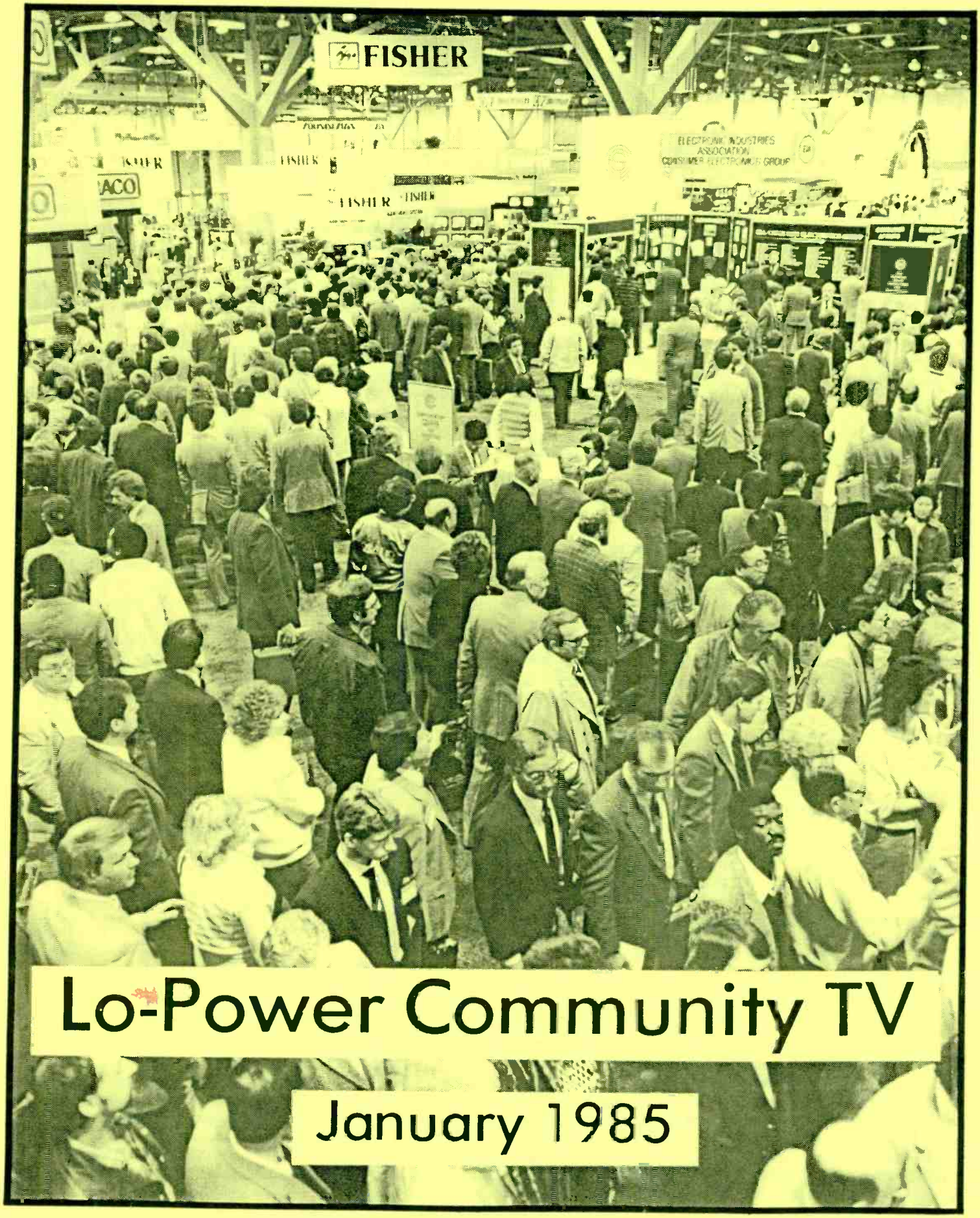

Lo-Power Community TV

January 1985

What's Happening

The LPTV publication industry (if you can call it that) dwindles further. the **LPTV Reporter** published by Michael Couzens (who was one of the fathers of LPTV) bit the dust last month, and we are making good on filling out the subscriptions to his publication that were not yet expired, so welcome to those new readers.

Michael finally decided he had to practice law to make a living—the LPTV portion was little more than one disappointment after another and a financial drain. He is writing a report for us this month about the goings-on in San Francisco on the 15th and the getting together of two new LPTV associations.

We used to publish several manuals on how to do this or that in low power, but we learned that the FCC changes the rules and game plan so often that, before you get them all written and printed, they are already obsolete. For example, we just threw out 800 LPTV tier maps, compiled and printed at great expense. Four books, such as 'How to File' your own application for LPTV were thrown out long ago after five supplements couldn't correct the numerous changes.

TV Programming Newsletter reports that the First Bank and Trust Company of Mountain Home, Arkansas, filed suit over loans made to K43AJ in Mountain Home they claim aren't paid to the tune of $383,393 from American Broadcasting Systems, Inc., of Searcy, Arkansas. Reported in the offing is a sale of the station, as well as an LPTV in Ponca City and the rights to a Searcy station. All local programming was canceled this fall with SPN satellite feed continued. The station had carried considerable local programming, including sports. The station started programming in January of 1983.

Editor's Note: Funny, no one ever hears much about the successful, low budget LPTV stations. Pete Warren was one of the first on the air (in Alamogordo, NM), and he used relatively inexpensive Beta ½-inch studio gear, traded out a good part of his start-up costs and paid off the little over $100,000 start-up costs in less than a year. Pete has put several others on since with similar success. Recently, I called him on another subject and casually asked him as an afterthought why he thought so many LPTV stations had folded, and he said, 'It's because they don't know what they are doing'.

Frankly, I was so impressed with Super Beta (Sony's new higher resolution ½-inch Beta) that I'd seriously consider making my next LPTV an all Beta ½-inch Super Beta, especially if you can get a combo Super Beta and Beta Hi-Fi—in the same units.

Pete Warren's station in Alamogordo, NM, uses all Beta ½-inch successfully and Super Beta is far better than the old Beta. We still do not have enough details to talk intelligently, but remember, you heard about it here first.

Dear Editor:

In your recent article of 'LPTV Station Crosses Signals with City Hall', you sound as if the Sioux Falls station will be running movies from the video rental store. Is that legal? If so, we LPTV operators will have a great selection of movies to choose from.

I am quite interested to learn what you are doing in this respect.

Yours truly,
Radio Station Owner

Dear Reader:

The tapes we rent are mostly late releases which are not available for TV. However, we do rent 85 public domain (copyright allowed to expire) movies, and we also use them on TV. There are hundreds of these available and are a lot of big name actors, such as the several Ronald Reagan movies we ran on election night.

Possibly, before we print this, I will have seen Sony's new portable projection unit (we are waiting for a story about the LPTV associations getting together in San Francisco on the 15th). Available only for industrial, it was not shown at the CES in Las Vegas. Projection units so far have been three projection tubes overlapped. Sony has developed a new system (ingenious) that uses one tube at super brightness. How it gets three colors is tricky. It comes in a small, portable case and can project on a wall, etc., almost any size. It comes with a built-in Beta player for around $3,000. $2,100 without. (Subject to discounts, of course.) It is designed and sold now primarily for industrial use or demonstrating a product, etc. I have not seen it yet but expect to on the 17th. This device opens up a lot of possibilities if it is as good as I hear it is. Also, I understand it can do rear screen (it can make the words backwards so they read right from the front).

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor: Harlan L. Jacobsen.

Postmaster: send address changes to **7432 East Diamond, Scottsdale, AZ 85257.** (602) 945-6746.

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interpreting the FCC rules & regulations

The New Window System: A Well-Intentioned Mistake?

by Harry Cole, FCC Counsel

The Nineteenth Century had its land rushes and its gold rushes. Now, if a recent Commission proposal is adopted, the Twentieth Century may have its own FM and TV frequency rushes. The result would be a new approach to the process of filing applications for new commercial stations in those services, an approach which could have a significant effect on strategies underlying decisions governing whether or not to file for new FM or TV stations.

The proposed system would replace the current system involving cutoff dates and cutoff lists. As you are probably aware, at present the Commission allocates FM and TV channels to specific communities. Once a channel is allocated, you are free to apply for it. There is no deadline for filing the first application, and there is technically no requirement at all that anyone ever file for any particular channel (although the Commission does assume in allocating each channel that at least one applicant will ultimately file for it). Once someone does file an acceptable application specifying a particular channel, that application is placed on an "A" cutoff list and assigned an "A" cutoff date. That cutoff date represents the deadline by which anyone interested in filing a mutually exclusive application must have his or her application on file. (It also represents the deadline for petitions to deny the listed application, although, in the context of the FCC's recent proposal, we need not dwell on that aspect here.)

Under the existing system, once the "A" cutoff date passes, the universe of competing applicants is fixed—i.e., if you don't have your application on file by the close of business on the "A" cutoff date, you're out of luck. Each application is then assigned a "B" cutoff date by which all minor amendments must be filed. Following the "B" cutoff date, the applications are ready for designation for hearing, a process which depends only on the availability of FCC staffers to review the applications and prepare the hearing designation orders. While this may seem rather simple on paper, in actual practice the overall process from the filing of the first application until designation for hearing can take two or more years.

Competing applications

This kind of backlog is an obvious source of concern. More troubling to the Commission, however, is the fact that placing an application on an "A" cutoff list makes it a sitting duck for competing applications. An "A" cutoff list acts like a red flag calling the world's attention to the fact that at least one applicant thinks that a new station in the specified community would be a good idea. Worse, having called the world's attention to that fact, the "A" cutoff date affords all interested persons a 30-day period in which to prepare and file competing applications for themselves. The result is that even if the idea of filing for a particular community was unique to one applicant, that applicant is forced by the Commission to share the idea, and then to compete with everyone else who happens to agree that it's a good idea. And to make matters even worse, the Commission apparently believes that some of the applicants who file competing applications on the "A" cutoff date do not, in fact, want the station, but instead want only to blackmail the original applicant by standing in the way of a quick and simple grant. The idea, of course, is that the original applicant may be inclined to buy off the competing applicant in order to avoid the fuss (not to mention the expense) of a comparative hearing, and to get the grant that much sooner.

Not all of this situation is the FCC's fault. Back in the 1940s, in a case called *Ashbacker v. FCC*, 326 U.S. 327 (1945), the Supreme Court interpreted the Communications Act of 1934 as establishing a right to comparative consideration for competing applicants. In other words, the Court said that where two or more applications mutually exclusive with one another are filed, the Commission cannot simply grant one and deny the rest without first holding a comparative hearing involving all the applications. Thus, the FCC has been left to devise some system by which all potential mutually exclusive applicants are given an opportunity to get their applications on file before the universe of competing applications is fixed. The cutoff system is the most recent approach arrived at by the FCC to assure that everybody's *Ashbacker* rights are guaranteed.

The window approach

Because of the various problems inherent in the cutoff system, however, the Commission has now proposed a "window" approach akin to the manner in which cellular radio telephone applications are processed. The Commission has suggested that it designate a "window period" of 45 days during which applications for all allocated TV and FM channels could be filed. That means that if you had your eye on a particular channel in the FM or TV Tables of Allotments, you would have to file an application for that channel during the 45-day window period if you wanted to assure yourself of comparative consideration. Similarly, any future FM or TV channel allocation would include, as part of the action allocating the channel, a specified window period during which applications for that new channel would be permitted. If no one files for a particular

channel during the available window period, the first applicant filing for the channel after the close of the window period would automatically preclude any other application, and would thus be entitled to use of the frequency without the need for a comparative hearing. Applications for changes in existing stations would also be subject to the window period if the proposed changes would affect a vacant channel.

The Commission's idea, of course, is to give everyone the same notice as to the availability of FM and TV channels, and thus to satisfy the requirements of *Ashbacker* without creating any "sitting duck" situations. The Commission apparently thinks that the window system will somehow reduce the number of applications filed for FM and TV channels. The benefits which the FCC hopes to realize from this include reduction of both administrative delays and the costs incident to the application process. The FCC is also hoping that its window approach will discourage applicants who are not "seriously interested in providing better service."

As with many of its recent innovations—be they termed "regulatory," "deregulatory," "unregulatory" or whatever other term may be acceptable these days—the Commission's proposal here is not without merit. In the case of FM applications, there has long been a substantial backlog of applications which has been caused, in large measure, by the cutoff system. It should be pointed out, however, that the TV situation has suffered virtually no backlog problems, and the TV Branch has generally demonstrated an admirable ability to process new applications very quickly. Furthermore, anyone who has spent time, money, and energy in assembling an application, only to have numerous "claim jumpers" file competing applications on the "A" cutoff date, knows the frustration of having to sit back and wait while the FCC notifies the world of your application and invites everybody to file on top of you. The proposed system would theoretically eliminate that phenomenon, if only by forcing everyone to show their interest at the same time; in that way, no party could lay back in the bushes in order to check out everyone else's plans, and then pick and choose which channels to file for.

Conceptual flaws

However, as is often the case with these things, the FCC's proposal is not without its conceptual flaws. In particular, while the notion that a window system will reduce the numbers of applications to be filed is all well and good in theory, that notion is not borne out by the Commission's own experience. In cellular radio, where a variation on the window system has been in effect for several years, the FCC recently received approximately 150 or more applications for *each* of the markets in the fourth tier of cities (i.e., markets 90-120). Even in the most complicated FM cases it is unusual to find more than 20 applicants for a given frequency. And in the low-power television area, earlier this year the FCC tried to turn the cutoff system into a variation of the window approach by issuing a single cutoff list containing some 4000 applications; far from discouraging competing applications, this approach led to the filing of some 25,000 or more competing applications. The lesson, it would appear, is that numerous applications are going to be filed whether the FCC likes it or not, and that a window period approach will not necessarily discourage applicants. In fact, it appears that such an approach may trigger *more*, rather than fewer, applications, since it forces everyone who has even the slightest interest in a particular frequency to file applications in order to avoid being shut out from consideration.

Another aspect of this proposal which bears some discussion is the Commission's expressed concern about applicants who, according to the FCC, file applications "for the purposes of delay" and who may not be "seriously interested in providing better service." Obviously, applicants who fit this description are not desirable, and efforts to eliminate such filings should be pursued. But the question of an applicant's true intent is not an easy one to resolve. It is not always easy to tell from an application whether the applicant is really interested in obtaining the station, or whether the application was just filed for some other, inappropriate purpose (e.g., delay, blackmail, and so forth). This is especially true in light of the Commission's own massive effort to streamline the application form itself. That effort has led to an application form which requires virtually no time and effort, and very little money, to fill out and file.

More applications

What this means is that the FCC has removed virtually all the tediousness to filing applications. The obvious and inevitable result of that is going to be an increase in the number of applications filed, since there are certainly more people interested in trying to get a station if they don't have to do very much to get the application on file. In addition to this, the streamlining of the application form makes it difficult for the Commission to divine whether any particular applicant is or is not seriously intent upon building and operating a station. Further complicating this is the fact that, several years ago, the Congress and the Commission lifted the ban on profiting from the dismissal of an application. As a result, if you file an application now, and at some later time are offered a large sum of money to dismiss your application, you can accept that money even if it exceeds the amount that you have spent preparing and prosecuting your application. Even an applicant who is completely intent upon building and operating a station may have his or her mind changed if the right offer is made. But without the services of a mind reader, it is difficult to determine whether that applicant's mind was really changed, or whether he or she filed the application in the first place in order to be bought out.

The bottom line on this is that while the Commission's proposed window system is certainly a well-intentioned step, it may turn out to be more of a placebo than a panacea. And, ironically, it must be noted that some of the evils against which it is directed arise not so much from the existing cutoff process, but from the streamlined application forms which the Commission itself has developed. While we are loathe to suggest the reimposition of burdensome paperwork requirements in this enlightened age of deregulation, we might suggest that the effects of that streamlining be reconsidered in light of the perceived problems leading to the proposed window system. BM/E

The VCR Explosion

The VCR explosion is about to be increased by the entrance of the Koreans. Why all of a sudden? They have been making them for some time, but their contract (patent agreements, etc.) with the Japanese said no exports. That contract expires in March. The Japanese are expected to meet this head on with reductions of their own. The Koreans can produce for much lower cost because of wage differences, but their capacity to produce is limited compared to Japan's numbers. The Japanese are expected to be able to produce a much larger number than last year and, since the market at home, Great Britain and Europe have all leveled off (they all have a higher saturation than America), it is the United States that Japan will target for huge numbers of VCR's in 1985. How this affects you and your plans, you will need to decide. But you do need to know about the VCR boom and keep it in mind, because it is changing viewing habits.

Last year at the CES (Consumers' Electronics Show) we reported the lowest-costing satellite packages were $999 for everything you needed. This year they were showing a lot of five-foot dishes and complete packages for $499. Some of these receivers are using drop out compensator (old VCR circuit that fakes a line when tape skips one) circuits to cut down sparklies from using too small a dish. Definition is not so hot, but if you are used to regular off the air TV out in the toolies, well this looks great.

VCR Sales Figures

We told you over the last year that there was a tremendous boom on and coming in VCR software. In fact, we put our money where our mouth was and opened a video store in conjunction with our LPTV station.

The national figures are now in: 1984 VCR hardware sales were 85% to 95% ahead of 1983. Software was **more than 100%** ahead of 1983 and is expected to double again in 1985.

The number of video stores in Sioux Falls, SD nearly doubled in 1984—three have started up (and the oldest one quit) since we started up in October and four more are in the works by spring, we hear.

All of the stores in business in 1983 nearly doubled their business in 1984, and, despite the new stores coming in, business will increase a hefty percentage in 1985 again. This is all made possible by the doubling of the number of VCR's each year and the fact that those that own VCR's rent **more** movies each year.

Growth of pay TV and cable have stopped—their growth trend primarily, we believe, because of the VCR (and maybe satellite receivers).

We rented a large building (over 2,500 square feet) for office, sales, and TV studio with about 20% of the space devoted to tape rentals. The FCC lost our studio to transmitter application, so we could not do studio production (the STL license is now expected to be reprocessed and sent January 20th). So, during this period, we now have the tape rental business to where it almost pays all the overhead, despite starting with only ⅓ the stock of tapes and VCR's for rent we should have started with ($10,000 worth instead of the $30,000 we should have had). The large building rents for $600; electric, gas and phone bring it to $1,000 a month. Now we have supposedly sold the TV station portion, so what do we do with the tape store? We spent a lot of money remodeling, adding insulation, etc. for the studio. Options: 1. close it, move the stock to the next LPTV town, pay off the lease (eight months to go). 2. keep it open, hope for another LPTV to be granted there for us soon. 3. expand the tape business, add satellite equipment, etc., in the unused space.

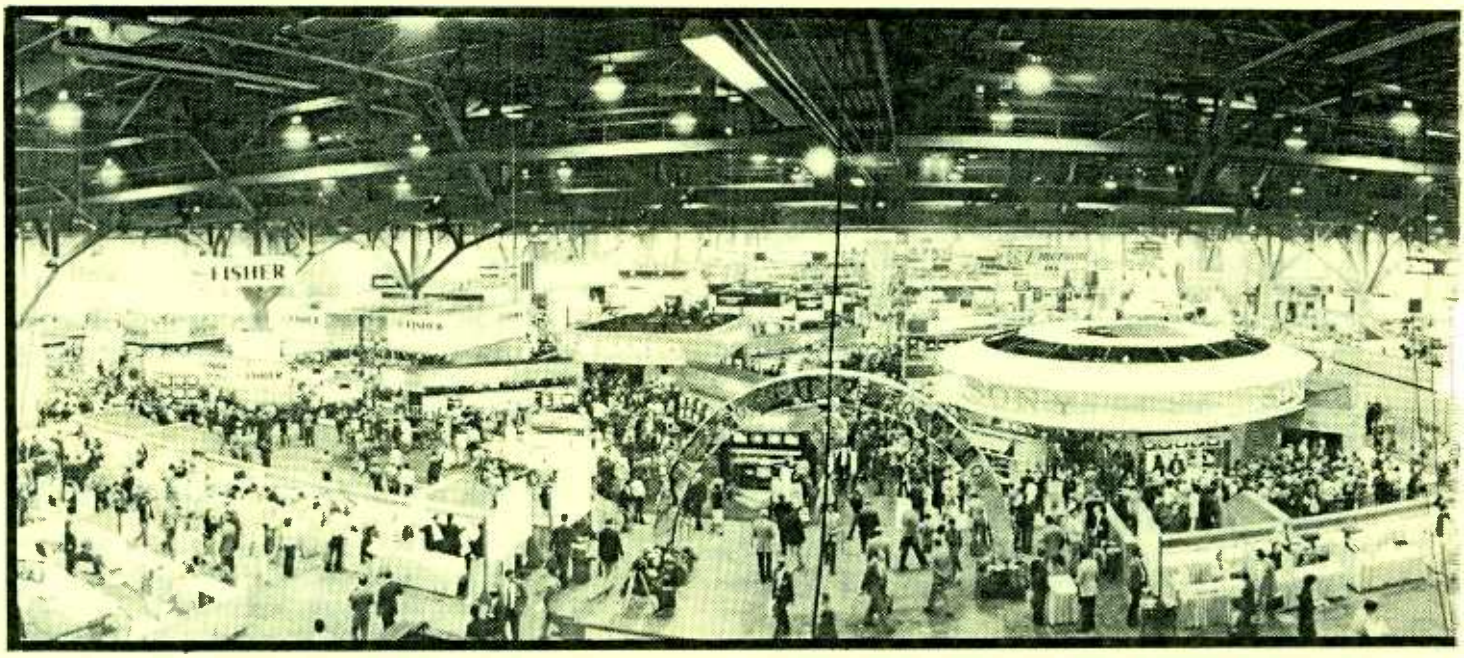
Stay tuned; we'll tell you which soon.

More on Sioux Falls and SPN

In the continuing episode of my hassle with the city of Sioux Falls, SD over our putting a satellite dish in our leased yard (leased from the city)—they sent us a notice saying we had until December 19th to get off the property for violation of the contract by our putting in the satellite dish. We sent back legal mumbo jumbo saying our paid-for-a-year-in-advance contract says 'antennas' (emphasis on the 's'), and that the satellite dish **is** an antenna and don't mess with us or you'll be in federal court el pronto. Not a word since. Oh yes, the original contract they sent didn't have the 's' on antenna—I added that before they or I signed it.

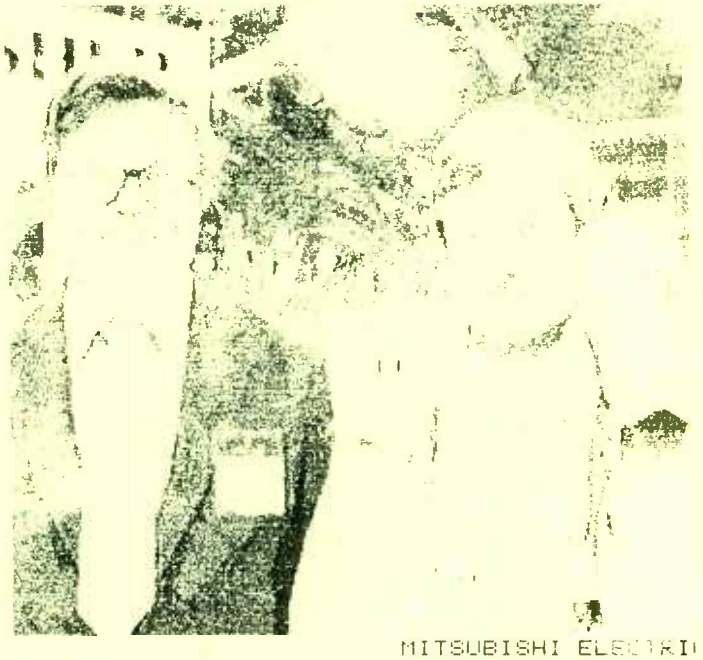
It is often 15 degrees below zero at the transmitter shack location, so bringing equipment up to the studio takes too long to warm up, so we gave up on lugging equipment back and forth between the studio and transmitter shack to insert commercials, etc. Our dependable color monitor went up in smoke after bringing it in from 15 degrees below zero temperatures. Moisture condensed on the inside of the metal TV monitor cabinet when we turned it on inside the building, and the resulting condensation dripping ruined (shorted out) something. So it's either we get our STL license (not here yet) or we run nothing more local until spring. In the meantime we're running SPN off the satellite 24 hours a day.

