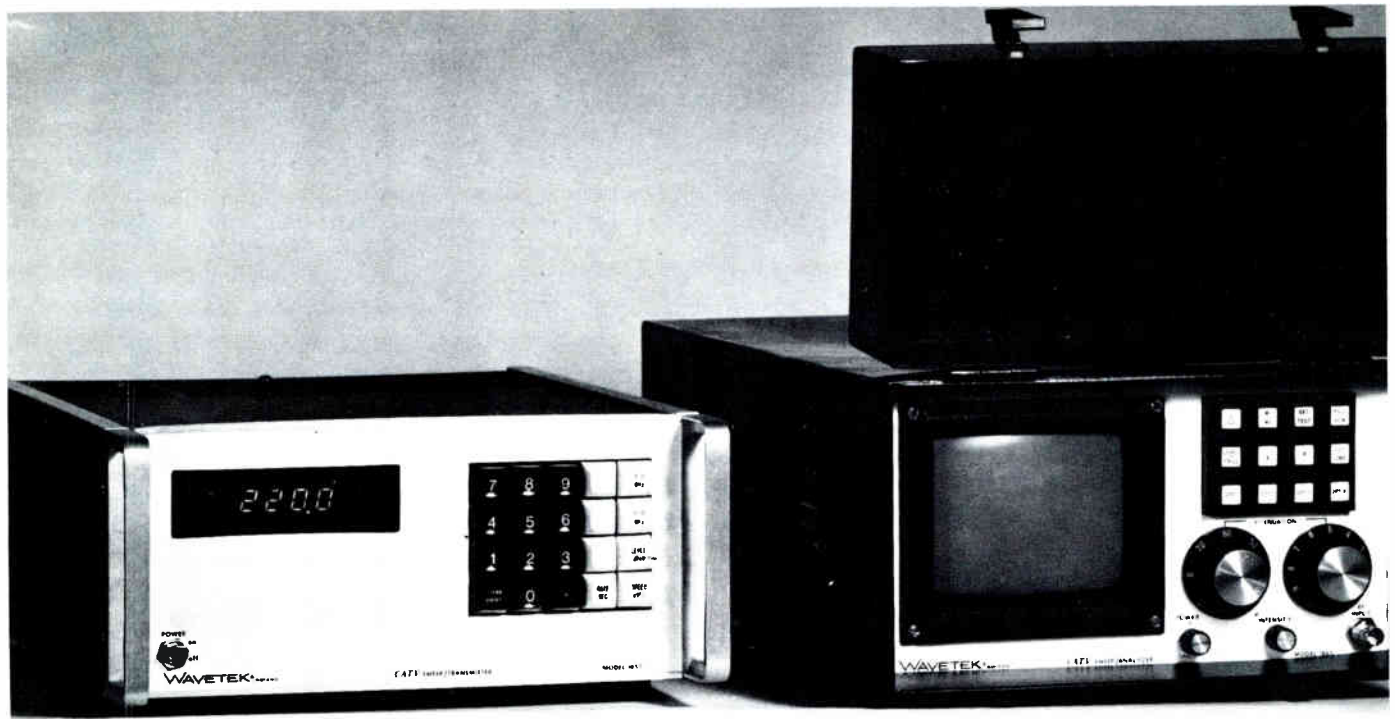
trols, digital storage and refreshed display, alpha-numeric readout and a battery-saver.

The Wavetek processed system incorporates a sweep transmitter and a sweep analyzer.

The model 1855 is a microprocessor-controlled bench or rack-mounted sweep transmitter. Using the front panel keyboard and the LED readouts, it takes only about 20 seconds for the operator at the headend to enter the desired output level, sweep duration, sweep repetition rate and start/stop sweep frequencies into the 1855. A microprocessor board in the 1855 stores and automatically transmits the entered data (on a phase modulated, 50 MHz pilot carrier, operating 20 dB below the sweep output level).

The model 1865 sweep analyzer is a portable, battery-operated unit packaged in a high impact plastic case. This unit features microprocessor technology, digital storage, refreshed display, alpha-numeric readout, a unique moveable cursor measurement system and a battery-saver circuit. This analyzer receives the transmitted signal from the model 1855, decodes the phase modulated pilot carrier, and instantly and automatically presets itself for the sweep duration, sweep repetition rate and start/stop sweep frequencies that were entered into the model 1855 at the headend.

For additional information, contact Wavetek Indiana, Inc., 66 N. First Avenue, Beech Grove, Indiana 46107, (317) 783-3221.



Earth Station Equipment

Technical Paper on Tones From Channelmatic

A free technical paper describing the use of dual-tone multi-frequency (DTMF) tones for automation of satellite receiver terminals is available to satellite program distributors and earth station operators from Channelmatic, Inc.

The paper covers the use of tones and various switching and control equipment to perform signal switching and receiver channel changes at the receive-only location. Particular em-

phasis is placed upon the tone makeup, reliability factors, decoder design perimeters and real-time auxiliary control. The material should be of primary interest to CATV systems seeking automated control of pay-TV programs such as HBO and Madison Square Garden.

For a copy of the technical paper and information on related TVRO automation products, send a request on company letterhead to: Channelmatic, Inc., 2232 Lindsay Michelle Drive, Alpine, California 92001, (714) 445-2691.

Comtech Highlights Five-Meter TVRO System

At the Western Show, Comtech featured its top-of-the-line five-meter satellite TVRO antenna system. Designed specifically to meet the growing demand for small, economical antenna systems for TV receive-only and special application satellite communication earth terminals, the model 807-6-5M antenna system offers a combination of high efficiency and compact packaging.

The system consists of a five-meter

parabolic reflector, prime focus button-hook feed, and an elevation/azimuth mount which provides adjustments in latitudes from 0 degrees to 360 degrees and elevations from 10 degrees to 60 degrees.

The reflector is a solid surface heavy duty structure five meters (16 feet) in diameter with a focal length of six feet. Construction is of high strength, corrosion resistant fiberglass.

The dual-polarized high efficiency button-hook feed is located at the prime focus of the reflector and is supported by tension cables attached to the outer rim of the antenna. The input to the feed is through a polarization rotation plate which permits a 90 degree rotation of the feed to change polarity. When the optional low noise amplifier is supplied, the input connector is type "N" female.

For additional data, contact Comtech Data Corporation, 15207 N. 75th Street, Scottsdale, Arizona 85260, (602) 991-9580.



Channelque® Introduced By Gardiner

A new programmable earth station switcher, Channelque®, was introduced at the Western Show by Gardiner Communications. The device can provide video messages during non-programmed hours, protect against carriage of unauthorized programming for network non-duplication and syndicated exclusivity protection.

Channelque® is programmed with a ten-key pad using the digital clock on the master panel. The clock is equipped with standby power, and an LED

display shows the switching time, day, channel number and program source.

Features of the unit's switching capability include being crystal controlled, independent modules and a ten channel capacity. It can switch to an internal color character generator, another satellite receiver or another video/audio source.

Display of the unit is page-by-page and front panel switchable. Video is output color, one volt peak-to-peak.

For more input, contact Gardiner Communications Corporation, 2000 South Post Oak Road, Suite 1490, Houston, Texas 77056, (713) 961-7348.

AML Products Featured By Hughes Microwave

The Hughes Microwave exhibit at the Western Show featured its AML receiver redundancy system, AML multi-channel transmitter outdoor receiver, and a high-power AML transmitter array.