About SPN—they have some good programming but the repeats kill you. They have a program called 'Franchise Showcase', for example. Now it appears several times a week at different times. It's kind of interesting the first time you see it. It's a commercial cleverly disguised as an interview with two different franchise outfits. The only trouble is they only have one program. The same one runs over and over again. They are still running the same episode the put on the day we came on the air. I can repeat it word for word, I've seen it so many times. They also have 'Holland on Satellite'—a pretty interesting program paid for by the Dutch. You'll like it enough the first time so you tune it in again. Only trouble is that the next time and the time after that it's the same program you've seen already. So the first week of SPN, your LPTV station's programming is popular. After about the third week, viewers are getting a bit tired of it. If you go in and out and cherry pick from SPN it may be okay, but as a steady diet—YUK.



Cover photo shows some of the attendees at the recent Consumer Electronics Show in Las Vegas.

In the past, you went to broadcast and industrial shows because new technology came out there and eventually trickled down to consumer goods later. Now, nearly all new developments appear at consumer shows first, which is where the big market is, and they later tricle up to broadcast and industrial. We do not miss attending and reporting on consumer shows now as a result.



Mitsubishi makes a small printer which was demonstrated by **Video Review** magazine. The unit prints out a paper copy of whatever is on television. Either off the air, tape, camera, etc. Our photo here was printed from one frame off of a color camera. The quality is much better than our photo reproduced here since we did not have this screened for printing. Editor, left side, and son, Jeff Jacobsen, photographer, right.

ALL-IN-ONE CAMCORDER

The one-piece camcorder model ICVM6060 uses full-size VHS cassettes for two hours of recording capability. It can film in low light, has a black and white electronic viewfinder for instant playback, and weighs about seven pounds. The unit is capable of recording in color.

VHS Camcorder

Matsushita NV-M1

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-in-One Camcorder

news at the Consumers' Electronics Show
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g in at about seven pounds, the unit will
p to two hours. Changeable battery packs
over one hour each. You can play back in-
through the B & W viewfinder. Previous
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Price on the full size units is expected to
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y is out with a new technical breakthrough
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sed a Beta ½-inch system with this much-
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Hawkeye

Cordless Video/Audio Transmitter

- Transmits Live Video/Audio from Video Camera to ANY TV Set
- Transmits Recorded Video/Audio from V.C.R. to ANY TV Set
- Range Approx. 200 Feet • Sharp — Clear Picture
- No Cable — Portable • Operates on 12 Volts D.C.
- Color or B/W • Light Weight — Miniature Size
- Applications: · Home Entertainment · Crime Watch · Baby Minder · Education · Home Security · And Much More

MANUFACTURED BY: HAWKEYE INDUSTRIES, INC. ARKANSAS, OKLAHOMA · U.S.A.

Every year we find some unexpected surprises useable by low power operators. Two of this year's turned out to be 'Hawkeye' and 'Rabbit'. Two ways of allowing cameras to roam about or be on another floor, etc., without cabling between. At a basketball game, for example, it is nice to have a camera down at floor level, but the cabling requires extra personnel, expense and safety hazards. With this Hawkeye unit, your extra camera can roam around with no cables (up to 200 feet), and you pick it up with a UHF antenna on channel 14. Listing at $399.95, the units are available in quantities for under $300. Toll-free number for seller, **VDO-PAK Products**, is 1-800-874-5906. With a high-gain, UHF antenna, such as a 20-element channel 14 yagi, range can be extended considerably. By using a similar antenna on the transmit end (illegal), range could be extended to several hundreds of feet. By adding an expensive UHF amplifier, range could be extended beyond a mile (illegal).

When taping a church service, for example, you usually have two cameras in the balcony. However, this never gives you a front view of the congregation (in a small town they tune in to see who went to what church today). By having a camera in the front of the church, you get a front view of the congregation. This usually means extensive cabling from the front to the back of the church. With the Hawkeye, this is no longer necessary. You will not be able to genlock the remote camera (but that's okay). You can also do this with the Rabbit. While your remote camera is plugged into a 110-volt outlet somewhere (the Hawkeye runs on batteries), the Rabbit feeds a RF signal back through the house wiring, and you can pick it up on a special receiver anywhere in the building. Hawkeye can be picked up by any VCR with a tuner or any TV set on channel 14. Rabbit requires a special receiver. Rabbit would be ideal where you have several things going on at the same time at different floors of the same building. Hawkeye would not get through floors while Rabbit's system follows the house wiring. Both could be used with a recorder in a van, for example, allowing the camera to travel lighter. The Hawkeye doesn't need to be plugged in but needs line-of-sight (no obstructions) and within 200 feet. The Rabbit would need the van plugged into the house 110.

First American Indian Tribally-Owned TV Station On the Air

The first American Indian tribally-owned television station is on the air and broadcasting on the Northern Cheyenne Indian Reservation in Montana.

Dull Knife Public Television began broadcasting November 1, 1984 on channel 5 with a combination of locally produced programs and education PBS satellite signals.

Dull Knife Public Television's general manager, Ron Holt, said, 'By early spring we will be on the Crow Reservation and reaching many of the surrounding non-Indian communities'.

Dull Knife Public Television was founded in part from the National Telecommunications and Information Administration, the Northern Cheyenne Tribe and the Dull Knife Memorial College.

Programming for the television station focuses on a heavy schedule of American Indian topics, educational, news, sports and television courses designed for Dull Knife Memorial College.

Station manager Holt says, 'Television is the greatest entertainment medium on the Northern Cheyenne Reservation and locally-produced programming has caused a great amount of interest in Southeastern Montana.

Like television stations across the country, Dull Knife Public Television is in need of people with the ingenuity, vision and boldness necessary to push television further ahead. Says Holt, 'We encourage talented people to choose television as a career. We are offering training positions but just think of the advantages you have when you possess experience or a degree. I can say, indeed, there is a need for trained Indian television talent; maybe we can fill the gap by serving as a training facility.'

Dull Knife Public Television is planning to serve as a regional telecommunications training center by the fall of 1985.

The technically sophisticated television station houses two satellite receiving antennas, an advanced television editing and recording facility, and television studios for recording many of the local and syndicated programs. The station also has a computerized satellite recording scanner and an automated master control system.

For more information, call Ron Holt at (406) 477-6215.

PUBLIC NOTICE

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL84-33

Released: December 21, 1984

Notice is hereby given that the television translator and low power television application(s) listed below have been accepted for filing. These applications, which are not mutually exclusive with other LPTV and TV translator applications have been fully reviewed and in the absence of petitions to deny, the applicant(s) appear to be grantable. Petitions to deny the application(s) may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application listed below.

BPTTL-810217NV Greenburger/Acton Rights Associates Boston, Massachusetts	Channel 19
BPTTL-831214J9 Ponyland Broadcasting Co. Ft. Myers, Florida	Channel 24
BPTTL-831214XC Marco Island Eagle, a division of the Palatka Daily News, Inc. Marco Island, Florida	Channel 24
BPTTL-820617MS Blacks Desiring Media, Inc. Scobey, Montana	Channel 33
BMPTTL-830228IG State of Alaska Valdez, Alaska	Channel 15
BPTTV-820419SU State of Alaska Council, Alaska	Channel 7
BMPTVL-830222JU State of Alaska Chuathbaluk, Alaska	Channel 6

Last issue we told you about the video cassette players available from Porta Video for as little as $260. We found a Supra VCP for $193 (available in March). Contact K & K Merchandise Group in New York at (718) 392-4949. It is larger than the $260 units, but it is front load. All the late models of most manufacturers are front load. Only the older models have been top loaded.

If you want to use foreign tapes, the **Image Translator**, a device used with **G.E.**, **Panasonic** or **Quasar** recorders, you can play back 'Pal' and 'Seacom' systems for a standard American TV set. Contact (305) 448-7088, Instant Replay. They call it, 'Image Translator'.

Newest Video Venture

Low-Power TV: It Plugs the Gaps

By MICHAEL WINES,
Times Staff Writer

WASHINGTON—For those of you flying to Milwaukee to watch Larry Kolb's "Auto Buyer TV Magazine" on Channel 55, billed as "the nation's first video classifieds," forget it.

"Larry went off the air because it was deer-hunting season—or that's what he told us, anyway," said Ken Shapiro, general manager of Milwaukee's Channel 55. "But he says he's coming back."

Shapiro hopes so. The rest of Channel 55's programming—"Beautiful Korea," "Chinese World of TV," "The Yugoslav-American Show" and similar features—may have even less drawing power than classified ads for used cars. Millions of Wisconsin residents drive cars but only 20,000 are Serbs or Croats, and there are only 6,700 Koreans and Chinese in the state.

Speculative Venture

But then, such is life in America's newest and most speculative video venture: low-power television, a sort of shoestring-budget TV that is springing up in big cities and small towns alike, showering rock 'n' roll on Lawrence, Kan., agribusiness reports on Sulphur Springs, Tex., and college football and high-school band concerts on Rolla, Mo.

Low-power television is exactly what its name implies: limited-range TV, with signals that travel only 15 to 30 miles, contrasted with the 70-mile range of regular full-power stations. It was created by the Federal Communications Commission to plug the yawning gaps in conventional TV coverage—providing local news and sports to towns that the big stations ignore or do not reach; offering special-interest programs to ethnic or minority neighborhoods; giving suburbanites and country folks alike the chance to see their youngsters' football game on the tube and advertise their yard sales during half time to boot.

Technological Advances

Because low-power TV is also low-budget and benefits from recent technological advances that have dramatically reduced the costs of some video equipment, it can survive with smaller audiences and advertisers than larger stations. And because it is low in power, there is room for thousands of new outlets virtually anywhere one wants to set one up.

At last count, 76 low-power stations were on the air in the lower 48 states, in such places as McComb, Miss., and Mountain Home, Ark., as well as in such metropolitan centers as Detroit, Chicago and Milwaukee. Alaska has a whopping 194 low-power stations; many of them are part of a state-run network designed to keep the capital, Juneau, in touch with Point Barrow and other remote communities. But some do strictly local programming—like a rock-music station in Anchorage.

By the year 2000, visionaries predict, up to 4,000 of the tiny outlets will beam everything from farm news to naughty movies into America's parlors.

"It's going to reconfigure television in this country," said Robert G. Allen, a Washington attorney for a trade group for low-power broadcasters. "The stations going on the air now are going to be the local TV stations of the future."

Maybe so. But for the moment, low-power TV is the sort of business where programs like Kolb's cancel themselves, instead of the other way around. And the camera that telecasts the local news this morning may moonlight tonight by videotaping a wedding or high-school graduation.

"We don't know anybody who's making money on it," said Charles Souls, a Rockingham, N.C., newspaperman whose company is warily considering a low-power station of its own.

Such dire pronouncements have not prevented aspiring TV moguls from bombarding the Federal Communications Commission with applications for low-power construction licenses—28,000 in fact, so many that the FCC has been forced to award its permits by lottery.

The hopefuls vary from such corporate giants as Sears, Roebuck & Co. to mom-and-pop operators with no television background. Their competition has at times been frenzied: Some applicants have filed for licenses in as many as 1,000 cities and one Chicago operator this fall even paid his lottery competitors $750,000 to abandon the race for a choice license to beam programs from atop the Sears Tower, the world's tallest building.

What lures them is the prospect of getting in on the ground floor of a potential boom. Despite the struggles of outlets like Channel 55, some knowledgeable experts say, low-power TV could well enjoy a high-powered future.

Only Game in Town

The available frequencies for full-power television stations have been all but used up by the 1,500 or so outlets now on the air or in the planning stage. For growing small towns and ethnic neighborhoods without a big outlet of their own, low-power stations may be the only video game in town.

Typical among low-power's locales is Hopkinsville, Ky., which was but a farm burg in the southwestern corner of the Bluegrass state when the FCC handed out licenses for regular television stations in the 1950s and 1960s. Today, Hopkinsville is the center of a 200,000-person market that is all but ignored by the nearest big-city TV stations, all of them 60 or 70 miles distant.

Channel 43, the low-power station that went on the air in Hopkinsville last July, is drawing viewers and advertisers with its local news and farm shows. Manager D.J. Everett reports he was swamped with protests this fall when two high school football play-offs occurred simultaneously and the station's lone remote camera unit was forced to ignore one of them.

The station's undisputed star, Everett says, is an electronic graphics and weather-map generator—a gizmo that, at $30,000, cost twice as much as the annual rent and furnishings for Channel 43's offices.

"How many trucks the local Ford dealer sells depends on agriculture," he explained. "How many shoes the local shoe store sells depends on crop prices and that depends on the weather. I'm competing with three stations from Nashville on the cable, and our weather is as good as anybody's."

Enough similarly seductive success stories abound to make low-power television seem at least as promising a financial gamble as personal-computer stocks did in 1980—or the South Sea Bubble of 1720, a London financial scheme in which thousands of investors poured everything they had into a South Seas trading venture that looked like a sure thing but eventually crashed with ruinous effect.

Money-Losing Albatross

Many of the low-power industry's leaders came of age in the 1960s, when FM radio—for decades a money-losing albatross around broadcasters' necks—suddenly found a hugely profitable audience of rock-music listeners who preferred FM's clear signal. The same future, low-power advocates stoutly contend, awaits video stations in small towns, suburbs and big-city neighborhoods that ordinary television serves only sporadically, if at all.

"We want to be local as fast as we can. We view it as an unmet need," said Christopher Fager, vice president of Low Power Technology Inc., a Texas-based company that runs stations in Anchorage, Alaska, and Lawrence, Kan.

Fager argues that both advancing technology and the fragmentation of the old mass-television market work in low-power's favor. Big-city television outlets cost several million dollars to build anew and scores of millions to purchase. But a low-power station can go on the air for as little as $200,000, and operating costs are far below those of bigger stations.

With broadcasting costs dropping rapidly, he says, a small station need only grab a small share of a local audience to attract advertisers.

"The idea that a TV station has to cost millions is outmoded," he said. "We're using cameras in Lawrence—$8,000 cameras—that would have cost $30,000 or $40,000 as little as two or three years ago. . . . We've got a state-of-the-art station. The only thing different is the size of the transmitter."

But whether cottage-industry television portends the greening of the broadcasting business—or simply the spread of a vast television Sahara—is anything but clear.

While some stations, such as Hopkinsville's Channel 43, are prospering on a mix of local news and sports, the programming on many others resembles the bland fare offered in any big city.

Taped Music Videos

The Anchorage and Lawrence stations broadcast some local news and weather, but most of the programs consist of taped music videos from what Fager bills as "the world's largest music video library." Station W36AC, an outlet in McComb, Miss., halfway between Jackson and New Orleans, beams movies to subscribers who rent signal-decoder boxes for their sets.

And a few broadcasters who pride themselves on community service have had rough going. Some, finding viewers less than ravenous for the latest cattle prices and town council news, have dropped local programs and begun retransmitting the signals of big-city TV stations or satellite channels. Others are trying to sell their low-power licenses before losses overwhelm them, consultants report.

The video menu on Milwaukee's Channel 55 is virtually identical to that of Chicago's Channel 26, a full-power station whose owners also control the Milwaukee outlet. Most of Channel 55's local efforts, including "Auto Buyer TV Magazine" and the recently departed "Bob Lewandowski Show," a Polish program, have been less than enthusiastically received.

"There will be some spectacular failures in the next few years," said John Couzens, a San Francisco consultant who helped shepherd low-power television through the FCC bureaucracy in the late 1970s.

"I'd say if you want to get rich quick, this is not the way to go," added Barbara Kreisman, who heads the FCC's low-power office. "But that's not what it was intended for. The object was to get more television out there and that's what it has done."

Indeed, Couzens expects low-power stations to improve rapidly once enough are on the air to attract the attention of the companies that make television programs. Some foresee the day when the outlets will band together into new networks or link up with major networks that want to expand their coverage of rural areas.

Things may already be looking up in Milwaukee. The state's biggest bank and its biggest utility have signed up as advertisers on Channel 55, and Shapiro says the station hopes to get its signal on a local cable system whose viewers could provide an entire, new advertising market.

"The Germans," he sighed. "They're the largest group. But because we're low-power, most of them are out of our range right now."

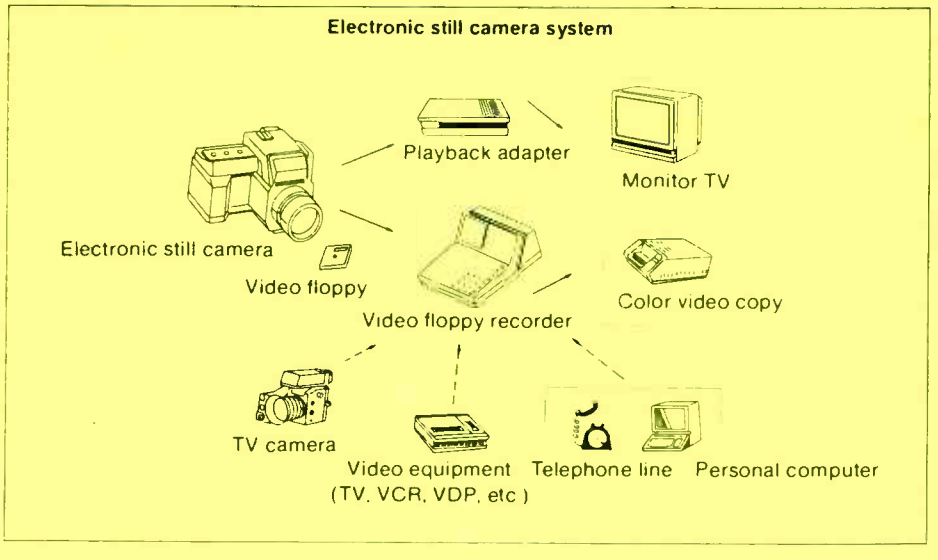
Reprinted from **Los Angeles Times**; December 8, 1984.

ELECTRONIC STILL CAMERA SYSTEM

Electronic Still Camera

This still camera equipped with an electronic image sensor can electronically record 25 high-quality still pictures on a 2-inch video floppy. As such, it can be used for many applications.

This electronic still camera is the outcome of innovations in magnetic recording technology and solid-state imager technology which make it possible to record still pictures on video floppies. These video floppies therefore take the place of the photosensitive film used in conventional still cameras. Recorded pictures can be immediately displayed on a TV screen without the need of any developing or other processing. Video floppies are small magnetic sheets about 2 inches across. One floppy can hold 25 "frame" pictures or 50 "field" pictures. Multiple signal recording — for track address, date, etc. — is also possible.



Electronic still camera

The body of the camera is about the same size as an SLR camera, and incorporates an imaging section, which is provided with the MOS imager, and a magnetic recording mechanism for recording the image signals on the video floppy. An adapter is fitted to the camera to enable the recorded pictures to be displayed on a TV.
The camera is suitable for a wide range of purposes, ranging from casual snapshots to newspaper reporting where the instant availability of the photos could be a major convenience.

Features:

1. MOS imager gives excellent color reproduction.
2. Low inertia direct-drive motor mechanism allows high-speed start (rapid standby).
3. Extensive use of custom LSIs and precision mechanisms makes the system light and compact.

Video floppy recorder

This uses video floppies for high-quality recording and display of still pictures, and can be connected to video equipment such as TVs, VCRs, video disc players, etc.
Using the recorded track address function, the video floppy recorder can access pictures in random order and can be programmed to display the pictures in any preferred sequence.
This video floppy recorder can be utilized as a compact filing device for still pictures in the home, school, hospital and factory.

Video Floppy Specifications

Cassette dimensions	60 × 54 × 3.6 mm
Disc diameter	47 mmφ
Number of tracks	50
Track pitch	100 μm
Track width	60 μm
Disc speed	3600 rpm
Disc thickness	40 μm (including coating)

Color Video Copy Equipment

A color video printer which can rapidly provide high quality hard copies from video signal sources, such as an electronic still camera or TV receiver. Each 3 · 4-inch copy has 64 contrast levels and takes about a minute to print out.

This copying machine uses the video output of an electronic still camera, TV, VCR or other video source to provide hard copy in color of a displayed picture. Print quality is on a par with that of a conventional photograph.
Prints are 3 × 4 inches in size and have an excellent resolution of 153 dots/inch. The copying machine can also be interfaced with a personal computer for printout of computer images.

A thermal line head is used for precision heat control of the degree of sublimation of the ink in a 3-color inked ribbon, enabling each dot to have any of 64 contrast levels. Each print consists of 512 horizontal dots by 480 vertical dots. Therefore prints consist of about 250,000 dots which can have any of 64 contrast levels in three colors. The result is near-photographic picture quality.
Operation is fully automatic — a TV picture can be printed by pushing a single button. Print size is a handy 3 × 4 inches, and one print takes a minute. Also, running costs are low.

The copying machine is provided with both RF and analog RGB video inputs (for NTSC system), and it can also be interfaced with a personal computer. It can be used for a wide range of applications, such as, in the home, for hard copies from an electronic still camera, TV, or VCR, and for print-out of videotex or teletext information, and in the medical, industrial measurement and educational fields.

Specifications of color video copying machine

Printing system	Thermal transfer printing
Transfer film	Dye transfer thin film (three colors)
Print size	106 × 80 mm (4-1/6 × 3-1/6 inch)
Resolution	153 dots/inch (512 × 480 dots image)
Contrast	64 levels
Print time	1 minute

Over the last several years we have done several articles on the Sony Mavica, a still camera that uses magnetic floppy discs instead of film for slide use, etc. Held up for two years over 60-some manufacturers agreeing on a manufacturing standard (that has now been completed), Hitachi showed and will soon make available (along with others) the recorder, playback machines, etc., but will not deliver the cameras until 1986, it is expected. The hard copies were superb and if no one told you, you would not know them from film. The reproduction of stills on a TV set was also excellent. The floppy is reuseable and will sell for around $2.65 and hold 25 stills. You will be able to make stills from an ordinary TV camera, off the air, tape, etc.—no developing again. If you own stock in filmmaking or developing companies, be forewarned. If you plan a LPTV station, don't go overboard for traditional slide chain systems, etc. They will be obsolete in 1986. Some of these companies will transfer slides to the new discs for you this year. Editor

HITACHI

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Lo-Power Community TV

February 1985

Public Domain Movies for LPTV Use

What's Happening

The FCC, an agency that already believes in the flat earth theory in licensing low power stations, apparently has adopted a new fantasy viewpoint.