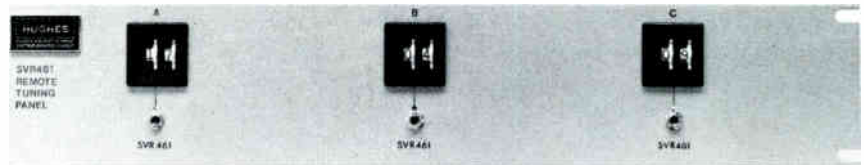
Hughes also introduced two of its latest ancillary products for its SVR-461 satellite video receiver.

The new tuning panel provides for remote selection of satellite channels for up to three receivers, thus allowing maximum utilization of the capabilities of the SVR-461. The receiver is a 24-channel unit used by CATV systems operators in the distribution of satellite-transmitted television programming.

The remote panel may be operated in one of two ways. When used with an automatic timing device, a relay closure switches the receiver to the channel showing on the remote panel. When used with the SVR-461 selector in "R0" position, the operator can change to any channel via the remote unit.

Also used in conjunction with the Hughes' satellite video receiver that provides a composite baseband (0 to 8 MHz) output, the FM demodulators will retrieve those additional signals appearing on Satcom I. Features include crystal control, modular construction and the latest integrated circuit design.

For further data, contact Hughes Microwave Communications Products, P.O. Box 2999, Torrance, California 90509, (213) 534-2146.



Cable Equipment

Belden's New Cable Guide

Belden Corporation has published a new 20-page illustrated guide featuring the selection and use of CATV coaxial cables, including dual, flooded and messengered cable.

Over 60 variations of RG 59/U-type and RG 61U-type drop cable plus converter and accessory cable are cataloged. In addition, a number of alternate shielding methods are described that enables matching the cable to its operating environment.

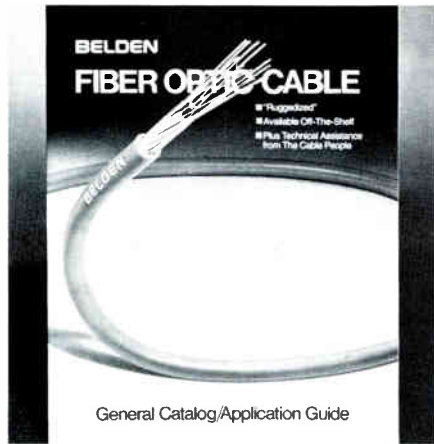


Also presented by Belden's Fiber-optics Group is a four-page brochure of standard fiberoptic cables for light-wave communications applications. This catalog/application guide provides specifications on standard cables with 1, 2, 6, 12 and 18 fibers.

Three basic product groupings are described in the fiberoptics brochure: a series utilizing graded-index fibers with 62.5 um core diameters for applications requiring wide bandwidth characteristics over long distances, and two series of cables using plastic-

clad silica fibers in core diameters of 200 and 300 um for easier coupling and greater strength.

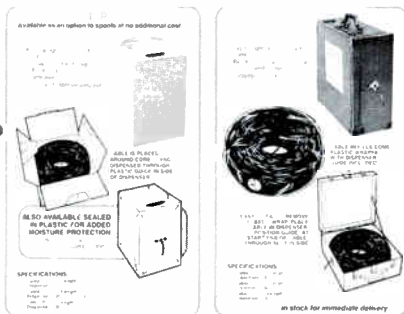
For additional details on this literature, contact Belden Corporation, P.O. Box 1327, Richmond, Indiana 47374, (317) 966-6681.



Cerro's Reeless Cable Dispensers

Cerro Communications has introduced reeless EZ cable dispensers—a convenient and functional method to transport and dispense cable. This new product is easy to carry, store and use. The dispenser remains stationary—eliminating problems caused by spools rolling out of position and unwieldy reeling devices.

The cable, available packed with RG-6, RG-59 or other CATV/electronic coaxial cable sizes, pulls out easily and stops immediately when pulling action stops. Encasing the cable also protects it and keeps it clean.



The reeless EZ cable dispensers are available in disposable and reusable types. The disposable type is offered as an option to spools at no additional cost.

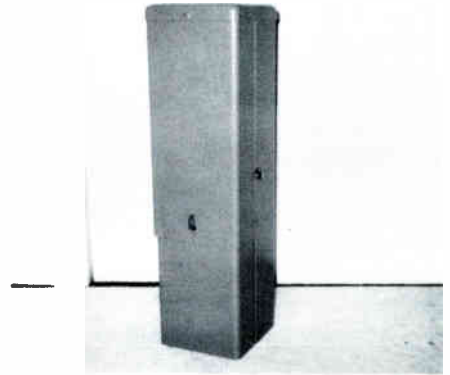
For additional information, contact Cerro Communication Products, Halls Mill Road, Freehold, New Jersey 07728, (201) 462-8700.

Intercept Unveils Metal Cable Enclosure

Intercept Corporation recently unveiled its metal cable enclosures at the Western Show. The pedestal is a low silhouette design, furnished with a padlock hasp, and made from heavy gauge hot-dipped galvanized steel.

The pedestal undergoes a three-part phosphatizing process and also goes through a 365-foot Ramsburg electrostatic painting system.

The size of the pedestal is 5 3/4"W x 5 3/4"D x 20"H. Mounting hardware can be used with either a 24- or 42-inch long anchor post (optional) depending on local soil conditions.



For more information, call or write Intercept Corporation, 140 Delawanna Avenue, Clifton, New Jersey 07014, (201) 471-9050.

Signal Vision Develops New Coring Tool

Signal Vision, Inc., has developed a new coring tool for coring all sizes and types of aluminum cable. Special features of these tools include a delrin plastic body for long life, insulated auger to stop shorting and interchangeable handles for cutting ease and economy.



Additional data may be obtained by writing or calling Signal Vision, Inc., 23011 Moulton Parkway, C-4A, Laguna Hills, California 92653, (714) 586-3196.

Security/Converters

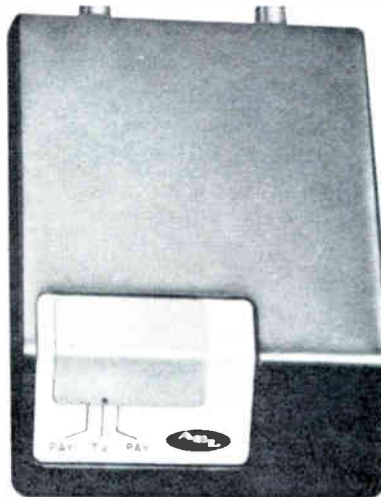
Descramblers from AEL

New at the Western Show from AEL are competitively priced scramble/descramble systems. The AEL-D descrambler is an on-channel scramble/descramble system that can be used on any channel of either a 12-channel system or in conjunction with a converter.

Also introduced by AEL is its dual-

channel converter unscrambler, model AEL-DCU. This unit is designed for the fully-loaded, 12-channel system. The AEL-DCU converts and unscrambles two midband or superband, non-adjacent channels to a lowband channel.

For additional details on these products, contact AEL, P.O. Box 552, Lansdale, Pennsylvania 19446, (215) 822-2929.



New Addressable Taps From Delta-Benco-Cascade

In Anaheim, Delta-Benco-Cascade unveiled its IT-1G loop through intelligent pay trap and its second generation of addressable taps designed with six outputs.



The new IT-1G pay trap is well suited for hotels and motels where basic service is provided free and a pay channel can be controlled locally from within the premises or remotely, from a central location via a cable system. The device can render a specified television channel unintelligible, without affecting other signals.

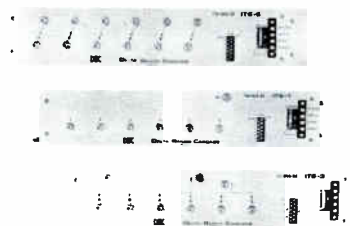
There is no need to rewire loop systems using the new IT-1Gs and the standby memory power maintains system condition during AC power outages. Each IT-1G can be monitored

to verify correct operation and tampered units can be detected.

D-B-C also introduced the IT-6, a unit with six independently switchable outputs. The IT-6 intelligent tap also furnishes six independent control voltages for operating external pay traps or slave taps.

The IT-6 can be used as a system building block. It can be configured to switch a number of different inputs to a multitude of outputs in an unlimited fashion, providing control of multiple pay, MATV and CATV services.

Other features of the IT-6 include RF/IF switching, all ports matched when either on or off, and custom LSI logic control with parity checking for reliable control.



For further details, contact Delta-Benco-Cascade, Ltd., 124 Belfield Road, Rexdale, Ontario, Canada M9W 1G1, (416) 241-2651.

Three-Channel Block Converter Descrambler From Magnavox at the '78 Western Show

At the '78 Western Show Magnavox featured its crystal controlled model MX-BCCD three-channel block converter descrambler. This unit features one pay channel plus two standard channels, or two pay channels plus one standard channel with two pilot carriers.



For more input, write Magnavox CATV Systems, Inc., 133 W. Seneca Street, Manlius, New York 13104.

Magnavox Addressable Taps

Prior to the Western Show, Magnavox introduced its line of addressable taps. These taps may be installed in only a system's trouble area alone, and provide instant, centralized control of major management problems—excessive churn, delinquent receivables and illegal connections.

The Magnavox system utilizes only as many addressable taps as needed and is controlled by a word processor generator.



As a special offer for the Western Show, Magnavox is selling four output taps at \$50 (\$12.50 per port).

For more data, contact Magnavox CATV Systems, Inc., 133 W. Seneca Street, Manlius, New York 13104.

Jerrold Features StarPack Line at Western Show

Jerrold Electronics Corporation featured its StarPack line of security pay-TV products in Anaheim. The StarPack pay-TV security system provides a complete system equipment concept with low cost, signal security, equipment security with outdoor descramblers and compatibility with existing CATV systems.

StarPack equipment for the subscriber consists of two units: the outdoor descrambler, model SRD-*; and the indoor control unit, model SC or SCCU. The scrambled pay-TV signal is developed at the headend using the scrambler, model SSE-200* in conjunction with a standard modulator.

Attention focused on Jerrold's new SCCU midband indoor control unit. Functionally the same as the model SC, this new unit can be used to add one or two scrambled channels to a fully loaded 12-channel system, or can be used as a stand-alone pay-TV converter.

The model SC is a simple, attractively styled, two-level indoor control unit that provides power to the descrambler. Communication between the two units occurs over the interconnecting RF drop cable along with passage of CATV system signals into the home, so that it is unnecessary to add any control wiring for the descrambler. The control unit provides pushbutton selection of the A, B or standard modes of operation in accordance with the type of descrambler installed externally.



For more input, contact Jerrold Electronics Corporation, P.O. Box 487, Hatboro, Pennsylvania 19040, (215) 674-4800.

Oak Presents New Moduline Converter

The CATV Division of Oak Industries Inc. has introduced Moduline Thirty, a high performance 30-channel converter housed in an attractive and economical package. The new converter has manual fine tuning that incorporates capabilities previously

found only in higher priced units. This compact converter costs little more than many block converters, but offers subscribers all of the benefits of a premium selective converter.

Moduline Thirty is the first of a new series of modular converters to be introduced by Oak during 1979 and 1980. According to Dean Bach, vice president of marketing for Oak's CATV Division, "Moduline Thirty is the most economically priced 30-channel varactor, channel by channel converter on the market today. It is particularly suited for small system operators," Bach emphasized, "who want to economically add more channels."

This new converter enables cable system operators to furnish subscribers with broadcast signals, time, weather, news, stock options and local origination programming.

All 30 channels are carefully aligned and checked to assure accuracy of channel tracking. The voltage control circuitry has been designed to withstand the effects of extreme humidity and temperature variations, and a large knurled thumbwheel control permits easy fine tuning adjustments by subscribers.

Oak's Moduline Thirty features an easy-to-read rotary switch channel selector which is resistant to dust and spills. Because the Moduline Thirty is a varactor diode tuned converter, the rotary switch selects DC voltages only.

Developed over one and one-half

years, the converter uses advanced electronic technology to ensure greater frequency stability. With a noise figure of 13 dB, the unit compares favorably with the industry norm.

Moduline Thirty is priced at \$37.50



years, the converter uses advanced electronic technology to ensure greater frequency stability. With a noise figure of 13 dB, the unit compares favorably with the industry norm.

With input levels of from -6 to +20 dBmV, the unit's wide dynamic range

per unit in 5,000 lot quantities and will be available after January 1, 1979 with a 90-day lead time.

For more information on Oak's products, contact the Oak CATV Division, Crystal Lake, Illinois 60014, (815) 459-5000.

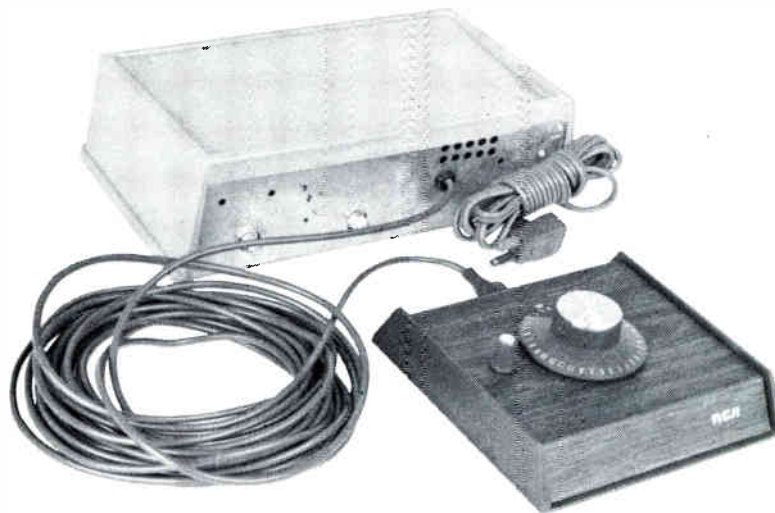
RCA Introduces Converters, Taps and Passives

RCA Cablevision Systems introduced several new products at the Western Show. Highlighting these units is RCA's model SCMC 36-channel set top converter.

The SCMC is designed for use at the cable subscriber's television receiver. It features a unique, high reliability rotary switch channel selector with only one moving contact. With this unit, the RF is not switched, only the varactor bias voltage.

This converter is available in both one-piece and cord remote versions; the latter can be mounted behind the TV set and operated with a small handheld control unit. Protective pads on the converter prevent marring. The power and control cords have strain relief bushings and a 25-foot cord is supplied with the remote model. A convenience outlet is provided on the converter power cord plug which can be utilized for plugging in the TV set.

RCA also introduced into its line of passive components a wide range of subscriber taps and trunk passives for cable system applications.



RCA subscriber taps are available in two-, four- and eight-way units and are used in the feeder line to distribute the signal to the subscriber.

RCA trunk passives include directional couplers in 8, 12 and 16 dB values, two- and three-way splitters and a power inserter. The directional couplers and the splitters are used for splitting the main trunk lines in a cable system into sub-trunk lines. The power

inserter combines the AC power with the RF signal onto the coaxial cable.