There are cases of applications filed for small market full service stations that were not put on the air for 11 years. The majority of the small market full service applications filed (and grants) never make it on the air. (The grantees find out what it costs to put one on the air and get discouraged.) Yet, the FCC has apparently adopted the policy of no LPTV license if a full service application is filed for any interfering channel anywhere. In other words, no LPTV operator will be allowed to interfere with a full service application. Our understanding was that, technically, it is impossible to interfere with an application. It is only possible to interfere with an operating station. Now, if a full service operator wants to keep out competition from a low power operator, all he need do is file an application in his cousin's name for any channel anywhere (he never has to build it) that would interfere with the LPTV.

Our point is—here is another ridiculous method the commission is using to eliminate more LPTV grants. We understand they are also holding up all grants in major markets below channel 21 because they may want to give those away to two-way radio, thereby having an excuse not to grant any competition for the politically-powerful full service entrenched broadcasters in the big cities.

Suppose you wait patiently for five years for a LPTV permit and go through a lottery with 10 others, and whoopee!, you win the lottery! Then someone out in the toolies files for a full power, five channels from the one you were granted (10 miles away), and you will never get your permit even though this party never builds the full power.

Is this providing maximum use of the spectrum to serve the public or is this a policy that serves the already entrenched? Why can't LPTV operators use the channel until the full service station gets on the air (likely never)?

Your station cannot interfere with a piece of paper. So the FCC's flat earth policy is now joined by causing TV interference to a piece of paper.

The new **Community Broadcasters' Association** have elected the following to the board of directors: Wes Attaway of Shreveport, LA; John W. Boler of Fargo, ND; Rev. David E. Brooks of DeQueen, AR; Frank Chappell of Ponca City, OK; D.J. Everett of Hopkinsville, KY; Cecil M. Fuller (CBA Vice-President) of Searcy, AR; Rick Hutcheson (CBA Secretary-Treasurer) of Vienna, VA; Harlan Jacobsen of Scottsdale, AZ; John Kompas of Milwaukee, WI; Jeffrey Nightbyrd of Austin, TX; John Reilly of New York, NY; Jim Runyon of Ft. Worth, TX; Lee R. Shoblom (CBA President) of Lake Havasu City, AZ.

You may write to them at: Community Broadcasters' Association, Washington, D.C. Area Office, 2102-A Gallows Road, Vienna, VA 22180; or call (703)893-3151 (this is a temporary phone number).

This publication seems to be the last of the LPTV publications (if you can call it that). Michael Couzen's **LPTV Reporter** discontinued two months ago. The slick LPTV magazine mailed free by Ron Merrell has now been changed to cover all types of small programmers, including non-broadcast. Reilly's publication **Currents** apparently is on hold with no issues published for months now.

In the past six months we have sold seven former translators to LPTV operators for low power use. We are now in the process of helping sell a LPTV for translator use.

Recently we managed to put on a 100-watt LPTV in time to save it. When we were notified to put it on the air, it had only two weeks to go before expiring. We were able to find a used transmitter and sent it by air freight.

There have been many low power permits that have expired. Some have been renewed and are about to expire again. We now have a full time person working to save these by getting people together with those that want to put them on and to help get others on the air before expiration. We have run into six low powers that were installed and licensed that are now dark for one reason or another. Most of these were installed at such high figures that I would not recommend you buy them for what they have in them. You can buy a permit and put it on the air, in many cases, for half of what some of these people paid for just equipment and installation. Others not only paid an extremely high price for installation but went out and hired 25 employees, eventually going dark from the large overhead, and now owe hundreds of thousands in liabilities and want their potential buyer to pay enough for the dark station's license to pay off their liabilities.

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor: Harlan L. Jacobsen.

Postmaster: Send address changes to **7432 East Diamond, Scottsdale, AZ 85257.** (602) 945-6746.

Public Domain Movies for LPTV Use

When we were experimenting in Sioux Falls, we discovered 'public domain' movies (copyright has expired) drew the biggest audience of everything we ran. We ran several of these public domain movies and pulled a very responsive audience. However, we had to keep going out to the cold transmitter building, warm up a recorder (and ourselves) to run the movies. So now we just use a satellite feed until our microwave is installed.

We discovered movies drew a good audience, but we also discovered some problems as well as advantages to movies. One of these problems is inserting commercials. Not having seen the movie before, you do not know the break points to insert commercials. The problem is when you think a break is coming up, you have to preroll your commercial tape player five seconds in advance so it's up to speed when you switch. So now you think a natural scene break is coming in five seconds so you preroll your commercials and then there is no scene break. Then you have to rewind your commercial back to the starting point again, and on and on and on. You could sell these with a sponsor with commercials only at the start and end.

We have considered switching to black (a camera with the lens cap on) and then rolling the commercial, which would give you five seconds of black before the commercial-carrying tape is up to speed. You could also dub the movie over to another tape and keep messing with it until you get the commercials in right, but that's too labor consuming for one LPTV station showing of the movie. Besides, you are then getting down to second generation which lowers the picture quality somewhat.

Two other solutions seem to be available. One is using a host, like Elvira does on horror movies and switch to the host at natural breaks live and then follow the host with a blank space for commercials. This, again, means a second generation tape, but otherwise, it may be a good idea. George Gunter of Jacksonville, Texas, has a large collection of public domain movies and now has a LPTV on the air that he is programming. He is thinking of using this approach and making them available to LPTV stations.

We have obtained first generation ½-inch VHS tapes of the enclosed list of public domain movies and George has most of these and hundreds more.

What we are considering doing is putting a control tone five seconds before a natural break on a second audio track. Then with a two-track player, play the audio from the first track and have the tone from the second track either turn on the player for your commercial (five seconds ahead) or simply turn on a light to alert the switching personnel.

If these tapes are made available for $5 rental, you can play them one night, insert commercials and dub a tape, including the commercials. Play it again the next afternoon as a matinee and you have movies at a cost of $2.50 per showing.

We are suggesting a package of these tapes shipped to you in 10's with each seventh movie a horror flick for use on Saturday night, which you can use with your own Elvira-type host if you like. You then ship them on to the next station every 10 days in groups of 10 in a box. Freight is paid to you but you pay to forward.

We are interested in hearing from you as to how you could use these, with tone, host or whatever. George does not want to go to alot of expense putting hosts on or breaks, etc., unless others are interested in using them at a reasonable rental.

We have all of ours in ½-inch VHS, which is much easier and cheaper to ship than ¾-inch.

If you would like to see and sample one of these public domain movies, write the title (list a second choice, also) you want along with $5 and a note saying you agree to put it back in the mail within three days after you receive it. You can use it for broadcast since the copyright has expired and was not renewed. You can also legally copy it for later broadcast if you want. Send your request to: VideoMania, 318 South Main, Sioux Falls, SD 57102.

George has been developing trailers (previews of tomorrow night's movie) to go on the end of tonight's movie. Interested?

Below are PD movies in stock in Sioux Falls, SD

A Farewell To Arms	(B & W)	Gary Cooper, Helen Hayes
A Shreik In The Night	(B & W)	Ginger Rogers
A Star Is Born	(Color)	Fredric March, Janet Gaynor
A Town Called Hell	(Color)	Telly Savalas, Robert Shaw
A Walk In The Sun	(B & W)	Dana Andrews, Richard Conte
Abilene Town	(B & W)	Randolph Scott
Africa Screams	(B & W)	Abbott & Costello
Algiers	(B & W)	Charles Boyer, Hedy Lamarr
The Amazing Adventure	(B & W)	Cary Grant
Angel And The Badman	(B & W)	John Wayne, Bruce Cabot
Angel On My Shoulder	(B & W)	Paul Muni, Claude Rains
Bad Man's River	(B & W)	Lee Van Cleef, James Mason
The Beachcomber	(B & W)	Charles Laughton
Bells Of Rosarita	(B & W)	Roy Rogers, Dale Evans
The Big Combo	(B & W)	Cornel Wilde, Richard Conte
The Big Trees	(Color)	Kirk Douglas, Eve Miller
Bird of Paradise	(B & W)	Joel McCrea, Dolores Del Rio
Blackmail	(B & W)	John Longdon, Anny Ondra
Blood On The Sun	(B & W)	James Cagney
Blue Steel	(B & W)	John Wayne
Call It Murder	(B & W)	Humphrey Bogart, Sidney Fox
Captain Apache	(Color)	Lee Van Cleef, Stewart Whitman
Captain Kidd	(B & W)	Charles Laughton, John Carradine
Commandos	(Color)	Lee Van Cleef, Jack Kelly
Cry Of Battle	(B & W)	James MacArthur, Rita Moreno
Cyrano De Bergerac	(B & W)	Jose Ferrer, Mala Powers
D.O.A.	(B & W)	Edmond O'Brien, Pamela Britton
Dark Journey	(B & W)	Vivien Leigh
Dawn On The Great Divide	(B & W)	Buck Jones, Tim McCoy
The Day Of The Triffids	(Color)	Howard Keel, Nicole Moore

Dinner At The Ritz	(B & W)	David Niven, Paul Lukas
Dressed To Kill	(B & W)	Basil Rathbone, Nigel Bruce
Eternally Yours	(B & W)	David Niven, Loretta Young
The Fabulous Dorseys	(B & W)	Tommy Dorsey, Jimmy Dorsey
Father's Little Dividend	(B & W)	Spencer Tracy
Flying Deuces	(B & W)	Laurel & Hardy, Jean Parker
The Front Page	(B & W)	Adolphe Menjou, Pat O'Brien
Ghosts On The Loose	(B & W)	Bela Lugosi
God's Little Acre	(B & W)	Robert Ryan, Michael Landon
Gold Rush	(B & W)	Charlie Chaplan
Great Guy	(B & W)	James Cagney
Gulliver's Travels	(Color)	Animated Feature
Gung Ho!	(B & W)	Randolph Scott, Robert Mitchum
He Walked By Night	(B & W)	Richard Basehart
Hell's House	(B & W)	Bette Davis, Pat O'Brien
His Girl Friday	(B & W)	Cary Grant, Rosalind Russell
Horror Express	(Color)	Christopher Lee, Telly Savalas
Hurricane Express	(B & W)	John Wayne, Shirley Grey
I Cover The Waterfront	(B & W)	Claudette Colbert
Inspector General	(Color)	Danny Kaye, Elsa Lancaster
It's A Wonderful Life	(B & W)	James Stewart, Donna Reed
Jamaica Inn	(B & W)	Charles Laughton, Maureen O'Hara
Jesse James At Bay	(B & W)	Roy Rogers, Gabby Hayes
The Jungle Book	(Color)	Sabu, Rosemary DeCamp
Kennel Murder Case	(B & W)	William Powell, Mary Astor
The Lady Vanishes	(B & W)	Michael Redgrave, Margaret Lockwood
Letter Of Introduction	(B & W)	Adolphe Menjou
Little Lord Fauntleroy	(B & W)	Freddie Bartholomew, Mickey Rooney
The Little Princess	(Color)	Shirley Temple, Arthur Treacher
Little Tough Guys	(B & W)	Leo Gorcey, Bill Halop
The Mad Bomber	(Color)	Vince Edwards, Chuck Connors
Made For Each Other	(B & W)	James Stewart, Carole Lombard
The Man Who Knew Too Much	(B & W)	Peter Lorre, Edna Best
Men In War	(B & W)	Robert Ryan, Aldo Ray
Meet John Doe	(B & W)	Gary Cooper, Barbara Stanwyck
Most Dangerous Game	(B & W)	Joel McCrea, Fay Wray
My Favorite Brunette	(B & W)	Bob Hope, Dorothy Lamour
My Man Godfrey	(B & W)	Carole Lombard, William Powell
Night Of The Living Dead	(B & W)	Duanne Jones, Judith O'Dea
The North Star	(B & W)	Anne Baxter, Dana Andrews
Nothing Sacred	(Color)	Fredric March, Carole Lombard
Of Human Bondage	(B & W)	Leslie Howard, Bette Davis
Our Town	(B & W)	William Holden, Martha Scott
The Outlaw	(B & W)	Jane Russel, Jack Buetel
Outpost In Morocco	(B & W)	George Raft
Palooka	(B & W)	Jimmy Durante
Painted Desert	(B & W)	William Boyd, Helen Twelvetrees
Pancho Villa	(Color)	Telly Savalas, Chuck Connors
Penny Serenade	(B & W)	Cary Grant, Irene Dunne
Perils Of Pauline	(Color)	Betty Hutton, John Lund
Pot O' Gold	(B & W)	James Stewart, Paulette Goddard
Pride Of The Bowery	(B & W)	Leo Gorcey, Huntz Hall
Private Buckaroo	(B & W)	The Andrews Sisters, Harry James & Orch
Private Life Of Don Juan	(B & W)	Douglas Fairbanks
Psychomania	(Color)	George Sanders
Rage Of Paris	(B & W)	Douglas Fairbanks
Rain	(B & W)	Joan Crawford, Walter Huston
Reaching For The Moon	(B & W)	Douglas Fairbanks
The Red House	(B & W)	Edward G. Robinson, Ron McCallister
Sabotage	(B & W)	Silvia Sidney, Oscar Homolka
Saga Of Death Valley	(B & W)	Roy Rogers, Gabby Hayes
Salome Where She Danced	(Color)	Rod Cameron
Santa Fe Trail	(B & W)	Errol Flynn, Ronald Reagan
Scarlet Pimpernel	(B & W)	Leslie Howard, Merle Oberon
Scarlet Street	(B & W)	Edward G. Robinson, Joan Bennett
Second Chorus	(B & W)	Fred Astaire, Burgess Meredith
Sherlock Holmes and the Secret Weapon	(B & W)	Basil Rathbone, Nigel Bruce
Sidewalks Of London	(B & W)	Charles Laughton, Vivien Leigh
Something To Sing About	(B & W)	James Cagney, William Frawley
The Son Of Monte Christo	(B & W)	Louis Hayward, Joan Bennett
Spitfire	(B & W)	Leslie Howard, David Niven
Strange Love Of Martha Ivers	(B & W)	Barbara Stanwyck, Kirk Douglas
The Stranger	(B & W)	Edward G. Robinson, Loretta Young
Tarzan The Fearless	(B & W)	Buster Crabb, Jacqueline Wells
Terror By Night	(B & W)	Basil Rathborne, Nigel Bruce
They Made Me A Criminal	(B & W)	John Garfield, Anne Sheridan
Things To Come	(B & W)	Raymond Massey, Ralph Richardson
The Thirty-Nine Steps	(B & W)	Robert Donat, Madeleine Carroll
This Is The Army	(Color)	Ronald Reagan, Kate Smith
Tulsa	(Color)	Susan Haywood, Robert Preston
Under The Red Robe	(B & W)	Raymond Massey
Winterset	(B & W)	Burgess Meredith, Edward Cianelli
The Woman In Green	(B & W)	Basil Rathbone, Nigel Bruce

AMAZING ADVENTURE (Romantic comedy)
Cary Grant

GREAT GUY (Drama)
James Cagney • Mae Clarke

SHERLOCK HOLMES' DRESSED TO KILL (Mystery)
Basil Rathbone • Nigel Bruce

THE PAINTED DESERT (Western)
William Boyd • Clark Gable

HIS GIRL FRIDAY (Comedy)
Cary Grant • Rosalind Russell

FLYING DEUCES (Comedy)
Laurel and Hardy • Jean Parker

Alfred Hitchcock's SECRET AGENT (Suspense)
Peter Lorre • Madeleine Carroll

GHOSTS ON THE LOOSE (Comedy)
Bela Lugosi • The East Side Kids

ALGIERS (Drama)
Hedy Lamarr • Charles Boyer

TILL THE CLOUDS ROLL BY (Musical)
Judy Garland • Frank Sinatra • Robert Walker

KILLER BATS (Horror)
Bela Lugosi

SAGA OF DEATH VALLEY (Western)
Roy Rogers • Gabby Hayes • Red Barry

BEAT THE DEVIL (Drama)
Humphrey Bogart • Peter Lorre • Jennifer Jones

KILLER BATS (Horror)
Bela Lugosi

POT O' GOLD (Comedy)
James Stewart • Paulette Goddard

MEET JOHN DOE (Comedy/Drama)
Gary Cooper • Barbara Stanwyck • Walter Brenna

STAGEDOOR CANTEEN (Musical)
Katharine Hepburn • Ethel Merman

More titles added monthly.

More on Trends

As you know, we read a tremendous number of industry-related publications, and, from the industry press and personal observation, we wish to pass along several trends that are noted and reported. One is that the cable boom has, in nearly all phases, slowed down. In contrast, the VCR boom has not only exceeded all expectations and predictions, it continues to do so with several new factors fueling a further increase in VCR ownership and useage. One is the continued increase in the value of the dollar in relationship to the yen, etc. (this makes the VCR price lower). Second is the Korean and Taiwan manufacturers are now getting into VCR production with much lower labor rates than Japan. Combined result is falling prices on VCR's. The third factor is that Europe, England, etc., all have a much higher saturation than U.S. homes with VCR's, and the market in those places is now slowing down. Therefore, the VCR manufacturers will need to have a bigger push in the U.S. where, in the past, they could hardly keep up with worldwide demand.

Australia, for example, already has 32% of homes owning VCR's compared to 20% in the U.S. Viewing live TV in Australia has fallen to 71% (from 100%). Australia observers report that homes that have owned machines more than six months use them far more often than new purchasers.

The trend in the U.S. is less are watching network television and the networks' percentage of audience is steadily falling.

The home satellite boom continues and is expanding at a tremendous rate. Good quality equipment for home reception is now available at $1,000. Five and six foot dishes are becoming common as the cost of the extremely low noise amplifier comes way down and far more sensitive receivers become available. In the next 12 months, over 25,000 satellite setups are expected to be sold to churches alone. Sunday evening services off of satellite (with big productions the locals cannot match) often draw more people than the regular Sunday morning service.

Congress has passed a law clarifying the legality of home satellite receivers. Commercial installations such as bars, hotels, etc., are not included.

One or two of the full time late movie channels still threaten and plan to scramble, but there are plenty left with the same movies that have no plans to scramble.

Quality of pictures received off of satellite channels is fantastic because it is FM (frequency modulated), whereas regular broadcast TV is AM. Quality difference is comparable to difference between AM radio and FM radio. People in rural areas, particularly, are amazed at not only the quantity but the quality of the picture (no matter where you live, the picture is superb). Cable systems carry only a small percentage of the over-100 channels available, and they do not improve the picture—only degrade it. The frequency used is the same as the telephone company uses for cross-country use. So, if you live near a telephone company installation, you may have reception problems on some channels. Several steps can be taken to eliminate interference, but the telephone company location and satellite reception should be checked before a low power station signs a lease, particularly for a downtown location. (The telephone company microwave is usually located downtown.)

Satellite TV is now an option in the big city, as well as the underserved rural areas. Cable, with a movie channel or two, plus a sports channel, Disney, Playboy, etc., comes to $45 a month. Same amount of money paid out monthly as payments for a satellite receiver gives you far more channels, better reception and less outages, and your equipment is paid for and all yours in as little as two years.

Low power can still compete by being the channel they switch to for local information.

Subscription TV on full service stations has dropped considerably with much scrambling equipment available used at 80% off. Reason for full service stations discontinuing STV is that cable systems have started up in most major cities and offer several channels for the same money the STV stations were getting for just one movie channel. In addition, the independent stations are now becoming very valuable and competitive for regular broadcast use, and the owners want them back for that use.

This does not mean STV is still not very feasible for low power. More feasible, perhaps, because of the availability of a lot of low cost used scrambling and descrambling equipment.

We have several MDS operators (microwave-fed subscription TV) that are interested in obtaining low power permits, but most are interested only if they can get several channels in a market.

We discontinued SPN in Sioux Falls in favor of Odyssey, the music clip network. Shortly thereafter, we received three petitions signed by over 600 people requesting that we put the hunting and fishing programs back on channel 34.

Rather taken aback by that (we didn't even know if we had 600 viewers for sure), we looked into how that happened. Apparently there was a large hunting and fishing convention in town and, as part of the program, someone announced that we had been carrying some great hunting and fishing programs but had taken them off. Three different groups then got together petitions with a lot of the signers, some of whom, never having even known about the programs (or the station), signing because they wanted a chance to be able to watch now that they had found out about it.

Our response is that we are staying with Odyssey and are sure that if we took Odyssey off, we would get a number of petitions, also. 50% of the population in Sioux Falls is under the age of 30, according to statistics furnished by the chamber of commerce. We hear that nearly all of the college TV sets are tuned to our channel nearly all of the time. In the meantime, we are trying to get two additional channels through the FCC, one of which would be used to put the hunting and fishing programs back on.

Continued next page.

In the meantime, as you know, the FCC lost our STL (studio to transmitter microwave) application and suggested (October 1st) we reapply and they would expedite it. They called us on February 18th and said it had been granted. Now we have to locate some STL equipment and install that before we can do commercials, etc. In the meantime, tower rent has been $100 a month and the light bill under $40 a month. So we have five months of the public discovering channel 34 (the only UHF in town), and we now have a much larger audience for our potential advertisers than we would have had when we started.

This may not be a bad idea for many of you who are not ready to go full blast from day one. Put your channel on the air with a satellite feed and just let it run. You are gaining audience every day, so when you get around to studio and commercial insertions, you have built up a much bigger audience.

Most 100-watt UHF's we have been able to put on the air and operating for under $25,000, including satellite dish, etc. One we installed for under $18,000, including all equipment, some of which was used. Incidentally, these costs include installation labor and travel expenses, etc. The supplying satellite networks carried by these all have no charge for their 24-hour programming. We are now planning a VHF installation, which we believe we can get on with satellite programming for under $8,800.

One of the things we learned at Sioux Falls is that modulators, satellite receivers and transmitters will work unheated at 20 degrees below zero. We understand that does put some stress on components and would be better not to subject them to that but, nevertheless, they continued to operate with no auxilliary heat in the building. It is normally five degrees warmer inside our insulated building than it is outside, due to heat given off by the transmitter. We had a 70-mile an hour wind that blew our dish out of alignment one night, and when there was not enough video the, the transmitter shut down automatically. We realigned the dish (froze my face) and got it back on, only it came back on with the sound garbled and unintelligible. Sound out of the satellite receiver was perfectly normal so it had to be the audio section of the modulator (deduction). Thinking maybe it was too cold and contracted, etc., too much, I pulled the modulator's audio chassis, heated it with a hair dryer and put it back in. Worked perfectly for several weeks, including some more days well below zero. Then, on a warm day, I shut off the satellite receiver for a bit while I refocused the feed horn which had a different measurement from the dish (¼ inch) than some others I had installed. After it was all turned off for awhile and I turned it back on, the modulator put out garbled sound again. Temperature was 45 degrees out, but I thought, 'what the heck, extra heat worked last time', so I heated it up with a dryer again, reinstalled it and it worked great, and has been working fine ever since. So maybe you need to carry a hair dryer in your tool kit. Some integrated circuits might just need warming up.

Incidentally, a satellite receiver's down converter is normally installed out on the dish feed point when you have a long run of cable. Since we had only about 12 feet of cable to the dish over the building, we put our down converter inside the building. Drift in a satellite receiver is primarily due to the down converter, so keeping it a little warmer and away from fast temperature swings as is often a part of South Dakota weather, may be helpful.

Sioux Falls Video Store Update

We started with less than 150 titles in October and now have 350. Store is in the black and, currently, every dime goes back into more titles. Only on two occasions have we run commercials on our LPTV station about our video rental store. On both occasions, business doubled for the two following days. Microwave permit just granted will allow us to soon run commercials daily. However, the current Odyssey rock program attracts mostly the younger population, and video software industry figures show that only 1% of rentals are to people under the age of 21.