RCA passive components feature a low insertion loss and a high isolation between taps and from output to taps. A full frequency range of 5-300 MHz can be operated. In addition, an interlocking RFI flange exceeds FCC required performance for radiation and eliminates the need for a conductive RFI gasket.

Sylvania Introduces Three-Channel Descrambler Option For its 40-Channel Converter

Sylvania has announced the January 1979 introduction of the model 4021 descrambler option for its model 4041, 40-channel converter. The descrambler circuitry, providing from one to three channels of decoding, is designed to fit into the existing RF processing package of the model 4041 converter.

The model 5300 headend video scrambler unit utilizes a synch-suppression technique and is unique in that the timing information is frequency modulated onto the reference carrier. This feature provides for approximately 85 dB of dynamic range at the receiver/descrambler unit. The timing information for three scrambled channels can be carried in a 3.75 MHz bandwidth. The encoding circuitry in the scrambler unit is digital, allowing for simple adjustment of the phasing of the timing information at the headend using rotary switches.

For more information, contact Ray Pawley at GTE Sylvania CATV Operations, 10841 Pellicano Drive, El Paso, Texas 79935, (800) 351-2345 or (915) 591-3555 in Texas.

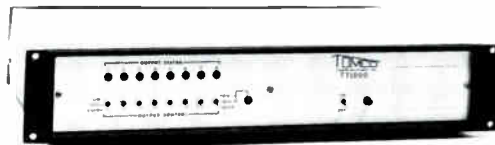
Tomco's Touch-Tone® Decoder

Tomco's TT-1000 Touch-Tone® decoder provides switch functions from satellite signals. Home Box Office and Madison Square Garden are sending signals to indicate program start and stop. MSG is also indicating commercial start and stop times. The

TT-1000 decoder detects these tones and provides a SPDT relay contact closure.

Security is provided with a selectable access code. This is a three-number code that may be changed as required.

For more information, contact Tomco Communications, Inc., 1077 Independence Avenue, Mountain View, California 94043, (415) 969-3042.



Vitek Offers Multi-Channel Traps

Vitek Electronics' multi-channel traps are incorporated into negative pay-TV security for systems contemplating more than two premium channels. The multi-channel traps are constructed in the same manner and in the same cable configuration as Vitek's single-channel traps.

The ground rules for using multi-channel traps are the same for single-channel traps (i.e., the lower adjacent

channel must be vacant). Mechanically, instead of using two-wire core (as is done for the single-channel traps), a three-wire core is used. This allows for two channels to be placed side-by-side so that the length of the multi-channel trap will be relatively the same as for a single-channel trap. This side-by-side technique also allows room for twice as many resonators to be used.

For more information on multi-channel traps, contact Vitek Electronics, Inc., 200 Wood Avenue, Middlesex, New Jersey 08846, (201) 469-9400.

Video

Video Filters from Allen Avionics

Allen Avionics has introduced a new line of L-C filters for the video industry. Included are delay equalized NTSC low-pass filters having sharp roll-offs and good passband delay linearity with cut-off frequencies from .1 MHz to 10 MHz.

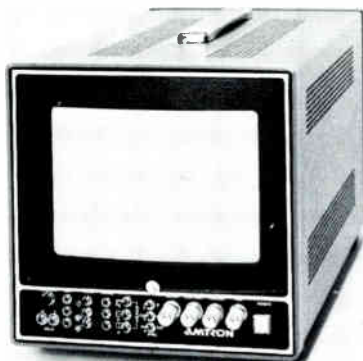
Also available are NTSC reject filters, often used in color systems for monochrome transmission to prevent color flashes from appearing on the screen. Allen Avionics has also introduced an NTSC bandpass filter, a low distortion unit designed to attenuate the luminance information in color TV signals. For more information, contact Allen Avionics, Inc., 224 E. 2nd Street, Mineola, New York 11501.



New ENG/EFP Color Monitor

A new eight-inch single-gun color video monitor from Amtron Corporation is flexible enough for portable field use or studio rack-mounted installations.

The AM-8 is identical in size to the popular Tektronix 1485 video waveform monitor and may be included in a side-by-side mount with that instrument, or two AM-8's may be used together in only 8¾-inches of standard rack mount space.



The AM-8 is equipped with professional features such as switchable A/B inputs, internal/external sync, separate RGB gun switches, plus individual background and gain controls. Horizontal and vertical scan delay (pulse cross) display is optional.

For additional information, call Bill Widera at (408) 688-4445.

Digital Channel Programmer From Arvin

The Arvin Digital Channel Programmer, with non-duplication and multiple channel switching, incorporates the latest in long-life solid state photo-optic scanning and integrated circuit logic. Non-duplication and multiple channel switching is accomplished via simplified programming of a plexiglass disc with 30-minute intervals for a total of seven days.

For additional information, contact Arvin Systems Inc., 1771 Springfield St., Dayton, Ohio 45403, (513) 258-2181.

Chyron Introduces New 3/4-Inch Videocassette Cleaner and Evaluator

The Chyron cassette cleaner and evaluator, CCE model U-1, is a completely automatic, self-contained unit which cleans and evaluates 3/4-inch videocassette tape at a rate ten times faster than real time without altering the pre-recorded signal. The unit removes dirt and embedded particles from tape surfaces, and detects surface and edge damage which may cause VTR head clog and video dropout. A thirty-minute cassette can be processed easily and safely in less than three minutes.



The CCE model U-1 has three modes of operation. The unit can be made to automatically stop on major tape damage only, stop on minor tape damage only, or continue until the entire playing surface of the tape has been cleaned and evaluated. Two LED numeric counters on the front panel indicate the actual tape length in minutes and tenths to 99.9 minutes, and provide a count of accumulated major and minor tape damage.

For additional information, contact Chyron Corporation, Video Products Division, 223 Newtown Road, Plainview, New York 11803, (516) 249-5202.

Colorado Video Reduces Price of Slo-Scan Converter

Colorado Video, manufacturer of the Slo-Scan converter used in UPI's Newstime programming, has announced a price reduction for the converter. Originally costing \$7,500, the Slo-Scan converter now sells for \$6,000. So far, 40 of these units have been sold, and the company anticipates selling a few hundred more units in 1979.

For more information, contact Colorado Video, Inc., P.O. Box 928, Boulder, Colorado 80306, (303) 444-3972.

CRC Electronics' New Cassette Controller

CRC Electronics, Inc. has announced the introduction of the TD-100 Time Delay Cassette Controller. The TD-100 represents the application of digital technology to the flexible control of recording and playback in modern videocassette machines, including the revolutionary Sony Beta-



max machines. The TD-100 is designed to provide any delay from one hour up, in one-minute increments, for any program source, whether it is of a specific duration, or is a 24-hour feed. It provides for resumption of operation after VTRs have been stopped by power failure, as the TD-100's logic is battery protected. Used in conjunction with a suitable array of machines, the TD-100 becomes essentially an "Extended Delay Line" with program material emerging from the system at the desired interval after entering.

For further information, contact Jim Chiddix, CRC Electronics, P.O. Box 855, Waianae, Hawaii 96792. (808) 668-1227.

Datamedia Introduces Communications-Oriented Video Terminal

A new, low-cost, microprocessor-based, communications-oriented video terminal, designed to provide a "new level of reliability" in a range of transaction processing and inquiry response applications, was announced by Datamedia Corporation. The product is the first in a new family of microprocessor-based video terminals from the company.

The newest Datamedia video terminal—the Elite 3025A—is a buffered

Teletype®-compatible CRT terminal with a single-page video memory that displays 1920 alphanumeric characters in a 24-line/80-character format.

The unit provides broad versatility in communications with a data processing system, minicomputer, or other peripherals, accommodating a standard RS232C or optional 20mA current loop interface, and supporting full or half duplex, two- or four-wire, internally or externally clocked, asynchronous communications.

For more information, contact Datamedia Corporation, 7300 N. Crescent Blvd., Pennsauken, New Jersey 08110, (609) 665-2382.

New Ikegami CCTV Camera High in Sensitivity, Resolution, S/N Ratio

A new CCTV camera, the ITC-44, has been introduced by Ikegami as its entry in the current competition for price-conscious surveillance installations. Yet, according to that firm's new CCTV national sales manager, Fred Bergstrasser, the ITC-44 is built to a standard of appearance, low weight and size and performance far above its price class.



The camera needs only 1/10 foot-candle at its 2/3-inch vidicon tube face for an image, which means only 1.2 foot-candles from a standard eighty-nine percent reflectance object. With a silicon-target vidicon, minimum tube face sensitivity is ten times better, or 0.01 foot-candle.

The ITC-44 is available with a choice of pickup tubes that includes Plumbicon, vidicon, separate-mesh vidicon, Newvicon, Chalnicon, or silicon-target vidicon. With gamma correction off, signal-to-noise ratio is better than 44 dB, video bandwidth 6 MHz or better, and deflection distortion less than 2 percent. Drawing only 12 watts, the ITC-44 is available for operation from 117V AC for UL installations as the ITC-44A or from 24V AC for economy installations.

All electronics are ICs. An FET Percival-circuit video amplifier first stage provides the high signal-to-noise characteristic. All semi-conductors are

silicon types. Gamma correction and black clamping extend the image-handling capability and yield clean, clear images of moderate contrast even with backlighting or light flare. Auto-sensitivity control extends the dynamic illumination range to 10,000:1. Auto beam current control compensates for normal aging of the pickup tube.

Further data is available from Ikegami Electronics (USA) Inc., 37 Brook Avenue, Maywood, New Jersey 07607, (201) 368-9171.

Dynasciences Introduces High Resolution Video Enhancer

Dynasciences, a unit of Whittaker Corporation, has introduced a new high resolution video enhancer to its line of television studio equipment. The model 858 is the first video enhancer specially constructed to interface with cameras and monitors operating over a 30 MHz bandwidth at a 1023 line scan rate. The 858 is designed to enhance the clarity and sharpness of an image in both horizontal and vertical transitions.

The new high resolution enhancer has a 30 MHz bandwidth and a signal-to-noise ratio of better than 46 dB. The unit features separate controls for adding up to 12 dB of horizontal and 6 dB of vertical enhancement. Also, an internal coring control, accessible through an opening in the top cover, provides for noise reduction.

The model 858 may be added to any existing high resolution, 1023 scan line system without significant interfacing problems. It requires only a video input and sync input from the camera. For more data, contact Dynasciences, Township Line Road, Blue Bell, Pennsylvania 19422, (215) 643-0250.

Video Noise Meter From Lenco

A video noise meter that utilizes a new principle of noise measurement is available from Lenco, Inc., Electronics Division.

The model VNM-428 is designed specifically for video signal-to-noise measurement requirements of TV studios, CATV installations and microwave system users where portability,

Slow-Motion and Slide-File Broadcast Disc Recorders Offer 10,000-Hour Head Life

Two compact, easily transported, low cost broadcast video disc recorders offering typical head/disc life of 10,000 hours have been introduced by Oktel Corporation.

The model BDR-400 Slow-Motion Disc Recorder provides 30 seconds of real time broadcast-quality color video with continuously variable slow-motion, forward and reverse. The unit also features switchable fixed rates for record and playback, single-field playback, and electronic display of elapsed time with two cue markers.

Oktel's model BDR-300 Slide-File Disc Recorder is capable of storing up to 1200 frame slides, which provide full vertical resolution. The BDR-300 features a "preset/reset" address control that allows heads to be moved to any preselected track with a maximum search time of 3.8 seconds. Up to four fixed-head channels are available as



options to provide program continuity.

For further information, contact Oktel Corporation, 1731 Dell Avenue, Campbell, California 95008, (408) 374-1811.

simplicity of operation and accurate measurements are required.

A major feature of the VNM-428 is its ability to make accurate, real-time signal-to-noise measurements of any composite video signal no matter what the source. The noise meter has a built-



in calibrator that ensures accuracy of ± 0.5 dB throughout the range of 20 dB to 55 dB. The signal-to-noise ratio is calibrated to EIA standards and is shown on a large LED display.

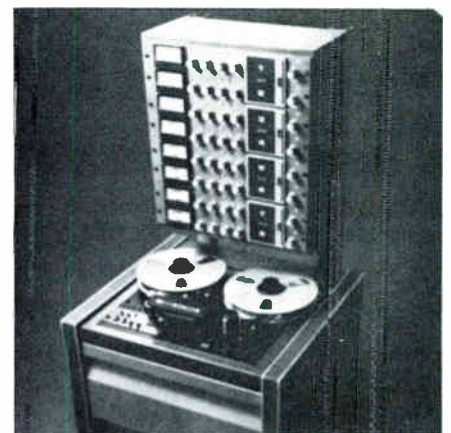
The meter may be used as a portable unit or rack-mounted with an adaptor for side-by-side use with an oscilloscope.

Complete technical specifications may be obtained from Richard N. Lawrence, sales manager, Lenco, Inc., Electronics Division, 300 N. Maryland Street, Jackson, Missouri 63755, (314) 243-3147.

Otari Features Full Function One-Inch Eight-Track

A new one-inch eight-track recorder, said by the manufacturer to be the first full function eight-track machine, has been introduced by Otari. Designated the MX-7800, it is said to sell at a price considerably lower than competing units and to incorporate several operating and convenience features that should prove to be of real value to the multi-channel recording studio.

All functions and operating modes can now be controlled remotely on an optional remote control unit, including



selective reproduce and varispeed. This means that overdubbing on any one or a combination of the eight channels can be controlled from inside the studio by the musicians, for instance, instead of from the control room. As for varispeed, both coarse and fine controls are incorporated in the remote control, to permit changing pitch or precisely matching selection length.

As a complement to the remote control, Otari also offers a remote tape timer with an easy-to-read LED read-out and a return-to-zero feature.

For full information and specifications, contact Otari Corporation, 981 Industrial Road, San Carlos, California 94070, (415) 593-1648.

Multi-Role Lens has Front Units for Standard, Portable Cameras

A multi-role lens that provides a common set of optical zoom lens modules for both standard and portable television cameras is available from Rank Precision Industries, Inc.

The Varotal MRL* permits the user to select lens fronts (wide, narrow or standard) to make up a system tailored to individual needs and budgets, according to the manufacturer.

The Rank lens features a compact objective with a wide specification to meet full professional broadcast standards. Three interchangeable lens fronts give wide angle, narrow angle and standard capabilities with a total focal length range of 56 to 1.

The "portable" MRL was designed basically for use with tripod-mounted portable television cameras and has



manually-controlled focus in addition to optional servo zoom. Portable lens package also offers full optical specifications available in the standard broadcast version.

For additional information, write to Rank Precision Industries, Inc., 260 N. Rt. #303, West Nyack, New York 10994.

Sharp Electronics Introduces Three-Tube ENG Color TV Camera

The Professional Products Department of Sharp Electronics Corporation has introduced a three-tube Electronic News Gathering color television camera that weighs only 12.1 pounds. Suggested user net is under \$5,000.

A key feature of the new camera—model XC-320U—is a rugged, unified moulded housing block which con-

tains the lens, beam splitter, coil assemblies and tubes. The three vidicon tubes are attached directly to the dichroic mirror. As a result of the rugged design of the block, registration problems have been eliminated.