Current plans are to move the tape store to a larger room and use the current tape-rental room for the television studio. The tape-rental room has high ceiling ideal for studio use and other larger room has a low ceiling.

Movies usually cost an average of $45. We are keeping our average down by buying used tapes, hard bargaining with distributors and pre-booking, which saves 7%. Our average cost now is around $35 per title. Buying current hits is a tricky job. Some rent only for three or four weeks after you get them and then hardly ever rent again. Some cost $65, so you have to develop a sense of what will rent enough at $2.50 to get your money back. We put colored dots on all boxes and remove them as we rent them. Any with dots on them at the end of 30 days are remarked and moved over to the $1 section where they then rent like crazy. If they do not rent good there, we then trade them for $5 to $10 to video exchanges for other titles we think will rent better.

Our goal is to get to 1,000 titles and 8,000 rentals per month. We currently rent four VCR's and 12 VCP's at $4.44 a day Sunday through Thursday, and $10 on Friday and Saturday. We hope to get that to 35 machines. We currently rent three video cameras, also, from $6.66 to $24.

Four new videotape rental stores have opened for business in Sioux Falls since January 1. Business at all stores continues to increase, however, because the VCR-owner pie is constantly getting bigger.

Big secret of success in VCR movie rental business is learning what tapes to buy. Photo at left shows classics, musicals, how-to's and children's, which we rent out for $1.00. One-third of our business at $2.50 each tape is adult, which are out constantly.

Shown stacked horizontally along wall, left, is one Saturday night's rentals (all out) plus 50 adult tapes. Adult tapes are displayed in a ring binder and boxes are not displayed. All adult movies are stacked in blue cases behind counter. Adult tapes are asked for by the number. Others have empty box on display which customer bring up and asks for the tape. Checking empty boxes, shown here, shows which tapes have not yet been returned. Tapes that have posters on the wall rent better than those that do not. Posters are free but hard to get.

An empty, short parking meter post in front of store door would make a good holder for a drive-up return box. We have requested permission from the city for our installing a return box for drive-up. Night photo does not show chasing lights around the window borders.

Stereo Update

The stereo television we have talked about enthusiastically in past issues is progressing. Japan has had stereo television for over three years and Germany has also had it almost as long. Only recently finally approved in the United States, all parameters have not yet been decided, with the FCC copping out, deciding not to decide whether cable systems have to pass stereo along to their subscribers. With cable systems not carrying it and the affluent half of the population that most likely might buy updated TV sets that receive stereo, there is little incentive for stations to hurry now into stereo. Nevertheless, at least one station in each of the top 50 markets expects to be broadcasting in stereo in the next 12 months. Two are already on in Seattle. A half million dollars is one of the figures bandied around as the cost for a full service station to go stereo.

What does it cost for a LPTV station to go stereo? If the question pertains to right now, about $12,000 seems to be the lowest estimate. Two years from now we expect that figure to be $2,500. Major cost is in the stereo exciter, which very few know how to build yet and those that do are busy with full service customers who have the big bucks.

However, there is a modification necessary to your transmitter which we have been recommending you have done now when you order your transmitter, rather than have to send it in or field modify it when you decide to go stereo two or three years from now. This will add $500 to $1,000 to your present transmitter bill but will allow you to get right with stereo later, simply by plugging in when lower cost exciters become available. Remember, almost all of the satellite program sources are already broadcast over satellite in stereo, which costs only another $300 or so to decode and input to your LPTV station.

They are selling home stereo decoders now for over $100 to use with your stereo set to tune in TV sound. Some of the new audio tape decks even come with TV stereo decoders built in as a plus feature. Remember, the IC (chip) to decode stereo television costs the manufacturer only $6.00.

Sooner or later the broadcast end is going to be put on integrated circuits also, and then every apartment house modulator, etc., will include stereo television sound because the cost to transmit it will be low enough.

Cable systems are having a tough time figuring out how to pass the stereo sound system. Cable systems narrow up the band width of each channel and chop off the portion that carries stereo in order to squeeze more channels in at less cost. To change that system would cost cable big bucks. The FCC has announced they have decided not to decide about cable must-carry on stereo, so the pressure is now off the cable systems.

Therefore, it looks to me that we LPTV operators need to keep an eye open to jumping into broadcasting in the new TV stereo system as soon as economically possible to get one jump up on cable and, maybe, even one jump up on local full service station competitors.

Let's say you have your LPTV station carried on the cable (lucky you) and you are local. All the other TV channels are imported. If you go stereo, local hi-fi fans can tune your sound in off the air on their hi-fi stereo sets (in stereo) and watch your picture on the cable. Antenna users that own a set with the new built-in stereo capability would get you directly on their TV in stereo.

So even if the cable doesn't pass your stereo, it is possible for the local population to tune in your music videos, for example, in stereo off the air on their hi-fi decks or the new TV sets.

When you go stereo, you get another plus—you get an extra audio channel on which you can carry another language, classical music, a barker telling what's on TV tonight, etc., plus a professional channel for data, etc.

Advertising Sales Hot for Anchorage, Alaska's Channel 22!

Catch 22, Channel 22 in Anchorage, Alaska, had signed contracts for over $119,000 in advertising spots during the first three weeks of January. Station manager Bobby Eakin commented that 'Our music format has really caught on in the 20 to 35 age group. Since the new year, we've signed Stereo Warehouse to an $80,000 contract.'

During the first two months on the air, advertisers included national accounts such as **Pepsi, Coca-Cola,** and **Air Alaska,** and local businesses such as Stereo Warehouse, Anchorage Cold Storage, Chez Ritz, Spa Fitness and The Look. Ads cost $40 for a 30-second spot in prime time (6 p.m. to midnight) to $12.50 in the wee hours. This compares with $400 to $170 for prime time on the full power stations. Catch 22's signal covers Anchorage as effectively as the full power stations. 'It's only the rural areas where people live in cabins that we miss,' added Eakin. The station also produced advertising spots for KWHL, Stereo Warehouse, The Club and 15 other clients, ranging in cost from $250 to $2,100. Ad sales have reaffirmed projections that the 24-hour music video station could be self-supporting in six months.

Jeffrey Nightbyrd, LPTI President, commented, 'What we are marketing is 'metro TV'. We are showing that low power television is highly competitive in the metropolitan area. So far, low power television programming has been associated with rural or remote television. We are 'grass roots' TV in the city. Music video programming has already proven itself in the 20-35 age group. Anchorage has the highest per capita income and spending levels for this age group in the entire United States. Advertisers are beginning to see that our narrow casting approach is reaching their audience.'

'Life Begins at 30'

TV 30 in Lawrence, Kansas, is the Jayhawker community's first television station and Low Power Technology, Inc.'s (LPTI) second station on the air. TV 30 is the 'News and entertainment' channel. The programming consists of music videos with local news, weather, community events and public affairs.

TV 30 began broadcasting at 9 p.m., January 19, 1984, amid a gala event staged at the Alvamar Country Club with countdown orchestrated to '2001'. The first advent of local news was very enthusiastically received by the community, giving residents the opportunity to see themselves and neighbors 'making the news'. There are seven daily newscasts given on the hour from 5 p.m. to 10 p.m., Monday through Friday, with update newscasts on the weekend. Weather forecasts occur twice an hour. The station has a professionally-run local news operation with an experienced news director and augmented with graduate student interns from the University of Kansas. An original program, 'FOCUS 30', a two-minute information talk show that plays hourly, deals with local business, political and social service issues.

Until TV 30, Lawrence citizens watched television from Kansas City and Topeka. Now, the TV 30 signal reaches 20 miles from its centrally-located tower on the West Campus of the University of Kansas. Lawrence is a university community of 65,000 with an additional 25,000 students. Veejay's, music video hosts, were recruited from the university and local radio professionals. As expected, the music video format is very popular with the 18-35 year old target audience. Much of the programming of the station caters to the upwardly mobile student and professional community.

Station manager John Katich, a radio professional from St. Louis and Malden, Missouri, said, 'I am excited by the enthusiastic reception for our locally-run television station. The quality of the TV 30 signal is better than the full power television brought from Kansas City. I'm especially proud of the news portion of the programming, with color graphics and cracker-jack field reporting, that which has all of Lawrence tuning in. And we're planning to make it something not to be missed.'

Presale advertising sold locally was a healthy $25,000. LPTI's President, Jeffrey Nightbyrd, contends that 'metro TV' is what this station is all about. It is the company's strategy to prove that low power television is a profitable venture in urbanized areas.

Next on the drawing board for LPTI is the sister station in Topeka, which is scheduled in the Spring.

Lottery Winners:

The FCC has tentatively awarded low power television construction permits to the following: Charlie's TV, ch. 9, Koyukuk, AK; Neighborhood TV, ch. 53, Peoria, IL; Charlie's TV, ch. 16, Village of Center, NE; AVN, ch. 67, Augusta, GA; Buenaventura, ch. 17, Gallup, NM; Todd, Branton, Wooton, Fugit, ch. 35, Ruidoso, NM; CBC TV, ch. 19, Alliance, NE; Classic Video, ch. 53, Cortez, CO; Blow & Blow, ch. 13, Key West, FL; Family Television, ch. 34, Fresno. CA; Phyllis Teasdale, ch. 27, Monticello, NY; Sun Network, ch. 24, Tucson, AZ; CTV Translators, ch. 62, Birmingham, AL; Edward Johnson, ch. 8, Key West, FL; Mississippi Telecasting, ch. 31, Hattiesburg, MS; Creative Broadcast, ch. 54, Denison, TX; Ward & Ward, ch. 58, South Bend, IN; Mountain TV Network, ch. 51, Grangeville, ID; Quote . . . Unquote, ch. 64, Albuquerque, NM; Wichita Falls Broadcasters, ch. 40, Wichita Falls, TX; Family Television, ch. 50, Vero Beach, FL; J-Pax Broadcasters, ch. 55, Wichita, KS; Televisual, ch. 53, Harrisburg, PA; Specific Broadcasting, ch. 55, West Palm Beach, FL; Collis Callihan, ch. 40, Cedaredge, CO; Lorene Duran, ch. 31, Grand Junction, CO; National Innovative Programming, ch. 57, New Orleans, LA; Echonet, ch. 13, Nacogdoches, TX; Edward Safdie, ch. 38, Santa Barbara, CA; Preston-Jenkins, ch. 3, Vero Beach, FL; Zonation Broadcasting, ch. 68, Fort Wayne, IN; American Lo-Power TV, ch. 57, Enid, OK; Complexicable LPTV, ch. 19, Waycross, GA; Indiana TV Network, ch. 51, Hagerstown, MD; Shaltry Communications, ch. 44, Little Rock, AR; OKTV Translator, ch. 61, Woodward, OK, Eddie Robinson, ch. 45, Twin Falls, ID; Community Telecommunications, ch. 42, Rochester, NY; Latin American Television, ch. 30, Morgan City, LA; Continental Satellite, ch. 55, Omaha, NE; Lawrence O'Shaughnessy, ch. 35, Kalispell, MT; Deloy Miller, ch. 28, Redfield, SD; Morris Dimsdale, ch. 16, Live Oak, FL; Forward Broadcast, ch. 3, Elko, NV; Mighty Mac Broadcasting, ch. 13, Ignace, MI; Minerva Rodriguez Frais, ch. 7, Uvalde, TX; and J-Pax Broadcasters, ch. 65, Tulsa, OK.

Low Power Television Translators: Proposed Construction Permits

Report No.: GL85-4

BPTT-810309IX
Full Gospel Business Men's Fellowship International
Columbus, Indiana — Channel 57

BPTTL-820407SD
George E. Barrett, Edward C. Dunn and Charles R. Ray
Cave City, Kentucky — Channel 18

BPTTL-840116F9
Low Power Technology, Inc.
Indianapolis, Indiana — Channel 25

BPTTL-8401167N
Ponyland Broadcasting Company
Kalamazoo, Michigan — Channel 25

BPTTL-831214WC
Ponyland Broadcasting Company
Columbia, Missouri — Channel 28

BPTTL-820407RW
George E. Barret, Edward C. Dunn and Charles R. Ray
Eldon, Iowa — Channel 38

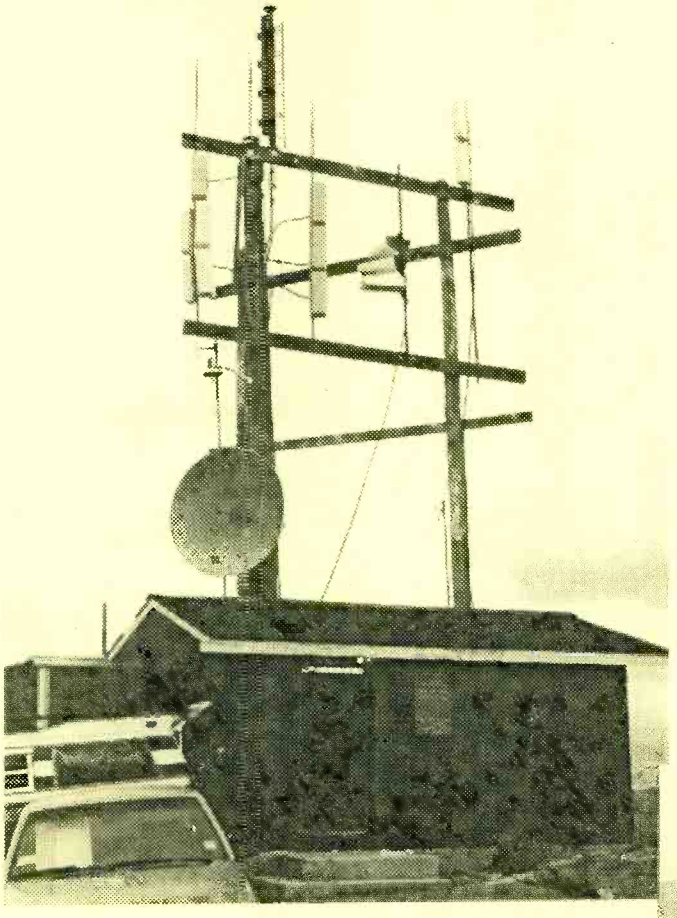
BPTT-830815JL
North Platte Television
Lexington, Nebraska — Channel 35

BPTTL-820616SC
Russell Communications
Rolla, Missouri — Channel 19

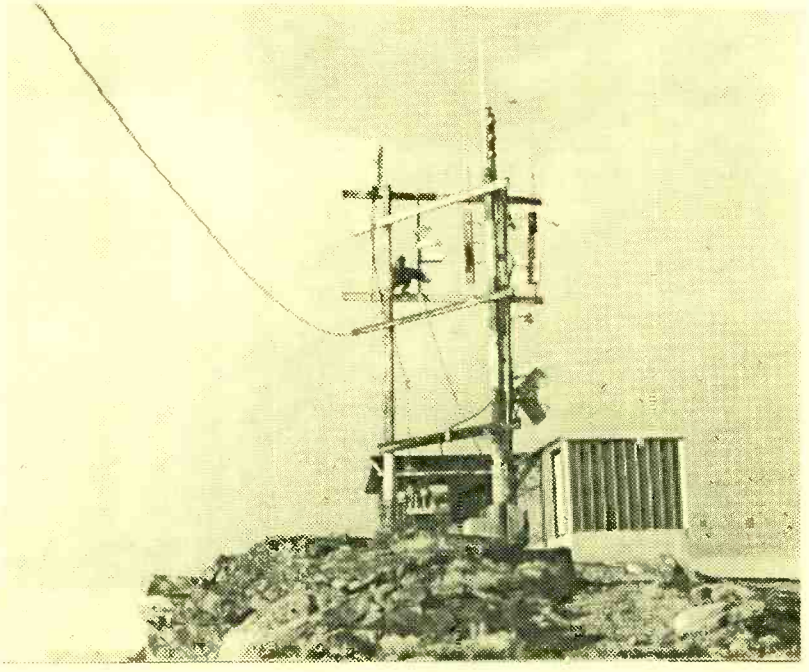
BPTTL-821025SC
Community Television
Oak Grove, Delaware — Channel 55

BPTTV-810303GS
Blacktail TV Tax District
Elmo & Big Arm Bay, Montana — Channel 11

St. George, Utah



St. George, Utah mountain-top installation includes five UHF translators—three low power, two FM and one microwave for the local cable system.

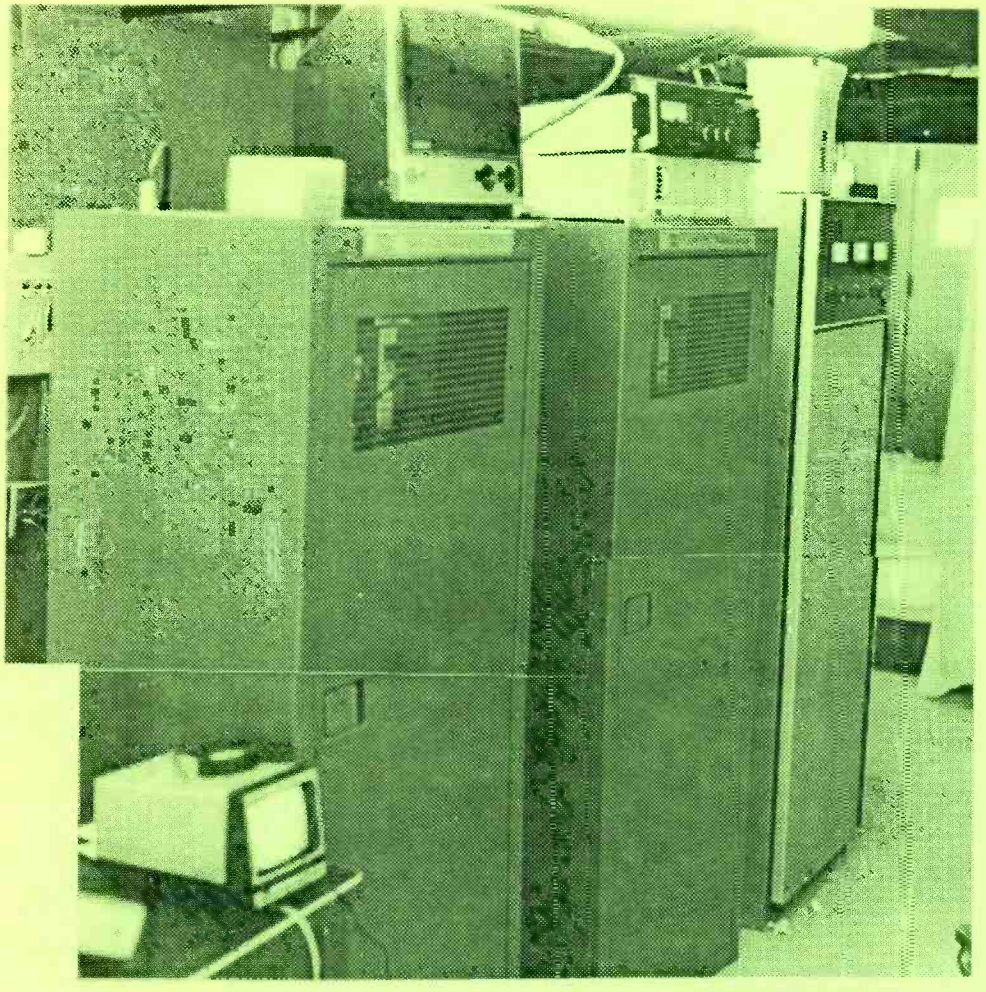


Your editor is shown in this photo orienting the four Scala color log antennas for the St. George channel 14 installation.

Satellite dish is long way from transmitter building. Frame to right of dish holds receiving antennas for translators picking up from other translators on peak on horizon, far right, 30 miles away.

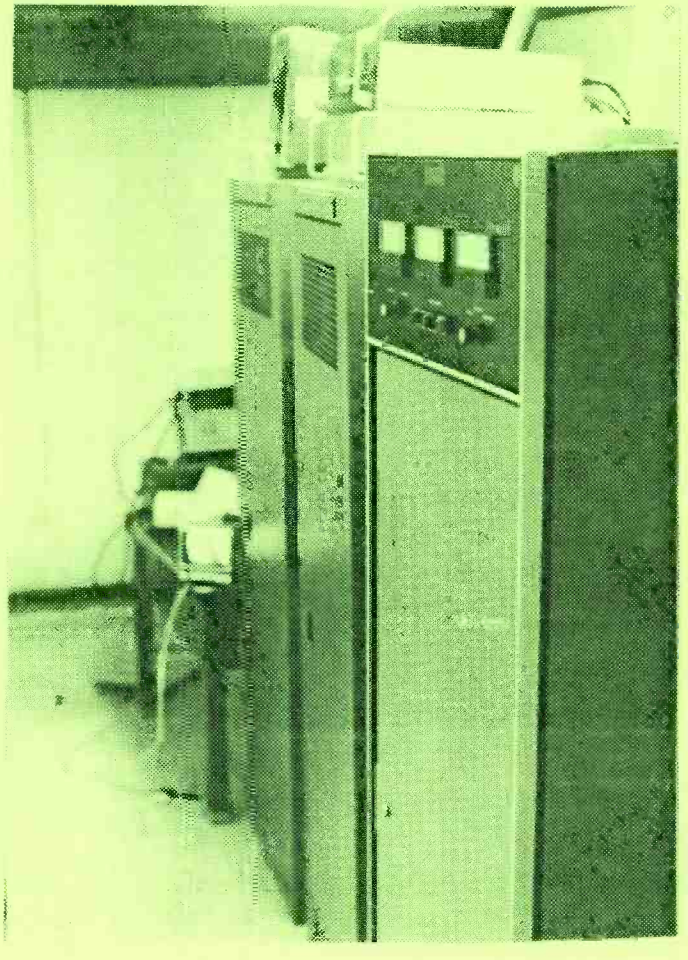
Huntington, West Virginia

Photo of installation we did recently in Huntington, West Virginia. Photo was taken from tower site on top of 18-story building. Note long, narrow population between hills on right and left. Signal only needs to go one mile left and right and 15 miles down the Valley. Ohio River is on the right.



St. George transmitter building houses three low power transmitters and is owned by the county, which houses several translators and FM translators in the next room. Russell Communications, owner of the channel 14 installation, center, which we installed, pays the county $150 a month rent. Each pays for their own power.

Channel 55 on left has their modulator and satellite receiver downtown and signal comes up the mountain on two miles of coaxial cable. Center installation we installed has satellite receiver and modulator on top of a Television Technology Corp. transmitter cabinet. Emcee transmitter, right, houses modulator inside. Photo is composite of two since we couldn't get it all in one.



Another shot of three St. George low power transmitters, all owned and operated by separate parties. MTV is not carried by the cable since it is predominantly a Mormon community that will not tolerate the sex and violence depicted in some MTV videos. Russell Communications is currently carrying Odyssey Network, which is popular. (Odyssey carries music videos similar to MTV, but cleaned up.) Russell plans local programming at a later date.