The camera operates at very low light levels (15-foot candles with 6 dB gain switch on), offers a minimum 400 lines horizontal resolution, and a signal/noise ratio of 46 dB.

For further details, call Ed Falk at (212) 683-4900.



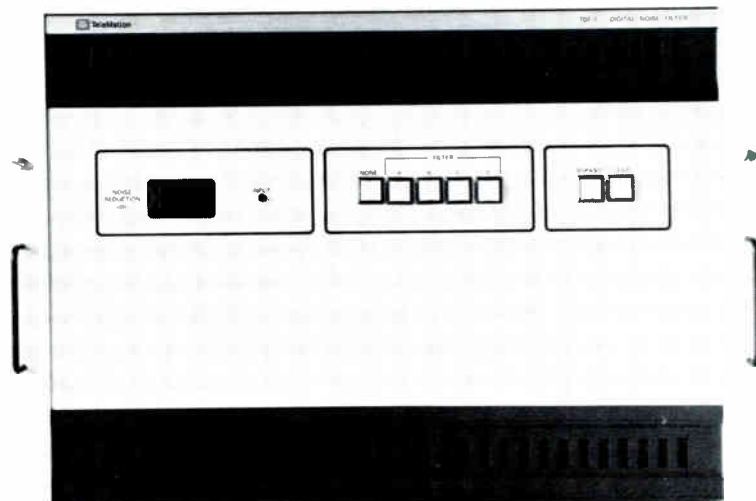
New Video Filter Reduces Noise by 18 dB

The new TDF-1 digital noise filter by TeleMation uses the latest industry sampling standard and state-of-the-art memory components to improve the signal-to-noise ratio of television signals—in some cases by as much as

18 dB—on an element-by-element basis.

The unit is especially useful for SNR improvement of multi-generation videotapes, ENG material and microwave/satellite feeds.

A four-times-subcarrier sampling rate delivers greater bandwidth and resolution than competitive systems



using a three-times-subcarrier rate, while the new charge-coupled-device memory matches the performance of RAM systems at a significantly lower cost.

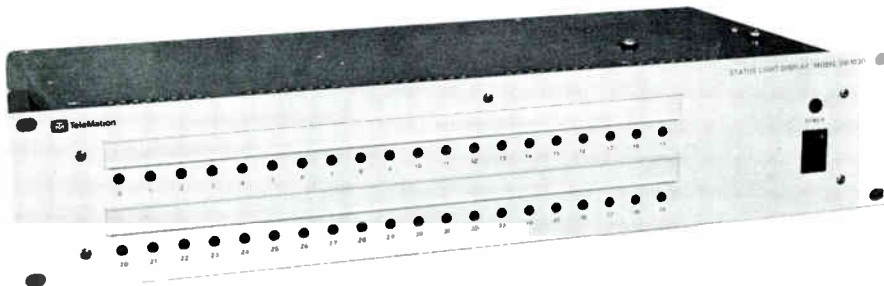
The TDF-1 automatically adjusts itself for high noise reduction on still portions of pictures and lowers the amount of noise reduction in those portions containing motion in order to avoid video lag. This adjustment process is controlled by a programmable read-only-memory (PROM) that can be custom-programmed for special applications.

Included with the TDF-1 are an RS-170A processing amplifier that completely regenerates incoming sync, burst, and blanking; a self-test system; internal genlock; and fail-safe bypass circuits.

TeleMation, Inc., is featuring the SM-1030 status light display, designed to operate in connection with TeleMation's TVS/TAS-1000 video/audio distribution switcher.

The SM-1030 is a tally device which monitors the TVS/TAS-1000 party line and identifies the output users through the use of LEDs. For example, if user number five selects the source being monitored by the SM-1030, number five's LED will illuminate. The identification strip on the front panel allows the operator to appropriately label the corresponding lights for identification of the users. The unit can be modified to display 40, 80 or 100 outputs simply by changing the front panel. It interfaces with the party line by a BNC connector with a standard piece of RG-59 coax. The unit contains an internal dip switch which enables it to be programmed to monitor any source in the system. As an option, a lever wheel switch can be placed on the front panel in lieu of the dip switch to provide easy selection by the operator.

For more input, contact TeleMation, Inc., P.O. Box 15068, Salt Lake City, Utah 84115, (801) 972-8000.



Tomco Offers Automatic Non-Duplication Switcher

Tomco Communications has introduced its model ADS-1000 automatic non-duplication switcher. The unit is available with RF or I F switch and one

or two optional VHF tuners. No manual adjustment is necessary for delay resulting from path length difference.

For further information, contact Tomco Communications Inc., 1077 Independence Ave., Mtn. View, California 94043, (415) 969-3042.



Video-Speed A/D Chip From TRW

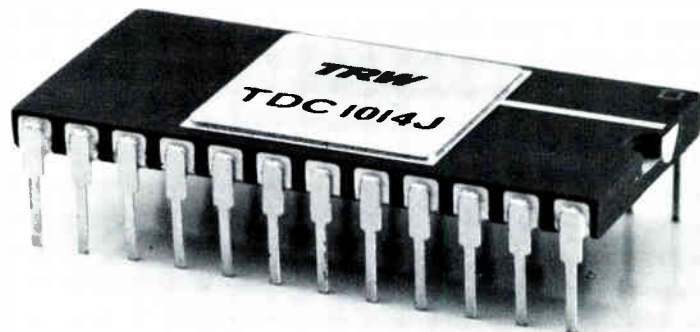
TRW LSI Products has announced the introduction of a new, low-cost, analog-to-digital converter chip that features 6-bit resolution and a 30 MHz sample rate—designated TDC 1014J.

Packaged in a 24-pin ceramic DIP, the bipolar LSI device consumes only 3/4-watt, yet provides high-performance video-speed data conversion without the need for an external

sample-and-hold circuit.

The TDC 1014J requires only a single "convert" command to digitize an analog waveform between zero and -1V. On-chip are 63 strobed comparators, encoding logic and a 6-bit data latch with TTL outputs. Output-mode controls provide either straight binary or two's complement data.

For more information, write to TRW LSI Products, P.O. Box 1125, Redondo Beach, California 90278, (213) 535-1831.



Inserter/Splitter from Vicon Industries

Vicon Industries has announced an addition to their line of video signal equipment. They are now offering the versatile model V270SP TV inserter/splitter. Either of two synchronized cameras can be displayed full screen or adjusted to occupy any portion of the screen by means of the convenient front-panel control. A display switch is used for quick changeover between



camera one, full screen and camera two, full screen and inserted picture/split-screen modes.

For more information, contact Vicon Industries Inc., 125 E. Bethpage Rd., Plainview, New York 11803, (516) 293-2200.

Video Shopper to Specialize In New and Used Video Equipment

Video Shopper, a firm specializing in sales of new and used video equipment, was recently established in Fair Lawn, New Jersey. The firm supplies professional video equipment to broadcast, industrial and educational users nationwide. All types of video production equipment will be offered including cameras, TV film projectors, telecine accessories, studio lighting, videotape recorders, switchers, monitors, and much more.

The first item being offered is a new model 1600 RCA 16mm film chain projector. Designed especially for film-to-TV, film-to-tape or regular projection use, the model 1600 features optical sound, quartz lamp, five-bladed shutter and 115V AC synchronous motor as well as all standard projector features. Priced below \$1,000, the model 1600 offers all the features of competitive machines costing almost twice as much.

The RCA model 1600 does not require a dedicated film chain camera. It can be used as needed with any portable or studio color TV camera. Broadcasters use it as an extra telecine machine, cable TV firms use it to put 16mm films on the cable system, industrial and educational personnel use it to make film-to-tape transfers and for other closed circuit applications. In addition, anyone can use it for all regular projection uses.

For further information or to be placed on Video Shopper's mailing list, contact Video Shopper, P.O. Box 331, Fair Lawn, New Jersey 07410, (201) 797-3299.

VMC-100 Sequencing System from Videomedia

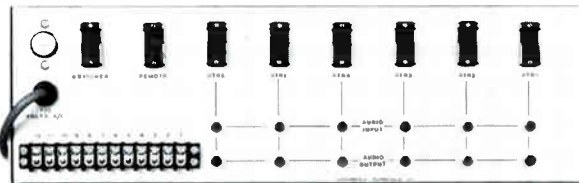
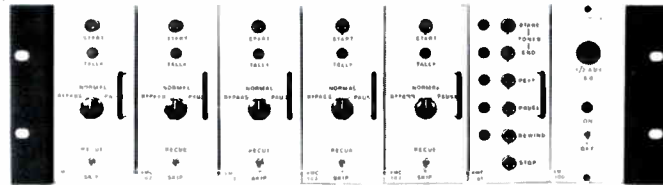
The Videomedia VMC-1000 sequencing system was designed specifically as a professional approach to sequencing 3/4-inch videotape machines in broadcast situations.

The versatile VMC-100 sequencer is a rugged, dependable, low cost control system that interfaces to any capstan

served helical-scan videocassette machine for precise cueing and vertical interval switching of program material.

The system derives its accuracy from counting control track pulses on standard, unmodified videotapes, obviating the need for expensive time codes.

For further information, contact Videomedia, 250 N. Wolfe Rd., Sunnyvale, California 94086, (408) 733-6500.

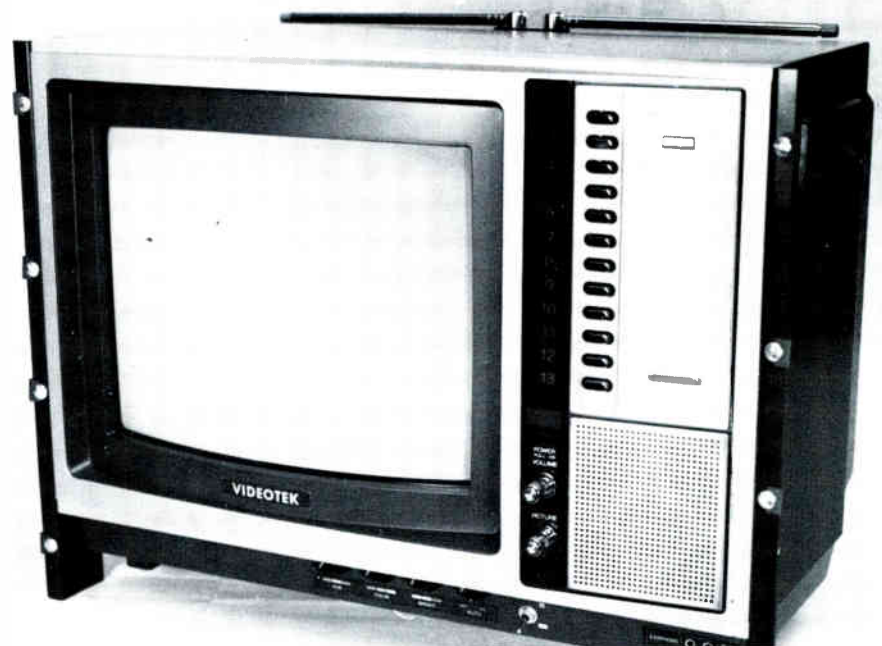


Twelve-Inch Rackmount Receiver/Monitor

With the redesign of the 12-inch television, the engineers at Videotek, Inc. have produced a 12-inch rackmount receiver/monitor to fit a standard 19-inch rack. The model RM-12R requires only 14-inches of rack height and features DC restoration, eight-pin

VTR connector, E to E, express tuning and improved Trinitron Plus® phosphors. Also available from Videotek is a 12-inch rackmount video/monitor, model VM-12R. This unit sells for \$750.00. The model VM-12R sells for \$725.00.

For more information, contact Videotek, Inc., 125 North York Street, Pottstown, Pennsylvania 19464.



Miscellaneous

Grounding Blocks from Cable TV Supply

Cable TV Supply has introduced the 350-8AB time saver universal four- or eight-output ground block. This product will stand up under adverse conditions, is easy to install, has easily accessible F-81 ports and is price competitive.

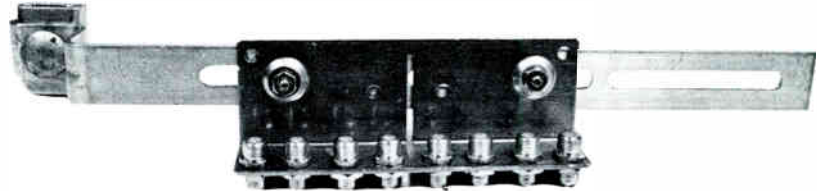
The 350-8AB can be used as an eight-output ground block or (2) four-output ground blocks, just by cutting two one-quarter-inch cut outs on the plate. This advantage eliminates having

to stock more than one kind of multiple ground block in the warehouse.

Also new from Cable TV Supply is an adjustable tap bracket #1020B. This bracket allows the installing technician the flexibility of adjusting the tap placement both vertically and hori-

zontally as needed. The 1020B is made from high strength corrosion resistant material.

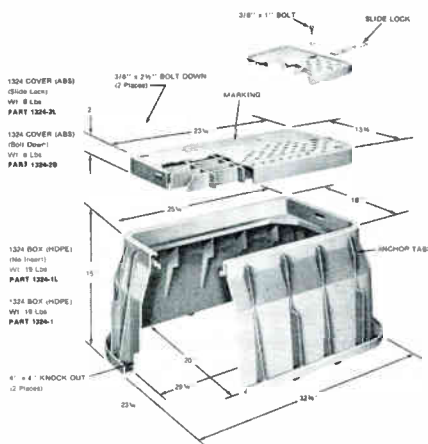
For more input on these products, contact Cable TV Supply Company, 11505 West Jefferson Blvd., Culver City, California 90230, (213) 390-8002.



Enclosures for CATV Applications from Carson Industries

Carson Industries features a utility product line that includes structural plastic valve boxes, meter boxes, hand holes, transformer and switch enclosures.

The 1324 series of enclosures are flush-mounted boxes for use with single or dual taps, line extenders, amplifiers and/or splices. This unit features a structural foam process that provides increased strength and durability while maintaining the lightweight advantages of plastic.



Advantages of the enclosure include lower costs in handling and installation, less breakage and more usable working space. The boxes nest into one another so the units occupy less warehouse and shipping space.

For additional information, contact Carson Industries Inc., 1925 "A" Street, La Verne, California 91750, (213) 339-3617.

Compu-News from Computer Video

Compu-News systems from Computer Video are advanced state-of-the-art news display systems with a high degree of flexibility in format development and display characteristics. It will accommodate all the newswire services: AP, UPI, or Reuters, and both the NYSE and AMEX stock crawl information. A NOAA weather crawl input is also available. Any of the systems, with the exception of the CNS-1 low cost system, will accommodate one or more keyboard entry for advertising or message display purposes. Automatic page sequencing, adjustable display time, character size, background color and font selection is accomplished by keyboard entry. Optional time and weather displays are available for combined display purposes.