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-1

Released: January 11, 1985

BPTTL-820616SS
Watonwan TV Improvement Association
St. James, MN — Channel 42

BPTTL-830318IL
Mountain TV Network, Inc.
Worthington, MN — Channel 47

BPTTL-830314UP
Mountain TV Network, Inc.
Storm Lake, IA — Channel 42

BPTTL-830309VU
Mountain TV Network, Inc.
Wishek, ND — Channel 52

BPTT-810309IM
Delta County
Paonia, CO — Channel 58

BPTTV-830225XF
Colby-Bates-Bowdoin Educational
Telecasting Corporation (WCBB-TV)
Pittsfield, Maine — Channel 4

BPTVL-810904SF
Attaway Broadcast Group, Inc.
Lufkin, TX — Channel 2

BPTT-830301JG
Dull Knife Memorial College, Inc.
Northern Cheyenne Indian
Reservation, MT — Channel 67

BPTT-830301JC
Dull Knife Memorial College, Inc.
Colstrip, MT — Channel 65

BPTTL-831214J6
Ponyland Broadcasting Company
Miami, Florida — Channel 21

BPTTL-820331TW
Meycom, Inc.
Marco Island, FL — Channel 21

BPTTV-820524TO
Virgin Valley Television Corp.
Mesquite, Nevada — Channel 12

BPTTL-831214VL
Low Power Technology, Inc.
Columbia, MO — Channel 42

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-2

Released: January 29, 1985

BPTT-820615TK
Northfork TV Translator System
Erick, Sayre and Carter, Oklahoma
Channel 60

BPTTV-810116SB
Butte Meadow-Jonesville
Improvement Association
Butte Meadows, California — Channel 4

BPTTV-830216XN
State of Alaska
Mosquito Lake, Alaska — Channel 2

BPTVL-830217IF
State of Alaska
Mosquito, Alaska — Channel 13

BPTTL-810319IF
Taft Broadcasting Company
Eau Claire, Wisconsin — Channel 38

BPTTL-810217RG
Tel-Radio Communications
Properties, Inc.
La Crosse, Wisconsin — Channel 38

BPTTL-830223US
Mountain TV Network, Inc.
Luana, Iowa — Channel 38

BPTTL-831214XG
BTV Associates
Iowa City, Iowa — Channel 38

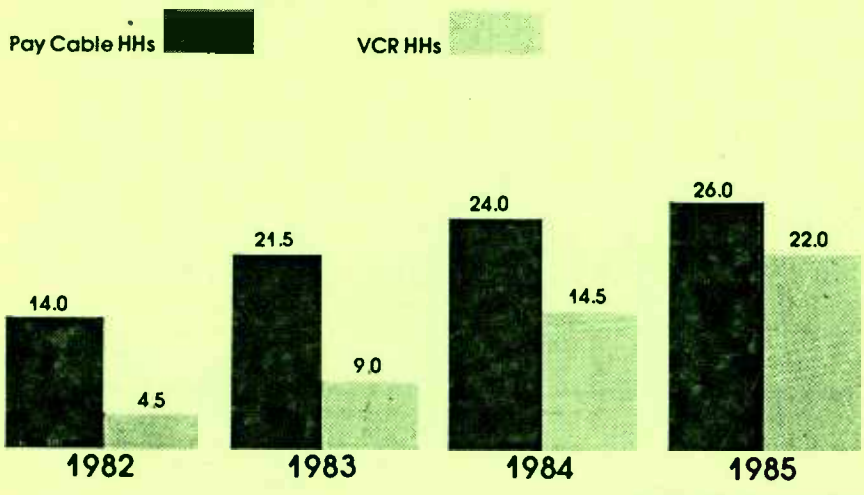
BPTTV-8102172Q
Absarokee Community T.V.
Club, Inc.
Absarokee, Montana — Channel 10

BPTTL-831109PH
Kentel
Pocatello, Idaho — Channel 47

BPTT-830815JL
North Platte Television
Lexington, Nebraska — Channel 35

PAY CABLE AND VCR HOUSEHOLD GROWTH: 1982-1985

(millions of households)



Source: the Yankee Group

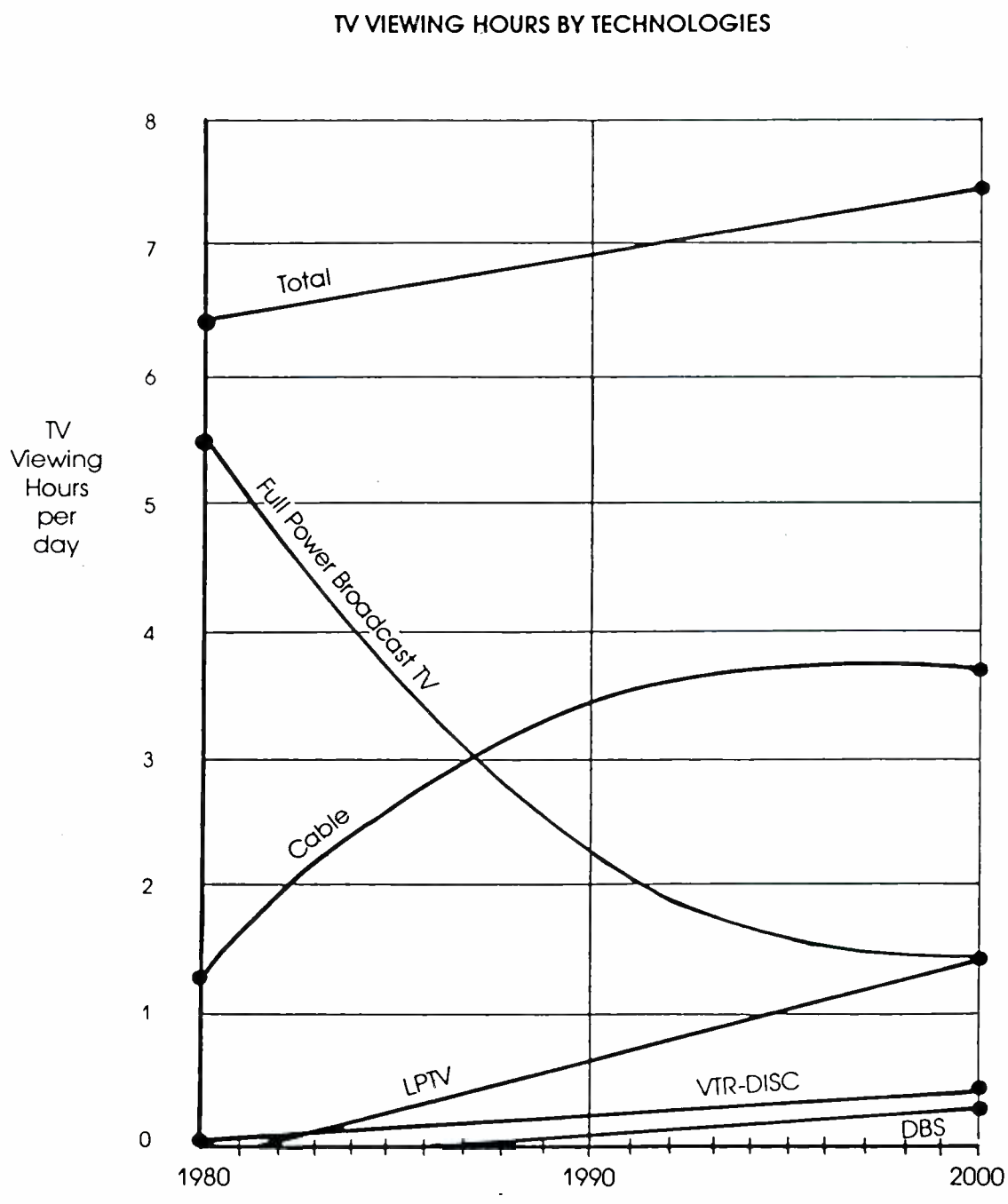
BROADCAST STATION TOTALS FOR DECEMBER 1984

January 9, 1985

AM Radio	4754
FM Radio	3716
FM Educational Radio	1172
UHF Commercial TV	365
VHF Commercial TV	539
UHF Educational TV	176
VHF Educational TV	114
UHF Low Power TV	112
VHF Low Power TV	204
Total Radio	9642
Total TV	1510

Lo-Power Community TV

March 1985



Projection and chart courtesy of Blonder-Tongue.

What's Happening

The FCC has repeatedly released figures stating there will eventually be licensed about 4,000 low power permits. There are now more licensed translators than that. Japan, the size of California, has 7,000 translators (LPTV-types), and since the United States is 24 times as large as Japan, that would give us 168,000.

The UHF taboos which keep UHF broadcasters from using every other channel (7 channels up-14-15, 20 miles, 5 adjacent, etc.) have been obsolete since the 60's with the improvement of UHF tuners, but the commission still clings to these taboos because it keeps their workload down and keeps down potential competition of new channels for the politically powerful, entrenched broadcasters.

If the needless UHF taboos were eliminated, and they well could be, that would increase by four times the number of potential LPTV grants. Multiply that by the 168,000 and you get the idea. Saying that only 4,000 can be licensed is ridiculous. Right now, we will temporarily settle for that 4,000. After five years of this, they still are under 500. The bottleneck is not technical, it is not equipment, it is not for lack of people willing to invest and build them, it is not economics—the only thing keeping thousands of communities from having additional TV stations in our lifetimes is **bureaucracy**. Remember—the FCC said for years that translators could not be allowed. Only after there were 5,000 to 10,000 illegals on the air did they finally agree to license them, and only then with unnecessary restrictions, which many still ignore. Even after five years of legitimizing the low power stations, they have managed to hold grants down to an agonizingly small number.

Probably the most-asked question and one this surviving (barely) publication should answer is when can you file for a channel in a town you want and/or when can you file to change power, antenna, coverage, direction, etc.?

First of all, when dealing with a question to be fulfilled by a bureaucracy, you have trouble getting or making a straight and accurate prediction. Looking at past history of LPTV, you can go back one year ago, two years ago and three years ago and see what the FCC officials said they would be doing with LPTV in six months, one year, etc., and you will find they lived up to NONE of those promised projections, and, in fact, did not even come close. Their predictions and promises were always many times as good as what they actually delivered. They made promises to take the public heat off and then went back to their same old pace.

With all that in mind, staff members are now saying no filing window until they are caught up with processing present applications on file, which, some say, will be next November, others say next March. If they insist on waiting until they are caught up, you can bet March or later will be more accurate. Nothing much of anything gets done at the commission over the summer. So no filing, no correcting or improving your coverage of your present station—nothing for another year, at least.

So, when a window does open, with people essentially not being able to file for what they want or need for over three years with this three-year backlog and being afraid they won't be able to file again for another three years, the commission are setting themselves up for another deluge of applications. Instead of gearing up and taking care of these as they arrived over the years, they go from one deluge to the next. Meanwhile, the public is denied additional television service.

We now have indications that the commission is working on the first lotteries of 1984's March 8th filings. Also—believe it or not—there are indications they are getting ready to grant (put on public notice) some of those on the March 8th list (lead application put on cut-off) that survived without anyone filing on top of them, or those that did have applications filed on top were thrown out for one reason or another.

We wonder what's happening to some of our applications filed three years ago that hasn't made it to nothing. When are they ever going to be granted?

Apparently the second (or third) copy of the application you file that normally goes into the public access room never made it there from the 20,000-plus filed last March 8th. Instead, they now get copies from upstairs with the regular file they work with; you come in one day and request the applications in the access room now and they get them down for you the next day. Meanwhile, public access copies of the 20,000-plus applications sit in boxes in the basement.

Interesting quote from Mark Fowler of the FCC before a house appropriations committee on March 5th.

Quote: WE EXPECT THAT DURING FISCAL YEAR 1986 WE WILL OPEN A FILING WINDOW FOR THE REMAINING LPTV APPLICATIONS. Unquote.

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Postmaster: send address changes to **7432 East Diamond, Scottsdale, AZ 85257**. (602) 945-6746.

Neighborhood TV Plan Still Viable

LPTV stations are not the only animals that get overstaffed in relation to the market. Below is an article reprinted from the March 13th issue (daily) of **The Arizona Republic.**

KUSK, Prescott, Arizona, as you may know, was to be the super station for a satellite feed to translators all over the U.S.A. set up as part of an ingenious plan. That went awry when the FCC set up the low power rules, and KUSK was left with making it on income from the market covered locally (20,000 people) in Prescott.

Competing with translators for the full service stations out of Phoenix and an extensive number of cable systems, KUSK managed over $25,000 monthly income, it was reported, but that apparently not enough to cover the overhead.

Neighborhood TV, a Phoenix firm that had financial backing from Sears-Allstate, set up a plan that may have been the key to the FCC finally implementing the low power rules. Neighborhood planned to have translators repeating KUSK in all of the top 100 markets in the United States. As translators repeating a full service station (KUSK, Prescott), they would have been must-carry on **all** cable systems in the top 100 markets. Neighborhood filed for these translators **before** the low power plan was put into effect and, in fact, probably caused it or expedited it being put into effect. The FCC held up granting Neighborhood's request under the old translator rules until they had the LPTV regulations in place and then lumped Neighborhood in with the LPTV applications and made their applications sitting ducks in the LPTV cut-off process.

Neighborhood TV went to court over being treated that way and just recently lost after an expensive legal battle. The company has been obtaining a few of the 100 top markets they applied for in recent lotteries, but it is too few and five years too late. Satellite time is expensive, but the plan was very feasible. The idea was to operate all of the 100 as unmanned repeaters (100 watt). An advertiser would then be able to get coverage at say $300 for a 30-second commercial on KUSK, making it, in effect, $3 for a spot in Chicago, St. Louis, New York, Los Angeles, etc.

The idea is still good but requires a lot more money and effort to put such an animal together. Their only labor overhead would have been at KUSK, Prescott.

That's a little background for the article below:

Prescott's Channel 7 lays off 12, cuts news shows

THE ARIZONA REPUBLIC
Wednesday, March 13, 1985

By FRED SMITH
Yavapai County Bureau

PRESCOTT — KUSK-TV (Channel 7), the independent station in Prescott that has tried to operate like its big city counterparts despite a skeleton crew, announced Tuesday a series of cutbacks in a bid for survival.

The changes will include the layoffs, effective Friday, of 12 full-time employees and several part-time staffers and the end of locally produced news, weather, sports and public-affairs programming.

The station also will alter its "canned programming" and will feature more religious material in the future.

"We've been caught in a never-never land of television," said Bill Sauro, part-owner of the station.

"We've got too much competition for the ad dollar here. We've done everything we can to make a go of it, but we're losing too much money the way it is now. I'm very disappointed we have to take these steps."

Channel 7 went on the air on Sept. 5, 1982. It is owned jointly by Sauro, president of Creative Advertising Inc. of Phoenix, and by the All-State Insurance Co.

"All-State got to the point where it didn't want to put any more money into the station," Sauro said. "And I couldn't put any more into it because I didn't have it."

The most noticeable change for local viewers will be the end of the 30-minute evening news program, which featured part-time newscasters, the 10-minute news show during the noon hour and a 20-minute forum on local issues that also ran at noon.

Also affected will be live broadcasts of Yavapai College girls basketball games and the Bradshaw Mountain High School football games.

Included in the laid-off category will be Rob Quirk and Kathy Baron, two journalists credited by Sauro for carrying the brunt of the news-producing load.

Quirk, 27, has been news director for the station since its inception. Baron, 28, joined the staff a year ago.

Said Quirk, "I think we did a lot for this community, like putting together public-affairs programs that the public shows interest in. We sure tried. We were on the way up, but it got to be a matter of dollars."

As news director, Quirk was a cameraman, announcer, editor and producer. Both he and Baron worked 50 hours Monday through Friday and covered what they considered newsworthy on weekends.

KUSK-TV won first place last year in the television general news coverage, long form, category of the Arizona Press Club's annual contest, beating out Phoenix and Tucson stations.

The judge cited KUSK-TV's Quirk for "tremendous public service" in his coverage of Prescott flooding in 1983.

Sauro blamed the cutbacks on a combination of factors. One, he said, was the fact that Channel 7, which he described as the "world's smallest independent station," never gained any recognition in television advertising rating books. This meant the station could not get national advertising.

Another factor, Sauro said, was the local economy. "Prescott's economy is not booming like the rest of the state.

"We've had a number of business bankruptcies, and I would estimate that 30 percent of our accounts receivable (for advertising) are not collectible."

In addition, he said, KUSK-TV was not able to become a household viewing fixture, even in the Prescott area. Phoenix television is relayed to this area by cable or translator and always proved to be more popular than Channel 7 among the viewing audience.

Sauro said the discontinuance of local programming will have some effect on ad revenue because the station no longer will be able to produce ads as it has in the past.

He said the station will continue to feature a heavy slate of sports programming in addition to religious productions put out by Billy Graham and Jerry Falwell.

Sauro did not rule out the resurrection of local programming in the future.

Sustaining Income for LPTV Operators

We are constantly looking for additional ways to make a buck as a low power station operator, particularly in a small market. It is often a slow process getting a low power station up to speed, and you need sustaining income to carry the overhead.

One of our experiments has been our videotape movie rental business in Sioux Falls. We started with about a $10,000 investment and it now carries itself and the basic station overhead while adding $1,000 a month worth of inventory from income. During the times I have been there, we have had many people ask about putting their 8mm movies on tape. When they discover they can also put the family picture album on also, they become real interested. I keep telling them we are going to set up to do it for them, because I think it's a natural tie-in, since everything you need in order to do this you also need in order to produce commercials, etc., for your station.

While at the recent Consumer Electronics Show we picked up literature from several firms that are making franchise deals out of performing this service. In other words, making money doing nothing but converting 8mm and photos to tape. Personally, I already know there is a demand. We are reproducing here some of the pamphlets we picked up. Your LPTV advantage is that you already have the equipment (or should have), and it would require little or no additional investment or personnel to produce these. In fact, your switching people who need to be in to switch networks, insert taped programs, etc., can do this while waiting and make that time more productive. Most of this production for people is non-rush, so you can work it into the schedule at no additional labor. The second big advantage is that you have TV commercials you can run showing examples of albums put on tape, etc. In other words, you can promote getting customers (everybody with a VCR is a prospect). You can offer making duplicates while keeping the quality up because you can use a processor. You can also offer editing of home movie tapes shot by individuals that need to be edited. You can offer classes and let the people come in and do it themselves after they learn how, etc., etc.

It is a natural because the public will believe you should be able to do a good job because that's the business you're in—producing TV tapes for your station.

We will be doing this at our Sioux Falls operation as soon as we get time to set up. (It takes time to get everything done as I am doing a lot of other jobs for other people.)

To find the additional literature on this subject, see the inside page (overleaf) from the back of this issue.

COMPETITION

Recently we put on a low power station in a small market for a client. In that market is a low power that operated for six months, went off the air because of finances for a long period and is now back on the air. Competing with the usual cable system channels, it also competes with five off-the-air channels.

The station goes off the air at 11:00. Watching the station, I was amazed at two things: the excellent quality of their production, smoothness, professionally-produced expensive tags and lead-ins and the number of expensive syndicated shows they were playing tapes of; the second thing that amazed me was that they were still on the air. Sitting there in the motel, I watched several days of this programming at different times and saw no local production of news or any local information shows at all, not even a local weather forecast. Yet, the operation was using a lot of expensive labor. In other words, they were spending big money daily on programs and putting them on and were, essentially, running the same type of programming all the competing channels were running, only they had network reruns that they had to pay for.

Sitting their with a pencil, I could almost tell you how many employees they had (at least 10), and I could almost figure, within reason, how much they were spending for syndicated tapes, shipping in and out, and wear and tear on their tape players. Then I could figure, within reason, the amount of ad income they had (practically no local spots), and I thought, 'Boy, this operator has a lot of money to throw away or they wouldn't be still in business'. Sure enough, one of the employees called when he heard a new LPTV was coming on, calling to see if we had any jobs open because the present station he was working for couldn't pay them on their recent payday. It seems almost like insanity to me that a local station would pay big bucks and try to compete (out-General Motors General Motors) with the same type of programming the other stations were already carrying.

Checking with the local residents about whether they watched that local channel, the only consistent and positive response I got was from a few that said they watched wrestling on Saturday nights (this is probably a program the other stations are not carrying). Some LPTV operators are getting this particular wrestling free that has built-in commercials. Even with the built-in commercials (barter deal), some LPTV operators are still paying this show's syndicator $100 a show. Even if you get it free, you still have to pay for shipping it in and out, so that program was costing them somewhere between $14 and $114 for one hour. Also, there had to be an employee there to run it, and there was wear and tear on the 3/4-inch tape machine plus employees' shipping time, etc. What was amazing was that they were using mostly this type of paid-for programming all day long.

You can almost bet that this license will soon be for sale at $250,000 or some such silly figure as they try to recoup the money they have lost in operating the station.

Then these horror stories get out on how much some LPTV operator lost in his first year. And then other permit holders begin to wonder, do I really want to put a LPTV station on the air? Do I want to chance losing a bundle like that?

Really, I do not believe that this station operator could even make it in a city the size of Phoenix with that present format of programming and costs unless he had enough money to hold out for three years. In that present small town, he would **never** be able to make it with that programming and overhead. If he lasted 50 years, he'd still be losing money. And that is why I say these guys fail because they think they have a traditional full power station operation and try to operate as such.

The LPTV advantage is: 1. low-cost operation—if it's a high-cost operation, it is because you chose to make it high cost; 2. freedom to run as many or few commercials, programs, etc.—no restrictions on LPTV as a full service has. Run any type of format, language, etc., as you want; 3. the ability to narrowcast or cover a special, small-interest segment that no one else is serving (Example: local information or local programming, particularly if no other station has local programming; or Spanish language programming when only 10% of your population speaks Spanish); 4. ability to operate totally unmanned a good part of the day. Staff only the hours when it pays to staff, but stay on 24 hours a day; 5. ability to act as a translator of another station (repeater) free of charge (or even get paid) and ability to run high-quality satellite-supplied programming at no cost and still be able to stick in local commercials with no programming costs.

Now the small town station I started out writing about here really has no one in the community grateful that he is on the air—they do not appreciate it or care that he is losing his shirt. He is just one more channel of the same thing they already have, so if he goes off the air, no one locally will really give a hoot or perhaps not even notice.

We have not yet done a survey in that town, but the LPTV we put on in this market is currently carrying 24 hours of satellite network's music videos. I am willing to bet that if you took a survey, you'd find the local population spending more viewer hours watching the currently unmanned music video station as are watching the heavily manned local station that came on the air several months before and should already have had a following by now. The public does not know or care whether it is manned or not. When the 24-hour music video station gets around to selling advertising locally, I am sure they will have greater success than the present operator. Even more so when the music video channel starts putting in some local programs and information. Keep in mind that the music video channel operator competes with no similar programming (there isn't a music channel, even on the local cable), and he has only around $200 a month operating costs for now while building an audience. (Time works for him—every day new viewers discover or hear about the music channel, and every day someone new gets the habit of watching.) When this channel does start

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selling local commercials, they will already have an established audience. In the meantime, I am sure the other LPTV operator will be discontinuing operation soon. No one has enough money to sustain that type of operation for long—that channel will have committed financial suicide.

It is not that LPTV operations are not feasible as moneymakers, it just is not feasible (at least in a small market) with that type of operation. To succeed in low power, you will need: 1. programming that the competing channels are not carrying (such as local information); 2. operate unmanned with no operating costs (free satellite programming) during the day parts that you have no sponsors, and/or for an initial period until you build an audience; 3. keep your overhead lower than your income; 4. get out and sell, sell, sell (advertisements, that is)!

LPTV — Big Success or Big Bomb?

There really is a lot of confusion over whether LPTV is a big success or a big bomb. The question we hear is, 'Do you know anyone making money in LPTV?' The answer is, 'Yes, we do.' We have talked about them in past issues. The people making money are pretty closed-mouth about it and are busy building more stations. The disillusioned who thought LPTV was the same as a full service station where you started out with 25-30 employees and those on a big ego trip are, of course, bellyaching that they are losing money.

First, the history of broadcasting, particularly television, is that even if you are in a good market with good coverage, good facilities, enough money, the right employees and do everything right, you could expect to lose a big bundle of money for two to five years. That expected and predictable loss was part of the investment in getting to where a TV station made money. Even the original stations in New York City and Boston that are now worth $200 million and return a profit of many millions each year, nearly 100% lost money for several years when beginning. Most of the UHF stations around the country built in the last 10 years lost a lot of money for a lot of years before getting into the black. Most are now selling for 10-30 times what their owners invested in them. FM radio stations' history in the past also had the same pattern.

Unfortunately, most of the people getting into low power thought a LPTV permit was the same as getting a McDonald's franchise—you just opened up with a couple dozen employees and a big fanfare, then you were going to be busy the rest of your life just taking the money to the bank, and you were going to be big stuff in your locality as is the big broadcaster.

LPTV broadcasting is not like a McDonald's franchise. It is more like ranching or farming with a longer season. If you choose a farm or ranch in a poor area with poor rainfall, poor soil and high taxes, you are going to have to operate differently than a farmer or rancher in a high rainfall area with rich soil. If you are going into ranching, you develop a herd over a period of years, and it may be several years of building the herd before you can actually send any to market. In the meantime, you need enough money on hand to keep going.

The LPTV ad-supported or STV (subscription) operation both take awhile to build (ad accounts, subscribers, etc.). Like the farmer, you have to get the soil ready correctly for your type of farm (not what farmers do two states away). Then you have to make the correct decision on what to plant, keep the weeds out for a long time and, if conditions are right, you eventually, if you're lucky, have a harvest. Then there has to be a market to sell what you raised. If what you raised isn't in demand this year, you probably won't get much for your crop.

In LPTV, you have to get your soil ready by public relations, advertising, getting people to get antennas, getting on the cable system and developing viewers by whatever means. What you plant is what type of viewer you go after, by your program format. Are you going to be a farm that tries to raise a little bit of everything that requires a lot of expensive machinery to plant and harvest all of these different types of crops? Or—are you going to go for one crop—a crop that you think will be in short supply, in demand and bring a good price? Then the weeds (competition) will try to take over and you have to do what you can to have your crop outgrow the weeds.

When your LPTV station grows its share of the viewers and the market eventually realizes what a good crop you have and you market it right, well, then and only then, you start going to the bank. However, this will likely take some time.

With a McDonald's franchise you do about as well the first day as you will do one year or three years from now.

Not so with an LPTV station or any other broadcast property. With satellite TV, cable, etc., there is hardly anywhere you can go and not have strong viewer competition. There are still some markets you can build into that have no local TV competition (yet), and you can be the big fish in a little pond with local television. Remember—viewers have entrenched viewing habits, and it takes a long time to work you into their patterns.

The average full service television station last year made a profit of over $1 million. The average TV station probably had four competitors, which means they averaged about 20% of the market (average viewers) and still made over $1 million. The average TV station had around 65 employees.

An LPTV station competing in this type of market should attempt to make $100,000 profit by getting 2% of the same market (number of viewers) and

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operating with seven employees or less (that's all at 1/10th the scale of full service). You do not have to pull as big a percentage of the audience because you can have such a low overhead. Your cost per viewer can be lowest of all. Your station draws a maximum of $350 worth of electricity per month for your transmitter (about $5 or less a month if you have a 10-watt VHF) compared to the full power UHF stations which have power bills of $5,000 per month and up.

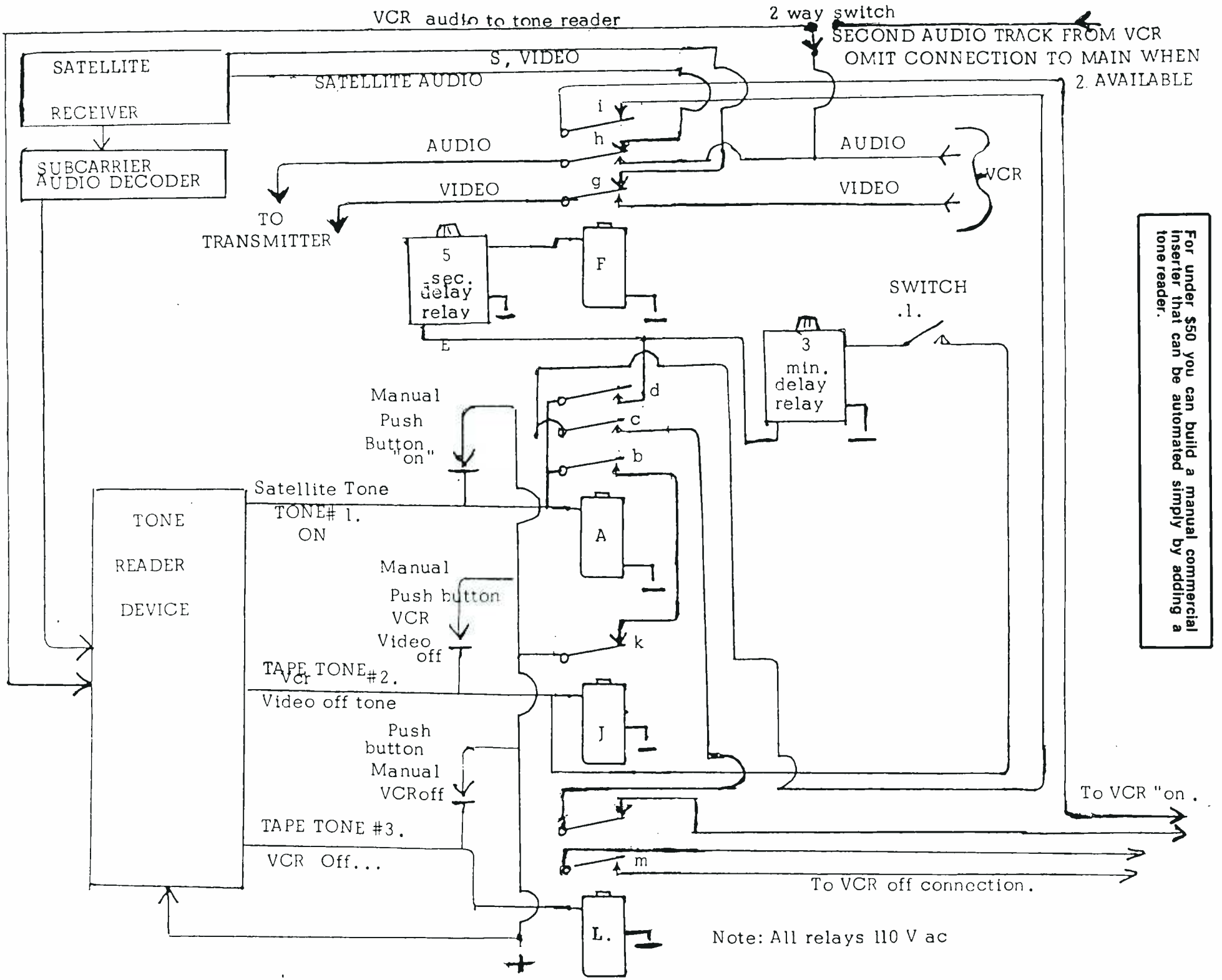
Your programming can be obtained totally free, if necessary, and your big overhead need only be labor. If your market will reward you by doing a lot of local production, do only what pays or makes economic sense. Starting off with expensive local production (employee intensive) and little or no ad income to support it, is what has brought red ink to many a LPTV operation. We say carry as much local information as possible that can be automated or nearly automated. For example: 1. superimpose local temperature, time, wind speed, direction, chill factor, barometric pressure and forecast right over the network program every 15 minutes for 20 seconds. We do this totally automated, 24 hours a day with a $450 computer. 2. Crawl news, as it happens, announcements, where the fire is, and even ads superimposed over network programs. This can all be automated where this information is even input from elsewhere. You can carry local information faster than everyone except the local radio station, and you can at least come in there as a tie. 3. Insert local (information) commercials, programs, etc., automated and inserted by satellite-supplied tones automatically and unmanned. 4. concentrate employees nearly totally on getting ad sales. Remember, this takes time, and you can expect to harvest little more than radishes right off. You have to carry the hired man on the farm for a long time before you harvest. You will likely carry a sales force for a long time with an LPTV station before you harvest. When they sell advertising, use the same sales force to produce the commercials.

Now We Tell You —

Another piece we intended to get in last issue was about satellite reception in March. This may be too late for March problems but be informed and keep it in mind because it will happen again in six months.

Twice a year the sun's rays hit your satellite dish to where it focuses perfectly on your dish's feedpoint (if you live in Arizona and have a shiny aluminum dish, it will be melted by the sun). There are complicated mathematical formulas to figure—from which satellite you are on, what your latitude is, etc., to exactly what day and what time your dish has this phenomenon happen to it. You won't know the date, but you will be able to figure almost what time of the day it will happen from where you are pointed, East or West. It will start out affecting reception several days in advance, and the reception keeps getting worse and worse at that same time each day until it hits it head on and kills reception completely. Then it will get less and less noticeable and disappear a few days later. What it does is degrade your picture until, one day at that time, it wipes it out (up to 30 minutes). The sun has a more powerful transponder than the satellites and overwhelms your reception. You might have a half hour tape ready to pop on when you see this phenomenon creeping up on you day by day, or switch to a different satellite for programming at that time of the day (not a different transponder—it has to be a different satellite).

No technician can fix this half hour outage problem twice a year other than move your dish to another satellite. So no need to call him when you know what's going on here. It cures itself. (Being cloudy won't make any difference.)


VCR audio to tone reader
2 way switch
SECOND AUDIO TRACK FROM VCR
OMIT CONNECTION TO MAIN WHEN
2. AVAILABLE
SATELLITE
RECEIVER
S, VIDEO
SATELLITE AUDIO
SUBCARRIER
AUDIO DECODER
AUDIO
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AUDIO
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Button
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Satellite Tone
TONE# 1.
ON
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Manual
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VCR
Video
off
TAPE TONE #2.
VCR
Video off tone
Push
button
Manual
VCRoff
TAPE TONE #3.
VCR Off...
To VCR "on .
To VCR off connection.
Note: All relays 110 V ac
For under $50 you can build a manual commercial inserter that can be automated simply by adding a tone reader.

Automatic Commercial Inserter Using VCR'S

We show you how to build (or have your technical friend or employee build) an automated insertion device.

Sequence starts by satellite tone **A**, which is heard by the tone reader shown at left. When hearing satellite-sent tone #1, reader sends short pulse to relay **A**, closing it. Contact **B** closes and supplies voltage to relay holding it closed continuously. Contact **C** is also closed, which is connected to the VCR 'on' solenoid. Contact **D** is also closed energizing (adjustable time) 5-second delay relay, which closes contacts after 5 seconds and energizes relay **F** which now switches from the satellite audio and video to your VCR audio and video contacts **G** and **H**. This also opens up contacts and circuit **I** (previously closed), releasing the 'on' solenoid on your VCR which, of course, continues to run until contacts in the 'off' solenoid in the VCR are closed.

So what we have had happen here is the satellite program supplier's tone signal for local commercials turns on the tape recorder (five seconds in advance) 'on' mode and the machine threads up. Five seconds later (time is adjustable), after the machine is up to speed, the audio and video is switched in from the VCR and the satellite source dropped. The on (button) solenoid is released on the VCR after 5 seconds while the machine keeps running.

Next sequences could be from satellite tones, but we believe this is simpler just to use the one satellite commercial 'on' tone with the other control tones all coming from your tape.

What happens next here is your VCR player's second audio track (or one, if that's all you have) is connected to the tape reader. Tape tone #2 is inserted on the tape (dubbed) where you want the commercial (or ganged commercials), station break, announcement, etc., all recorded together to end and switch back to satellite. On hearing tone #2, the tone reader sends out a short pulse to relay **J** which pulls in and momentarily opens contact **K**, dropping out relay **A**, which also opens up, of course, relay **F**, which then goes back to its normal satellite position. (If the electric company should fail at this or any other time, it would all come back on, automatically, switched to satellite while VCR would continue to roll to VCR stop tone #3 and then shut down ready to start fresh with the next commercial, etc.)

Since the relay **A** opened up opening contacts **B** and relay **F**, switching video back to satellite with relay **F** going back to normal satellite operation, we are left with the VCR still running and advancing to the next commercial's beginning point where you have inserted another stop tone, tone #3, which shuts down the VCR at the start point of the next commercial by pulling in relay **F**. Again ready to go on, the VCR waits for the next satellite tone signifying time to start another commercial.

Now we have designed here (but do not show to keep this simpler) another tape tone to switch to a second tape player and another tone to signify at what point you want the recorder to rewind and recycle the commercials. So if you had 25 30-second commercials on a tape and you wanted to play a certain combination or sequence of five of them all day long and you had a two-track (stereo) recorder (remember, we recommended you buy stereo recorders when setting this up for today), you would erase all previous tones on track two (incidentally, the VHS hi-fi units have four tracks—two for controls). Insert a VCR off tone #3 at the start of the first commercial on stereo track #2 so the machine runs up to the first stop after the rewind. (In our version we also built in a five-second VCR play 'on', but no video switch, at the end of the rewind.) So it rewinds and advances itself up to commercial #1, all ready to go at commercial #1's start point (we leave it out here to simplify drawing). At the end of that first commercial you insert (dub in on track #2) video switch tone #2. This switches video back to satellite as the VCR continues to run past all of the commercials you want to skip on up to the next tone #3 VCR stop tone you put in, which coincides with the start of the next commercial you have selected. Tone #3 pulls in relay **L**, which closes off contact **M**.

Most satellite tones for commercial insertion are at least 15 minutes apart, so your machine has time to get up to the next commercial, even if it is several down the line; it stops and is ready to go again for the next commercial you have selected on the tape—after the last commercial in the series on the tape, you would insert rewind tone #4 on the tape, which closes rewind contacts momentarily (not shown here), and the machine would rewind itself and cycle back up to the first commercial, etc. This could be after only five minutes of tape, for example.

If you want to insert commercials, programs or whatever, you can use a Radio Shack timer #63-888 ($24.95) to set the time parameters. For example, say that you wanted to insert the same series of five commercials over and over between 8 p.m. and midnight. The Radio Shack timer just turns on the 110-volt volt to your recorders and current to this device at 8 p.m. and shuts off the power to it all at midnight.

You could use another similar timer with a relay switching on power for one recorder (sourced from the other timer) in the 'power-off' position on timer #2. When timer #2 comes on, it pulls in the VCR selection relay and shuts off power to the 110-volt cord for VCR #1 and turns on power to VCR #2. By using video/audio loop-throughs and parallel VCR controls to both machines, the on and off will affect only the one currently being supplied 110-volt. For example, with this set-up, you could then set overall commercial insertion from 8 p.m. to midnight again with timer #1. Timer #2 runs from its own power source all the time, and it is set to come on at 9:30 and off at 12. Therefore, it powers up VCR machine #1 in its relay 'off' position from whenever to 9:30, at which time power is switched on and pulls in the VCR selection relay, which then pulls in and shuts off power to VCR #1 and turns on 110-volt to VCR #2, which has a different combination or series of commercials that you have set up on that tape for the second time segment.

This is all designed to be used with our ½-inch VHS machines with wired remotes. We just look up which pins (for the plug-in control cord) are on, off, rewind, etc. The wires from our device here then are connected to a plug using the right pins. The original wired hand control is unplugged.

CONTINUED NEXT PAGE

If you want to make a much simpler machine that does not listen for satellite tones but inserts commercials strictly at exact times and controls or jumps around and stops or recycles with tape-added tones, or, simpler yet, just comes on at an exact time, runs for an exact length of time and switches back to satellite after an exact amount of time. That, of course, would be simplest of all. You could use this non-tone, strictly time-controlled device to insert a 30-minute repeat of an earlier news program at 11:30 p.m., for example, after everyone at the station has gone home and have it switch back to satellite while shutting off the VCR at, say, midnight. That can be put together for under $50 (less using used or surplus parts). And, if anyone is interested, we will draw a diagram and parts list and sources in the next issue. Or you can adapt this one shown here to time control.

We are not actually building the device diagramed as shown here—we are having someone that is more up to date and into the latest solid state devices, convert my diagram here into a working version without mechanical relays—in other words, all solid state. I grew up in this business before solid state, so I have to work it out with simple relays, etc. (I didn't keep up on all the latest devices). Without the tone reader (and tone inserter to put tones on your tapes), all these relays can be bought for under $80 ($15 to $20 at a surplus shop). The commercial tone readers go for $350 on down to $35 depending on . . . . (we will tell you more about those in future issues). Right now we are trying to develop a simple solid state device, including tone readers and inserters that we can offer you for under $350 that does all of this, including rewinding and switching to a second recorder. If we succeed, at that price it probably won't pay for you to mess with this. The cheapest commercial inserters are about $2,400 on up to $38,000. In the meantime, if you can find a reasonable tone reader (and inserter), you can build your own by following this diagram exactly as shown in this issue.

If your VCR has only one audio track, you dub these telephone-type tones (touch-tones) right on the regular audio track at a reduced level. You connect audio to the tape reader in addition to satellite audio. The only tone the public will hear (lower than usual audio) is the video off of tone #2, which should switch immediately so only a split second will be heard.

We have built-in here a three-minute (adjustable time) delay relay that you can switch in when running short commercial gangs, for example. Turning the switch #1 to off would be necessary when running longer than three-minute segments. This is inserted just as a backup three-minute insurance policy that our machine doesn't accidently miss a tone (or in case we forget to put one on the tape) and run commercials all night. So after three minutes (adjustable time), it goes back to satellite if the tones have not yet taken care of it. It does so by pulling in relay J, which shuts down A and F and goes back to satellite after everything has been on for three minutes or whatever time you set the daily relay for.

Potter and Brumfield Corporation makes a series of time-delay relays, and you can get them from your local supplier. For another make, try Herbach & Rodeman, 401 East Erie Avenue, Philadelphia, PA, 19134—relay TM22K233 at $8.50 each.

The other regular relays are available at Radio Shack or almost any electronic wholesaler or electronic surplus establishment for a couple bucks each. These are all double throw relays. Buy one (quantity) single pole, one (quantity) double pole and two (quantity) three-pole relays (all double throw).

The satellite programmers, such as Odyssey, all send their control tones on a separate audio subcarrier. You will need a satellite receiver that can receive this extra audio channel at the same time. If you use a commercial Drake receiver, for example, you need their stereo receiver in addition (about $300). Odyssey personnel talk to the station operators on this subcarrier channel (by connecting a loudspeaker) and tells your studio operator what's coming up (voice) before the tones, etc. They leave their microphones open all the time, and you hear the employees discussing their pay, who is working when, etc.

Anyway, we have added three manual pushbuttons (see diagram) so you can manually switch using the relays simply by pressing the 'on' button when you hear the tone, for example. You could do this all without a tone reader using this set-up with a person in attendance listening to the instructions and control tone channel. Total cost is under $80 for parts. The advantage here is you just use one button and it switches the video automatically at the right time. So you have a cheap switching device that can be used manually or unattended if you add the tone reader.

PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET N.W.
WASHINGTON, D.C. 20554

News media information 202/254 7674 Fax order listing of releases and texts 202/632 0002

Low Power Television Translators: Proposed Construction Permits

Report No.: CL85-5 Released: March 8, 1985

Notice is hereby given that the television translator and low power television application(s) listed below have been accepted for filing. These applications, which are not mutually exclusive with other LPTV and TV translator applications have been fully reviewed and in the absence of petitions to deny, the applicant(s) appear to be grantable. Petitions to deny the application(s) may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application listed below.

BPTTL-830312YR
Mountain TV Network, Inc.
Broadus, Montana Channel 23

BPTTL-840116I9
Low Power Technology, Inc.
Eugene Oregon Channel 25

BPTT-830301JH
Dull Knife Memorial
College, Inc.
Muddy Creek Valley, Montana
Channel 55

BPTT-8011141X
Oklahoma Educational
Television Authority
Duncan, Oklahoma Channel 54

BPTTL-830307SW
Mountain TV Network, Inc.
Baker, Montana Channel 14

BPTTL-830309US
Mountain TV Network, Inc.
Choteau, Montana Channel 23

BPTTL-830314AW
Mountain TV Network, Inc.
Hamilton, Montana Channel 65

BPTTL-830314RZ
Mountain TV Network, Inc.
Hamilton, Montana Channel 67

BPTTL-830307SU
Mountain TV Network, Inc.
Baker, Montana Channel 16

BPTVL-821216TQ
Edward F. Anglin
Springdale, Arkansas Channel 7

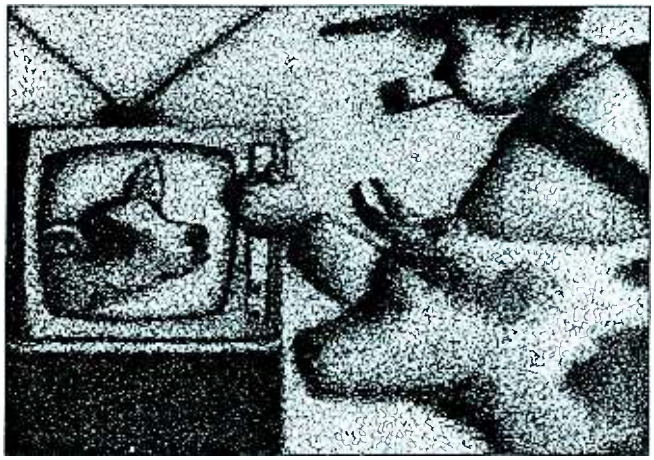
Reprinted from **Video**, April 1985.

New Channels

Covering Cable, Pay-Per-View, STV, and DBS

Low Power Lowdown

by William A. Marsano



David Ridley

Low-power television, or LPTV as it is fondly known, is a medium that has come a short way in a long time. One of its problems is that it is also low-profile TV: few people know about it, and not many more seem to care. Still, it's an interesting idea—a video version of Power to the People. Especially all those people who have fallen through the cracks of mass-audience broadcasting.

America is still in love with the myths and traditions of its small-town past. Never mind that 90 percent of the population lives in urban environs; the very term "small town" has a Norman Rockwell magic to it, and its misty glow fuels the LPTV vision. People in small towns don't always get all the TV services the city slickers do. Network affiliates and powerful independent stations are usually out of town, and even their signals may not penetrate the bosky dells. Video's own blessed sacrament—cable—ignores anyone who costs more than $4 to wire up. Even when small towns receive such services, they are seldom *served* by them. TV stations don't cover church socials, town meetings, and other threads in the fabric of small-town life. And that's what LPTV was created to do: cover the locals with a dime-size station just big enough to serve a small area. Think of it as neighborhood TV.

Charles Ferris, then Federal Communications Commission (FCC) Chairman, pushed for it in the late '70s and the FCC blazed into action, setting up the rules in June '82 (only an elephant takes as long to have a baby as the FCC). By that time a year's backlog of applications was stacked up in the mail room, and that has been one of LPTV's crippling problems. If LPTV is to be a communications revolution, some shots must be fired. So far the FCC has an estimated 25,000-40,000 applications on file. And how many LPTV stations are there? Good question.