Compu-Weather systems from Computer Video are advanced state-of-the-art weather display systems with new features and greatly im-

proved reliability. All systems have a high degree of flexibility in format development and display characteristics. The CW-3, for example, is a full environmental display featuring wind chill factor, air pollution count and dew point. All appropriate sensors display in standard and metric read-out.

All weather sensors are connected to a small electronic package that is remote from the main character generator chassis. Data is transmitted serially in a continuous read-out on single pair that can be remoted miles from the main unit. Complete isolation and lightning protection is also provided.

Any of the systems will accommodate one or more keyboard entry for advertising or message display purposes. Automatic page sequencing, adjustable display time, background color and font selection is accomplished by keyboard entry.

For more data, write or call Computer Video Systems Inc., Suite E, 6290 McDonough Drive, Norcross, Georgia 30093, (404) 449-3800.

MSI Television Introduces Flexicaster™

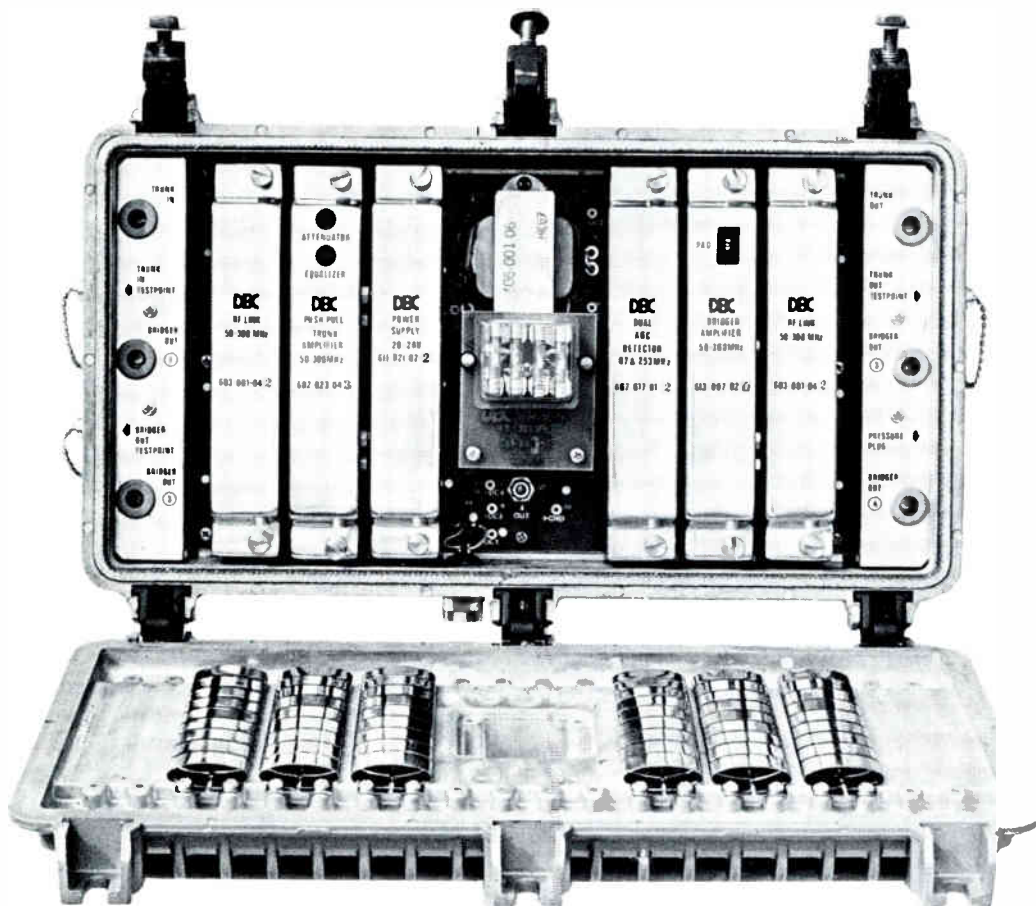
MSI's new Flexicaster™ system comes on the eve of a new decade with fully distributed data processing capability. The unit provides the cable industry with low-cost microprocessors and program memory. Each microprocessor-controlled channel is compatible with the over 1200 MSI systems presently in the field.

Some of the features include a new intelligent keyboard having 112 keys and preset coding in the keyboard allowing expansion to over 120 keys.

Convenient operation allows full keyboard control of up to 20 lines of display from the keyboard, line-by-line or page-by-page keyboard control of up to eight colors and eight character sizes, black or white characters, setting of display types page-by-page from the keyboard either in the "page print," "splash," or "bang" modes, as well as standard roll and crawl operation, and setting of display times on a page-by-page basis from the keyboard.

For additional information, contact MSI Television, 4788 South State Street, Salt Lake City, Utah 84107, (801) 262-8475.

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The rugged die-cast construction and connections are of exceptional reliability. The quick release hinges are removable and replaceable, allowing lid replacement and the addition of a standby power pack. An extremely efficient thermal design keeps it all running cool, ensuring long life. The ultra low power consumption can save you an amazing \$12,000 in yearly operating costs (based on a 1000 mile system).

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★**Ben W. Forte**, formerly western regional sales manager for Hughes Aircraft Company's microwave communications products, has been appointed to the new position of national manager for special accounts. Succeeding Forte in the western sales post is **Norman F. Woods**, who has joined Hughes from TM Communications where he was director of engineering.



Ben W. Forte

★**R.W. Polomsky**, vice president of Sales and Marketing, has announced that **Robert C. Corrao** has been named western regional sales manager for Jerrold Electronics Corporation, a subsidiary of General Instrument Corporation. Corrao will be headquartered at Jerrold's regional office in Denver, Colorado, and have sales responsibility for the U.S. west of the Mississippi, including Alaska, Hawaii, Mexico and South America. Prior to this appointment, Corrao held the position of marketing manager, CATV Products at Jerrold.

★**Charles P. Davis, Jr.**, an eight-year veteran of the cable television construction industry, has been named chief construction engineer for Citizens Cable of Fort Wayne, Inc. Davis, an Ohio Technical College graduate with an Associate's Degree in Electronics, has over 1,000 miles of coaxial cable construction experience in twelve metropolitan areas in five states. Davis will be directly responsible for the construction of the Fort Wayne cable television systems.

★**Dr. Guy W. Beakley** has been appointed general manager of the

Satellite Communications Division of Scientific-Atlanta, Inc. Dr. Beakley joined Scientific-Atlanta in September 1977 as manager of engineering for the Satellite Communications Division with the responsibility for product development and engineering management. Before coming to Scientific-Atlanta, Dr. Beakley was employed at RCA Laboratories in Princeton, New Jersey, where he served as head of the Image Processing Research Group. He joined the RCA-David Sarnoff Research Center in 1969 and has worked in a broad range of communications programs.



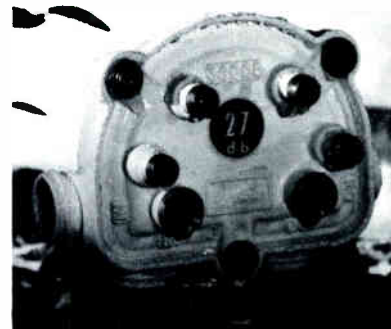
Guy W. Beakley

★**Ishwar D. Aggarwal** has been named Communications Fiberoptics Division Optical Fiber Research and Development Director, Frederick N. Wilkenloh, Valtec Corporation vice president-Optical Communications, announced. Aggarwal, a native of India who currently resides in Sturbridge, Massachusetts, was formerly Galileo Corporation associate director, Optical Cable Research and Development.



Ishwar D. Aggarwal

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