There are 134 operating stations, and "operating" is the operative word: it means the switch is on. It also means they could be showing anything from honest-to-God programming 24 hours a day or putting on nothing more than a test pattern to keep the license warm. Construction permits have been granted for 333 more stations, which have up to one year to get themselves on the air or forfeit—or sell—their rights. The FCC likes to swell its total by saying there are 198 more LPTV stations in Alaska, but they don't count. It's interesting to know that Alaska has the most TV stations per capita, but those LPTVs were built during pipeline days and are now a state-supported educational network serving a statewide audience. *Real* LPTV is local, independent, and self-supporting. Got it?

So when—if—LPTV comes to your burg, what will it show you? That depends on a lot of things. Let's look at three examples.

John Boler's TV26 in Bemidji, Minnesota broke the medium's maidenhead in 1981, becoming LPTV's first on-air station late in that year. Boler spent a lot of money putting together a first-class studio for local originations and, all in all, creating an LPTV showcase. But he couldn't make it pay. A well-equipped LPTV station of 100 watts VHF or 1000 watts UHF can cost between $250,000 and $350,000 for hardware alone—LP doesn't necessarily stand for low price. Bemidji is a resort town that livens up in summer when anglers hunt killer perch in Lake Wabatawangang and other waters. Local businesses aren't exactly gigantic, and neither are their ad budgets. LPTV may well be beyond the economic power of the very towns it was created to serve.

Bill Sanford, who calls himself "the engineering staff," says TV26 soon started carrying STV (subscription TV, a pay service that sends a scrambled signal over the air to rented decoder boxes) in prime time. That didn't do it. The station went to STV only—no local programming—in April '83. "Now we're surviving," says Sanford, "but it's not much fun doing STV only. There's a dogsled race on now that we'd have covered in the past." Trouble is, if TV26 had kept on cover-

ing that stuff, it would be off the air. So the best LPTV can give to this small town—despite a sincere effort backed by a sizable investment—is pay-TV. At least it does so without cable.

There is also local LPTV-type programming in Lake Havasu city, Arizona, where Lee Shoblom has established TV45. The station isn't making money, but it isn't sinking—partly because Shoblom owns the local AM and FM stations, which gives him cash flow, and also because his radio news staff contributes mightily to TV45's reporting efforts.

TV45 is the big TV deal in Lake Havasu City: it is available to all 5000 homes. The local cable op has only 1200 hookups with, says Shoblom, no plans to expand his dynamic world of hard-wired communications opportunities. What's more, TV45 doesn't resort to STV. But like any LPTV station it needs a continuing supply of programming. Naturally, much of it is non-local.

Shoblom wants TV45 to get even bigger, be more successful. "I'm sure glad I have the radio stations, because this pioneering is expensive," he says. And he sees TV45's future as being that of "a real local station—very much watched, very much in demand, very high dollar volume advertising." He wants to affiliate with other LPTVs in what visionaries would call a support group and realists would recognize as a network. How all that can be reconciled with the founding vision of LPTV is a big question.

Closest to your correspondent's hardened heart is an LPTV in Bruce, Mississippi in the heart of Calhoun County. Davey Doss, Ronald Pollan, and William Morgan have an electronics business in Bruce and that led to their becoming partners in TV7—what the hell, they had done everything else with the hardware but broadcast with it.

Now in its third year, TV7 is just about breaking even, and its load of local programming is impressive. "My wife Ann and Ronald's wife Rita," says Morgan in his rich regional accent, "they do a 30-minute community news show every day, Monday through Friday. They do church announcements, swap shop, every sort of announcement like that. That's live at noon and repeated at 5 p.m. Then we do school sports at least once a week. We're right into basketball now, which we tape and show on Saturday morning so as not to hurt ticket sales. Twice monthly we have a country-Gospel music show, three hours long. That's live. We have a studio here that seats about 75 people. We get all the local talent to perform. So we feel like we really *are*—can you hold on a minute? I'm doing a production, and I've got to fade a camera out [brief pause]—so we feel like we really are community television."

But even determined TV7 must cover with a lot of non-local programming. "We get SPN, the all-night movies from midnight to 4 a.m., then the pop-music videos until 8 a.m.," Morgan says. "We also use CMTV [cablemeister Ted Turner's country-music hee-haw to MTV].

TV7 has a staff of "about eight, all part-time, and two salesmen." It also has a small nut to crack—a low investment. "Tower and transmitter cost about $30,000," says Morgan, "other equipment about $20,000; so about $50,000 all told," not counting offices and real estate. How come so low, compared to the average previously quoted? "Well, we're using half-inch. This is home-video equipment."

The availability of satellite networks is a boon to LPTV. At first, according to Lee Shoblom, "the ad-supported cable services wanted to stay strictly on cable." But then—as doom-sayers, perverts, and cynics began to have the weetiniest suspicions that cable is not all that it says it is—they began to look elsewhere. And why not? In Lake Havasu City SPN could reach 1200 homes on cable. On TV45 it reaches all 5000. The cable ops—or apes, as they are also known—don't like it, but never mind. Cable is an industry that can be thrown into an oscillating blend of white-faced terror and fulminating rage by the mere utterance of the word "competition." If LPTV can survive, it may help pump financial blood into the shaky ad-supported networks.

But LPTV's survival is going to be hard. Too many licenses are in the hands of people who find construction costs too high; others are in the hands of those who want to do horse-trading—people who've no desire to become broadcasters but want, instead, to sell high what they got for free, a license to operate a TV station. Too many of the operating stations are showing only test patterns, possibly because they can't get the operating funds together; possibly, again, out of a desire to establish the franchise and then unload it at a quick profit. Too many applications are still at the FCC in a huge pile that is mildewed on the top and gangrenous on the bottom.

Its spiritual fate will remain a question even if LPTV survives as a fact. The survival of that naive but sincere ideal—holding up LPTV as a mirror to the lives of small-town people—depends on an almost un-American idea. To survive and remain small-town-oriented, an LPTV station has to be *moderately* successful—no more, no less. Small, not big. A profit-maker, but not an obscene windfall. Too little success means go to STV or go to black. And even a little too much will mean goodbye, church socials—we're headed for high volume advertising.

Fixing the LPTV Achilles Heel

One of the chief causes of outages for low power stations is the RCA (now Kentel) modulator (RCA sold modulator department to Kentel) audio section, which has an integrated circuit (IC) that tends to go out when there is lightning in its vicinity. Nearly all makes of transmitters use this modulator. Unfortunately, you usually do not have one of these IC's in stock (you should have), and you have to order it. Now you are off the air for a few days. Then to add insult to injury, RCA never put in a plug-in socket for this nemesis—you have to solder it in. Most do not know about this and have no idea what went wrong, so in a rush to get back on the air, they Federal Express in a whole new board (couple hundred bucks).

So, here's one of the tips you get only in this magazine that will save enough outages and repair expenses yearly to more than pay for your subscription to this publication. Pick up an audio transformer (600 ohm) with a grounded center tap (if you can't find one, call us). Install this between your audio input and the modulator and have it grounded to the chassis. That's the biggie that will cure most of your problem with this. In addition, we also recommend that you use a spike suppressor in the wall socket where you plug your modulator, satellite receiver and transmitter in. Prices for spike suppressors vary from $6 to $600. $30 to $60 should be worthwhile, at least.

We hope you get this issue before the lightning season gets under way.

Announcing a new way to watch your movies, slides and photos.

Are your precious memories gathering dust, stored away in a shoebox somewhere in your closet? Is it too much of a hassle to dig them out?

Now all your memories, 8mm or 16mm movies, color slides and photos can be transferred onto video cassette for easy viewing on your TV. Once your memories are on videotape they will be preserved forever. You'll never have to be bothered again with clumsy projection screens, complicated projectors, faded or cracked photos or buckled slides.

FROEHLICH FOTOVIDEO™

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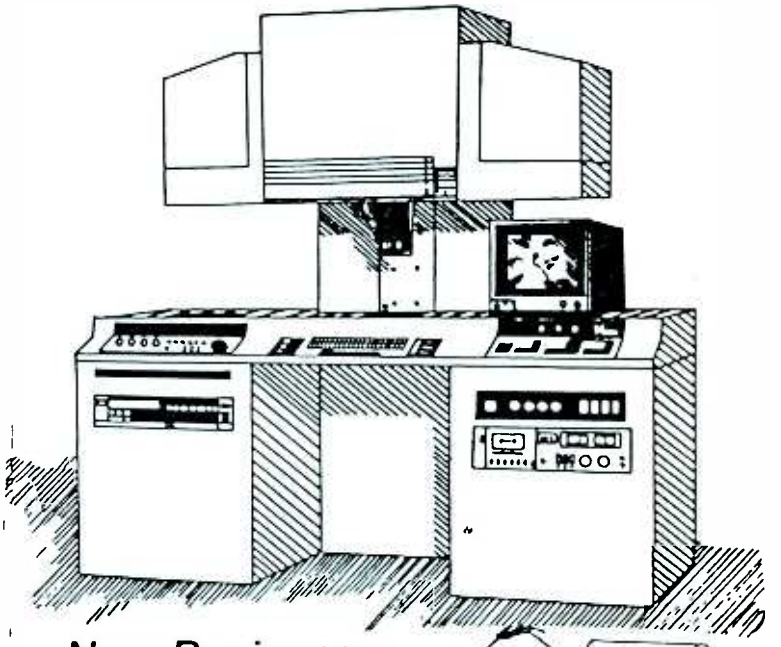
The Show of Your Life.

+

VIP 2400



New Business

"Personal TV, The Show of Your Life"™ plus VIP-2400 creates a new business. Personal TV is a complete advertising/merchandising program that insures new customers and in turn builds your business. Now you can assemble prints, slides, tapes, 8mm, super 8mm, flat art, brochures, negatives, and 3 dimensional objects up to 11" X 14" onto ½" VHS or Beta video cassettes. Add music and narration, and you have produced Personal TV—The Show of Your Life.

This is all continued from page 4 and we are reproducing here literature from 3 firms including a recent piece in Entreneur magazine which may be of interest carrying information from a 3rd firm. The VIP 2400 shown on this pages sells for $33,000.00. You can make up your own from a LPTV production unit, of course, if you already have one.

NOTICE:

We now have a full time staff person putting together who has a CP they are not going to build and keeping track of who needs a CP. Call after 12 daily. -602-945-6746

NEW IDEAS

Home Movies & Photos—Slip-Sliding Away?

With the video revolution in full swing, the last bastion of home entertainment, home movies and slide shows, is being threatened. At least that's what one Los Angeles firm hopes.

Hooper Camera Centers is now offering a revolutionary new Video Transfer Service, which means all of your photographs, home movies, and slides can now be seen on your television set. Hooper's technicians, using state-of-the-art equipment, are able to take any photo on any size film, including slides, and transfer the visual content to either VHS or Beta videocassette tape.

All those family photos, wedding pictures, crazy vacation slides, and memorable home movies—new or old, color or black-and-white—can now be permanently preserved for generations to come. No more fussing with unpredictable projectors, swearing at screens that won't set up, or having to store bulky, hulging photo albums. Hooper Camera Centers says now is the time to relax in front of your own TV set and enjoy your own home version of *This Is Your Life!*

Hooper also offers extra features and special effects, like your choice of background music and titles for any occasion. Owner Jack Williams claims his staff is specially trained to help anyone produce, direct, and star in his own personal TV special.

Extolling the benefits of his video transfer service, Williams said, "The transfer system itself is one that's been developing over a number of years and is sold exclusively through the photo industry. However, we're the first retailer in the city of Los Angeles to do this."

Of all the media upon which memories are captured, William says home movies are most commonly transferred to video, at a transfer cost of 8 cents a foot. Slides run 30 cents each. The average cost for a combination or single-medium video transfer runs from $30 to $50. "Our video transfer department's business is booming right now," said Williams. "We understand video and all its processes, a must to survive in this business."

For more information, contact Jack Williams, Hooper Camera, 4554 Van Nuys Blvd., Sherman Oaks, CA 91403 • (213)984-0622. ■

95% Profit

The VIP-2400 can be one of the most profit producing services you'll ever have with profit margins as high as 95%. It will continue to build new business, new traffic flow, and profit.

Builds Existing Business

The VIP-2400 and the "concept" of Personal TV builds the business you have now. You'll attract new customers, and offer a new service to your existing customers. Every business has a special need that you can satisfy with high quality video productions, created with the VIP-2400.

No Chemicals / No Mess

You just plug in your VIP-2400. No plumbing, no chemicals, no special wiring. All you need is an outlet and you're in business.

Anyone Can Do It

With a maximum of 8 hours training, any salesperson can operate the VIP-2400 with proficiency. The VIP-2400 takes no special skills, keeping labor costs at a minimum. Just remember, no special skills.

You're In Business

With the VIP-2400 and our trademarked merchandising package, "Personal TV", you are in business. NOW the VIP-2400/Personal TV can be the business of your lifetime.

Takes Only 12 Square Feet

...that's all, just 12 square feet. No need for alterations, knocking down walls, or additions. The space you have is room enough. The VIP-2400's design adds professionalism and merchandises itself!

We Train

We have training personnel to train you to be a competent operator.

If you need more information or wish to have a salesperson call on you, just fill in the information below and mail to:

HOPE Industries, Inc.
3701 Moreland Road
Willow Grove, PA 19090

ANOTHER USE FOR YOUR HOME MADE COMMERCIAL INSERTER.

HOW YOU MAKE A BUCK INSERTING PUBLIC SERVICE ANNOUNCEMENTS ON A LPTV—.

If you have LPTV-Translator down the road, now say 30 miles from your manned LPTV station at Town A that acts basically in town B as a translator but you have either no employees or a part time salesman in town B who sells a few local commercials, or one of your town A salesmen runs down the road to town B once in a while and sells a few spots.

You produce the commercials all in town A where you have all of your production people and send down to your salesman at town B. He loads up your commercial tapes in your insertion unit at town B. At the times they are supposed to run, you send a short tone over your town A channel and that turns on the commercials which play in Town B in place of your town A spot that plays at that time for a town A advertiser who does not want to pay extra to have his commercial play on your LPTV repeater type station in town B.

Town B generates revenue two ways, you charge extra for a commercial that plays in both towns, and if he does not want the second town, town B, you sell it locally only in town B. A town B advertiser can also buy both towns of course if he wants, or either one individually. Lets say you have repeaters, (translator-LPTV)4 directions for example in towns east, south, west and north of town A. You charge $20.00 for a spot in big market town A in the center and $5.00 additional for each of the smaller surrounding towns (repeater) he wants it to also appear on. If he wants it on all 5, (central town A where you have the studio and on your 4 unstaffed repeater towns). If he buys all, it costs him $40.00 total, with $20.00 plus $5 each for the four repeaters.

If he skips one town, your salesman sells that spot locally for $10.00 (smaller market) and inserts a local commercial by your sending down the start tone for that that town and the insertion device we write about in this issue sticks it in. If the salesman fails to sell a local spot, he puts in a tape with a series of public service spots town A made up for town B PSAspots.

So even if he does not sell a spot or you do not even try to sell local spots in town B, this method of operation helps you generate revenue because if the central station advertiser knows if he does not pay for that town, his commercial does not appear there.

If it is an advertiser that has one little grocery store in town A and probably is not going to do him a nickels worth of good in the outlying towns, if you have not sold that ad time in town B, you probably let the town A commercial go ahead and run in towns B,C,D,AND E at no charge. However, if it is a big grocery chain that has several stores in each of these towns and he decides not to pay extra for that town B, you need to stick in a self promo, public service or something if you can not or do not sell that time locally. Big chain store knows if he does not pay for town B, his spot does not appear there.

So your insertion device substitutes other local spot announcments for that community etc.. In fact it could just as easily insert a camera output set in front of a weather computor etc. that also displays the forecast automatically and turns on a music audio tape for that 30 seconds. That way town B has local information (local weather info)and it actually helps you generate revenue back in town A by wiping out the repeating of a spot that was not paid extra for to be repeated in town B. Next time he will likely pay the small additional charge to get coverage in town B.

Lets carry this a step further. Let us say that town A has rock music off of the satellite, but town B has country western satellite programing. Your personnel at town A monitor the same satellite country western transponder and when your manned stations personnel in town A want to put something local (tape or weather) on in town B, even if it runs off its own satellite pick up, the insertion device listens to audio from station A off the air and you can control the insertion in town B from town A, even if town B is so far away the picture from town A does not get there good enough to rebroadcast, but the sound does get there good enough to operate the control tone reader and control insertions at town B

What about the rule saying you must be manned when originating local? Where you running local when you turned it on from town A, if you were repeating town A?

Good question, but it seems if you have someone locally at town B such as an answering service or an invalid etc. maybe even the local fire department, monitor your channel(have a set always on) all the time even with the sound off, and they be able to shut down your stations transmitter by phone (done for under $100.00 worth of equipment) then you are probably manned from the FCC viewpoint.

Speaking from experience, (owned and managed an answering service for 10 years) I am sure an answering service would be glad to monitor (have your stations picture on in front of them 24 hrs.) for $50.00 a month if paid them an extra $10.00 every time they called you to tell you your station was screwed up, or they had to shut it down. (by phone).

You can operate 5 to 10 cluster station easily this way with only one set of production people.

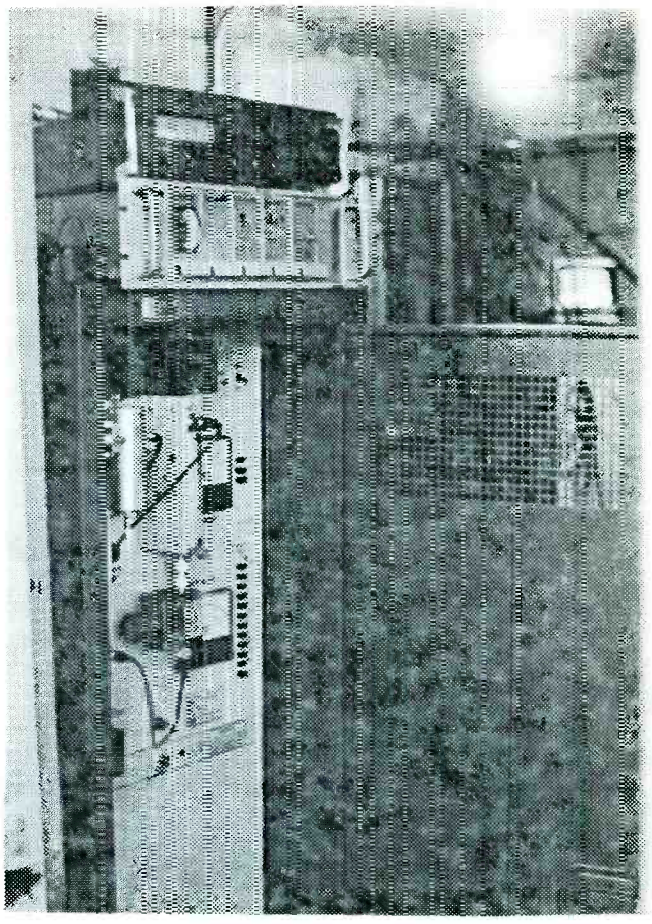
The local part time people in town B if you have one, and/or your town A people can insert crawling words superimposed across the bottom of the screen by telephone line (call) (about $2,500) worth of equipment) that will superimpose over the picture being repeated from town A.

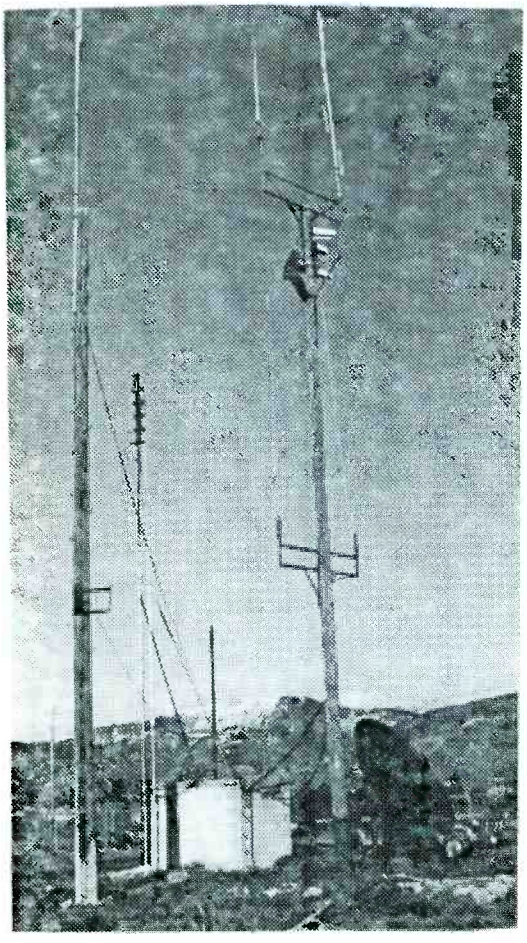
Local people do not care if it was called in to a computer by phone and put on the screen by a person in town A or in town B. If you superimpose the final score of the local ball game across the bottom of the screen they do not care where it came from. Local people can call a local number that unbeknown to them rings in the town A office. The information is then inserted by a computer telephone call to the town B transmitter. It would not appear in Town A or on any other repeater.

You can have a local phone listing in each town and one person can handle local information and insertion for 4 repeaters from town A. Your labor is one fourth employee per town. 50 spots sold per day in town A and 80% paid an extra $5. per spot in coverage for town B would mean that would generate $200. per day extra by operating the repeater this way in town B. That is more then enough to make town B highly profitable. even if you never sell a local spot in town B.

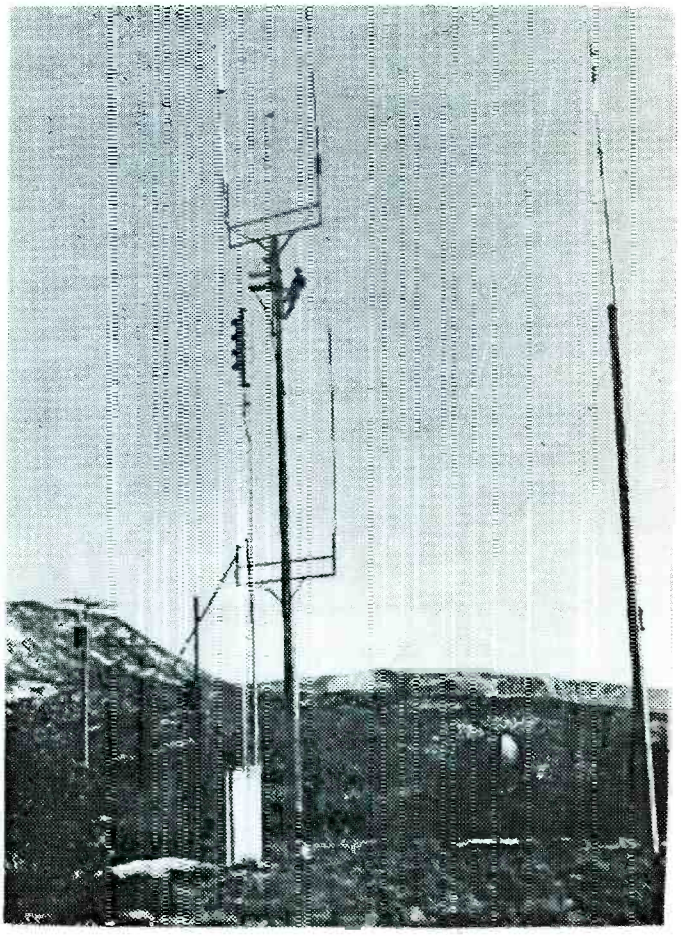
On this page are some photos of a recent LPTV station we installed for a client in a mountainous town that already had a low power channel installed for some time. Both are in the same transmitter building (a two-way radio location). We are shown here installing antennas on a pole used by the two-way radio operator. The antennas broadband, and the owner of this system can use the same cable and antennas for any other channel he may install later at this site. If he uses another transponder on the same satellite as a program source, he can also use the same dish.

Television Technology transmitter shown at right inside door of two-way radio building. Drake satellite receiver at top with RCA modulator below it.





These two photos, above and at right, are of the same installation shown from different angles. We are shown installing four Scala color log antennas. Winegard 10-foot satellite dish is shown at right in both photos. Steel tower to left holds a Bogner antenna for another low power operation also housed in the same two-way radio building.



Lo-Power Community TV

April 1985

What's Happening

Big news for LPTV readers is DO NOT go to the LPTV convention seminar scheduled in Los Angeles for May 14 and 15. If you do, you'll be all alone. The event has been totally canceled.

Only a few people signed up in advance for the show—by April 10, indicating apparently from past experience that there was not enough interest to make it feasible. Your editor lost nearly $100 on advance purchased plane tickets (30-days in advance, lower rate) that require a more severe penalty if changed or canceled. Your editor **was** on the program.

Marcom showed stereo generators at the NAB for a reported $2,995.

In previous issues, we have recommended you order your LPTV transmitter widened out for stereo, and also order your modulator with the right modifications for stereo (about $600 or more extra cost). Then, when you are ready, merely buy and add the stereo generator and you are in business. We'll keep you up to date on what works. Up until now, stereo generators have been $12,000 up. We see no reason why there won't be one soon for $3,000 or less and it may have already arrived with Marcom. We will be checking this out and will keep you posted on what works in putting your LPTV on with stereo. It could be a big feather in your cap to be the first full stereo TV station in your area. Remember, nearly all of the satellite channels have stereo subcarriers. Stereo was the big subject at NAB. Nearly every major market will have at least one station on in stereo by the end of 1985.

The Bogner antenna booth at the NAB had a LPTV 'for sale' sign up offering Bogner's Long Island LPTV station, apparently also in the big buck range.

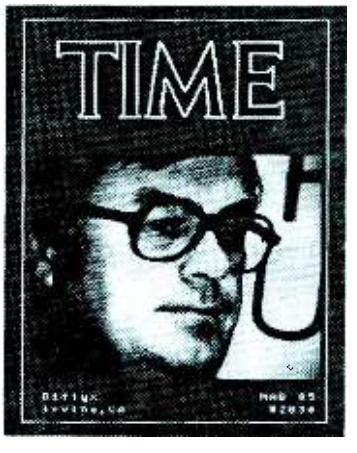
We attended the NAB show this year in Las Vegas as usual and pass along in this issue a few of the things we noticed that we think you may be able to use in your LPTV operation. Even if you were there, we probably noticed some things you missed (and the other way around).

Another of the big investment LPTV stations is for sale. Reported to have invested $2 million in the station at Cumby, Texas (licensed to Sulphur, Texas) (building, tower, studio, head ends for cable systems to carry it, etc., etc.), the principals have it for sale at $1 million. Carried on over 30 Texas cable systems, the station sale is handled exclusively by George Moore and Associates, Brokers, in Dallas, Texas, telephone (214) 361-8970.

Fairlight Instruments of Australia (write to 2945 Westwood Boulevard, Los Angeles, CA 90064, or call (213) 470-6280) have a great, low cost $6,500 video instrument that allows you to do a long list of sensational computer effects. Video imagery is what it's called, and if you're channel is producing or showing music videos where your audience is used to snappy effects (for your commercials), you may want to look into this device. They will send you a tape of things produced with this machine.

Several new, out-of-country people selling LPTV transmitters, translators, only they call them transposers. One such company was PESA of Spain, ALBALA 12, Madrid 17, Spain. We did not get prices.

We have been telling you about the Mavica and other floppy disc still cameras and how they would soon replace 35 MM. You can print out a hard copy if you like; a firm was using an ordinary home TV camera with one of these color printers and printed out my picture below in full color 8½ x 11. We reduced it here to show you how it looks. The 'Time' portion is red and was stored somehow as a frame.



Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor: Harlan L. Jacobsen.

Postmaster: send address changes to **7432 East Diamond, Scottsdale, AZ 85257**. (602) 945-6746.

Update

Utah's law on cable TV decency has been thrown out by a U.S. District Court judge as unconstitutional.

In the meantime In Phoenix, the county attorney's office is hauling video dealers into court who rent out 'adult', sexually explicit tapes. Tape dealers are getting together a $100,000 war chest to fight it in court. Most such attempts by county attorneys around the country have failed, with juries siding with the TV rental dealers.

80% of those who rent videotapes rent an 'X' tape at least once.

The Bemidji, Minnesota, LPTV station owner John Boler, was originally upset with his subscription satellite TV supplier for carrying 'R'-rated material late at night—that was a little to explicit for John's taste (and at one of the conventions he was complaining to the network's head man). The late night programming cost the station nothing extra but the LPTV station and other subscription operators add about $5 a month extra charge for the 'R'-rated late night programs. Nearly 85% of their subscription viewers were reported to be paying the extra $5 to get the 'R' programming. With well over 1,000 pay subscribers, that extra $5 monthly adds up to big bucks. The Bemidji pay system is addressable and, for those that do not want to pay the extra $5 monthly, the computer shuts down their decoder and that 'R' programming is not available in that home. So, like videotapes, it is not forced on anyone unsuspecting or that doesn't request and want it.

The 'X'-rated tape business nationally is about 20% of the rental business, dropping off percentage-wise year by year, even though the total pie increases year by year. Our Sioux Falls store is currently doing about ⅓ of our business in 'X'-rated (XXX) (up). The tapes cost the same or less than most late movies. The hot new movie releases rent good for 30 days and then die off. The 'X'-rated go just as good five years old as the new ones. (I just bought 40 from a rural town dealer who stopped renting 'X', purchasing them at just $20 each. At $2.50 a day rental, most of those will have paid for themselves in as little as over 30 days. Big problem is everybody and his brother are renting regular movies, including the major chain drug in town (four stores) who just started renting tapes and underselling us by 50¢ a day. Three other new 'family'-type video places that do not rent 'X'-rated have all started near us since January 1.

Our 'X'-rated have sheets that are all kept in a ring binder with a cover labeled adult 'X' on the front counter. Other than that you would never know we handled them. Customers ask for them by number and are given the 'X'-rated in jackets identical to all the other movies. At busy times when the store is full of customers, they stand in line to use the ring binder. We are now at 450 titles total, including 100 'X' (up from 150 total, including 'X' when we started) doing $5,000 a month (behind schedule) and expect to be doing $15,000 monthly with 1,000 titles (bought from income) by the end of the first year's operation. All this despite new competition.

We have a second videotape store planned for opening in August. We are currently remodeling the larger half of the building and moving the tape operation there about May 1. The present room will be remodeled when we finish the tape store move for use as studio for the station since we have our microwave link almost ready to go, to connect the new Sioux Falls studio to the transmitter.

Latest projections (in Multichannel News, April 15) is that 67% of American homes will have VCR's by 1994 (20% now). And 9 million new VCR's will be added in 1985 alone. According to the piece, the average VCR owner will spend $205 on rentals this year (eight per month).

Religious interests are snapping up some of the CP's that LPTV applicants do not get around to building. Noticed information on a new religious station (honest) at the NAB convention—KGOD.

We plan to switch (at least part time) to Discovery Network coming on the satellites June 1 at K34AJ in Sioux Falls. We now carry Odyssey (free satellite feed) full time, which runs far too many black-oriented videos (about 80%) (in contrast to MTV running practically none). Apparently Odyssey has trouble getting the other music clips that MTV runs, since many have given an exclusive to MTV. Since MTV runs few black videos, they are nearly all available. Odyssey has no VJ's, a strong point which we like, but Discovery plans to have some. Both allow you to tape the clips and put together a local show with a local VJ playing requests, etc., if you like.

Our attitude has been, as far as expensive DJ's (VJ's) go, the stations should have listened to their viewers who said **shut up and just play the music.**

The March Television Programming newsletter says, in an item labeled MUSIC VIDEO SHOWS SUCCEED BY EMPHASIZING THE PRODUCT, 'The radio phrase, 'more music, less talk' seems to apply to music video shows on commercial TV. All the syndicated shows that promised interviews and live performance and a lot of fluff have faded away. Remaining syndicated music video shows are generally mostly videos. . . . But it is clear that it is the video that draws viewers. The rest is useless.'

If you are interested in bumper stickers for your station in a zillion different color combos, write to United Tape and Label Corp., Broadcast Division, 1561 Fairview Avenue, St. Louis, MO 63132.

What's the Hurry?

We also own and publish a small newspaper in Phoenix, and in comparing notes with a North Carolina publisher recently, it occurred to us both that when starting a low power station, you have almost the same problem we had when we started our publication. It was darn hard to get ads at first because you had no established readers of your paper. It is also darn hard to sell ads on a TV station when you cannot show and do not have established viewers you can convince the advertiser are waiting to hear and see his message. So we may have stumbled on a method of getting your LPTV off the ground without losing your shirt for the usual 'first two years' or more. The knowledgeable people in this business that know TV broadcasting already know that nearly every full service station (no matter how many million a year they make now) lost a bundle their first two years in operation. Therefore, the knowledgeable people put this into their start-up fund, raising enough money to carry them through two years of severe losses when they set out to fund a LPTV station.

The newcomers to broadcasting start out with a big budget operation (they claim they are going to have to do it up right or the public won't accept it). Then, after losing a bundle and being heavily in debt, after a year's operation, they fold saying, 'boy, this LPTV sure is not the big money-making opportunity it was cracked up to be; it's a loser'.

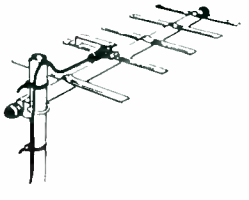
One way to get around this two year loss period is what we may have stumbled upon. It takes about a year for the public to all find out you are on the air (just as it takes that long with a publication), and it takes a while until they develop a HABIT of tuning to your channel—maybe two years. Once that is established, now you have something to sell your advertisers.

So why not do what we did (not on purpose—the FCC lost our interconnecting microwave application and we had to apply all over again)—namely let your station start out with absolutely NO STAFF and no studio or production for the first six months or a year, or even longer! Run 24 hours a day totally off of satellite programming. You can even set it up to switch between several different satellites at different times of the day and do it all automatically, totally unmanned. Our call letters, phone number and local weather information are all superimposed for 20 seconds every 15 minutes, 24 hours a day, and it still works six months later.

I can guarantee to an advertiser right now at least five times the number of regular viewers than I had there when we first came on the air. When I do carry an ad for him (June, hopefully), he will get at least five times the results he would have gotten earlier and he will be five times as likely to keep advertising with us. We had a much smaller investment initially because actually we needed no building, no office to rent, no employees, no studio investment, just the transmission equipment. Our total overhead, including transmitter maintenance, tower rental, electricity, etc., has been under $200 a month. Interest on our transmitter and satellite dish, maybe $350. So you could say we are losing $550 a month. We say we are investing it. We say to people who want to buy the channel that it is $2,000 more valuable and the price is $2,000 higher than it was a month ago.

When we go to an advertiser to sell him on using our station now, he knows about us since we have been around a while—we aren't something new and experimental. We didn't waste a lot of money on sales people's salaries trying to overcome that initial resistance handicap period. We simply bypassed that high loss/high resistance to sales period. We are in no hurry even now to rush in with local ad sales and local production, etc. The longer we wait, the greater our chances of doing enough ad business right off to carry the initial addition of labor overhead. Several other LPTV operators are now adopting this method of start-up. Get a lot of them on, low investment—just transmission equipment initial investment, no employees and let them run and establish an audience. Come back much later and do the expensive labor/studio part. In the meantime you will also be learning how to do that in a shorter loss time and you finally do it only when you are ready, when you and your potential advertisers both **know** you have established a viewing audience. We are waiting for some additional grants in the same town. Our chances of success right off will be much higher if we can sell ads on three channels and have one combined sales force, commercial production and insertion staff serving at least three channels. Three times the income with little or no additional overhead.

When someone says, is your low power station making any money yet, you say it's not supposed to make any money yet—like the farmer, we are in the growing season. Harvest time comes later but, as of now, the crop looks good.



LPTV ANTENNAS

An antenna company in California, Color/Craft, has pretty good prices on antennas cut specifically to your channel. If you are a 100-watt UHF and they buy an antenna cut for your channel they will get as much signal off that antenna on your channel as your 1,000-watt competitors' stations. In other words, these antennas are very responsive to one channel but not so hot on others.

If that's what you want, order 5-element (or more elements) outdoor cut to channel yagis. About $8 in quantities. They also make other antennas, including four-bay bow tie antennas (all UHF channels), around $9 each.

Find some other LPTV operator on the same channel and order quantities together. They gear up to make these individually-cut channel antennas and ordering a large number makes a big difference in price.

New Developments

We mentioned that Super Beta (½-inch) will be coming out soon and, sure enough, of all places, it was shown at the NAB. We expected to see it in final product form in May at the LA Industrial Video Show at the convention center, May 20-23. It had been shown at the January CES in prototype with no date for production. What excited us all along has been the much higher resolution of Super Beta. At the show in January, with a picture of a tree you could see every leaf rustling in the wind, not just a green blob. It looked better than ¾-inch.

They have widened out the band-width somehow and the Super Beta tape will also play on an ordinary Beta machine (compatible) but without the added detail. Essentially what it means is that what you put in the recording is what you get out (almost). Live and playback look almost identical.

Ordinary ½-inch has a resolution of about 240 lines, Super Beta about 350. VHS developers are clamoring to come out with a similar improvement, but we won't know until after the LA show what their timetable is.

Anyway, back at the NAB, they showed three things of interest to LPTV applicants in Super Beta. Incidentally, these were all also in digital audio (Beta Hi-Fi) with two digital audio tracks and two standard tracks (standard good for control tones). Shown was a Super Beta recorder, an edit controller for two such units (assemble and insert, but really neat controls), and last but not least, the camera-corder combo that uses a standard Beta tape right in the camera (recorder combo) and tapes in stereo and Super Beta. $1,500 list on that last item. The recorders than can be controlled by the edit controller are $2,300 each and the edit controller lists around $1,300. Now these are list prices, so expect to get 20% or more off of that. Availability—about August 1st.

We're talking about $5,000 for an editing system that is just assemble and insert . . . but . . . keep in mind, these are Beta hi-fi and Super Beta (picture). You will not find any audio recorder (other than compact discs)—even the finest reel-to-reel at the local FM station is not nearly as good a quality audio. Not only is the sound superb, picture quality, in my opinion, is as good or better than ¾-inch, with a fraction of the tape costs (shipping, storage, original cost per hour, etc., etc.)

We are buying no more recorders of any kind for any of our LPTV's other than hi-fi, and we will wait for either Super VHS or Super Beta. You should consider doing the same. Remember, you can play ordinary tapes from old machines on a hi-fi super or the other way around (but then you get only old style quality either way).

Take my word for it—when recorded in Super hi-fi and played back on that type of machine, the quality of both audio and video is superb and is what we have been saying for some time, that ½-inch is going to be plenty good enough for your LPTV, and it gets better all the time. Estimates are they will get ½-inch to cover 400 lines of resolution eventually.

Cameras were everywhere as usual, but we did not catch anything significant for low power use.

Expect camera stories next month after the industrial video show in Los Angeles.

Lots of editing equipment being demonstrated by a lot of different companies at the 1985 NAB.

Shown in this little photo is two radome covered microwave dishes as we pulled up from a 1,500 mile haul—transmitter rack is to the right of the forward dish.

One LPTV enthusiast told us that many years ago, he went to a broadcasters' convention in Florida and a man there was desperately trying to sell an FM permit he had for $5,000 and had absolutely no takers. By the end of the convention, he was offering it for $1,100 and he never was able to sell it. He eventually put the FM station on the air himself and recently finally sold it for $2.5 million after having made a nice living with it for many years.

PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET N.W.
WASHINGTON, D.C. 20554

News media information 202/254-7674 Recorded listing of releases and texts 202/632-0002

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-6 Released: March 15, 1985

Notice is hereby given that the television translator and low power television application(s) listed below have been accepted for filing. These applications, which are not mutually exclusive with other LPTV and TV translator applications have been fully reviewed and in the absence of petitions to deny, the applicant(s) appear to be grantable. Petitions to deny the application(s) may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application listed below.

BPTTL-820615QZ
Linda D. Clevenger
Paragould, Arkansas — Channel 41

BPTT-820413SL
State of Alaska
Sitka, Alaska — Channel 15

BPTTL-830309JV
Mountain TV Network, Inc.
Broadus, Montana — Channel 17

BPTTL-830309JW
Mountain TV Network, Inc.
Broadus, Montana — Channel 25

BPTTL-830309SM
Mountain TV Network, Inc.
Broadus, Montana — Channel 27

BPTTL-830312UO
Mountain TV Network, Inc.
Broadus, Montana — Channel 33

BPTTL-830309JX
Mountain TV Network, Inc.
Broadus, Montana — Channel 15

BPTTL-830314RV
Mountain TV Network, Inc.
Hamilton, Montana — Channel 69

BPTTL-830309JY
Mountain TV Network, Inc.
Broadus, Montana — Channel 35

BPTTL-8920504TQ
Clay Center Publishing Co., Inc.
Clay Center, Kansas — Channel 22

BPTTL-820617A3
Independent Satellite Systems, Inc.
Searcy, Arkansas — Channel 41

BPTTL-821208IW
Conner Communications, A Partnership
Vidalia, Georgia — Channel 27

BPTTV-830218SI
State of Alaska
Sparrevoh, Alaska — Channel 5

BPTTV-830218IP
State of Alaska
Cold Bay, Alaska — Channel 7

BPTTV-830228IL
State of Alaska
Adak, Alaska — Channel 4

BPTVL-830218IQ
State of Alaska
Cold Bay, Alaska — Channel 13

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-7 Released: March 25, 1985

BPTVL-810226LJ
Ideal American Television, Inc.
Tulsa, Oklahoma — Channel 4

BPTTL-840116PF
Bob Jacobucci
Victoria, Texas — Channel 51

BPTT-840116U8
Crescent Television Reception Improvement District (CTRID)
Joyce, Washington — Channel 47

BPTTL-801120IE
Graphic Scanning Corp.
Sarasota, Florida — Channel 69

BPTTL-810116IY
National Black Media Coalition
Detroit, Michigan — Channel 45

BPTTL-821213TY
Low Power Television, Inc.
Hopkinsville, Kentucky — Channel 62

BPTTL-830923TH
He's the One Broadcasting
Lapwai, Idaho — Channel 36

BPTVL-820419SL
Rural Television Service, Inc.
Poteau, Heavener, Howe & Wister, Oklahoma — Channel 9

BPTVL-810303GL
Ruarch Associates
Woodstock, Virginia — Channel 10

BPTVL-821216TR
Edward F. Anglin
Springdale, Arkansas — Channel 4

BPTT-810403IV
Louisiana Television Broadcasting Corporation
Morgan City, Louisiana — Channel 57

BPTTL-820617PR
Blacks Desiring Media, Inc.
Morgan City, Louisiana — Channel 28

BPTT-830713IE
University of North Carolina
Sparta, North Carolina — Channel 35

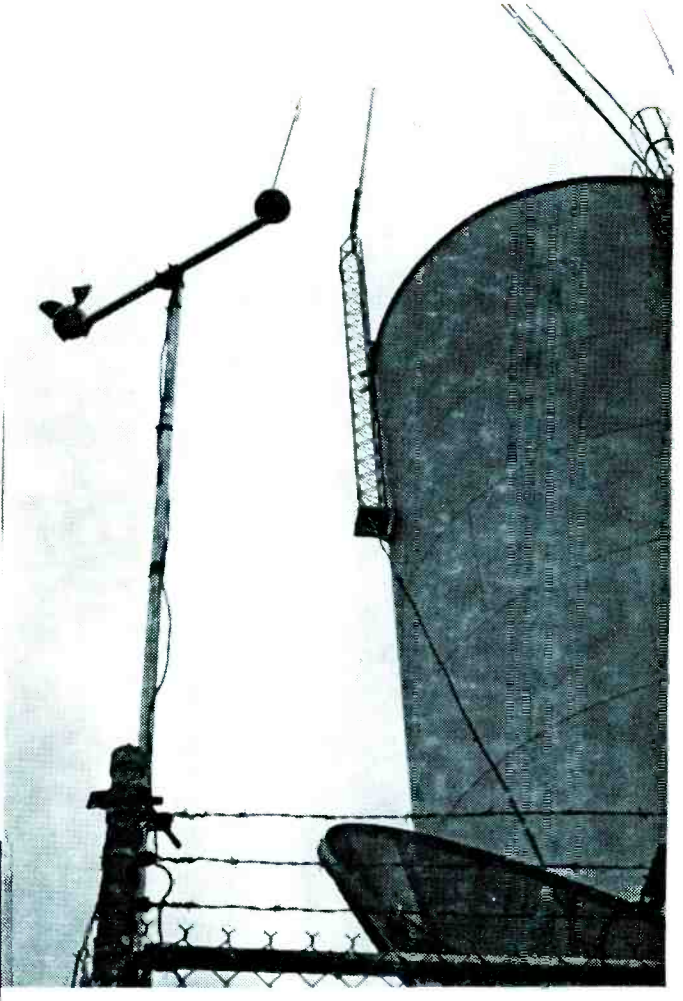
BPTTL-830309N3
Mountain TV Network, Inc.
Hazen, North Dakota — Channel 48

BPTTL-830312M4
Mountain TV Network
Hazen, North Dakota — Channel 64

BPTTL-810121LJD
SWC Network, Inc.
Baton Rouge, Louisiana — Channel 57

Winners in the March 29, 1985 lottery are:
William T. Conner, ch. 66, Jamestown, TN; Community Media Network, Inc., ch. 55, Memphis, TN; Frontier Southwest Broadcasting, Inc., ch. 61, Baton Rouge, LA; Complexicable LPTV, ch. 23, Valdosta, GA; Janet Roberts, ch. 12, Temple, TX; Brunhilda Salgado, ch. 7, Bemidji, MN; The Little TV Station, ch. 29, Twin Falls, ID; Mountain Broadcasting, Inc., ch. 39, Marshalltown, IA; Mountain TV Network, Inc., ch. 49, Worthington, MN; Focus Translators, Inc., ch. 58, Memphis, TN; Little Rock Television Company, Inc. ch. 53, Memphis, TN; Rosalinda Gonzalez, ch. 51, Aberdeen, SD; Low Power Technology, Inc., ch. 45, Mitchell, SD; Reels and Reality Film Co., Inc., ch. 69, Columbus, OH; Frontier Southwest Broadcasting, Inc., ch. 55, Little Rock, AR; Minority Entrepreneurs, ch. 67, Little Rock, AR; Quanta Communications, ch. 24, Scottsbluff, NE; Ponyland Broadcasting Company, ch. 67, Lima, OH.

More Trouble in River City



As if we did not have enough problems, a wind storm (blizzard, actually) bent our antenna support at Sioux Falls, and we pass this on to you because you may have the same problem.

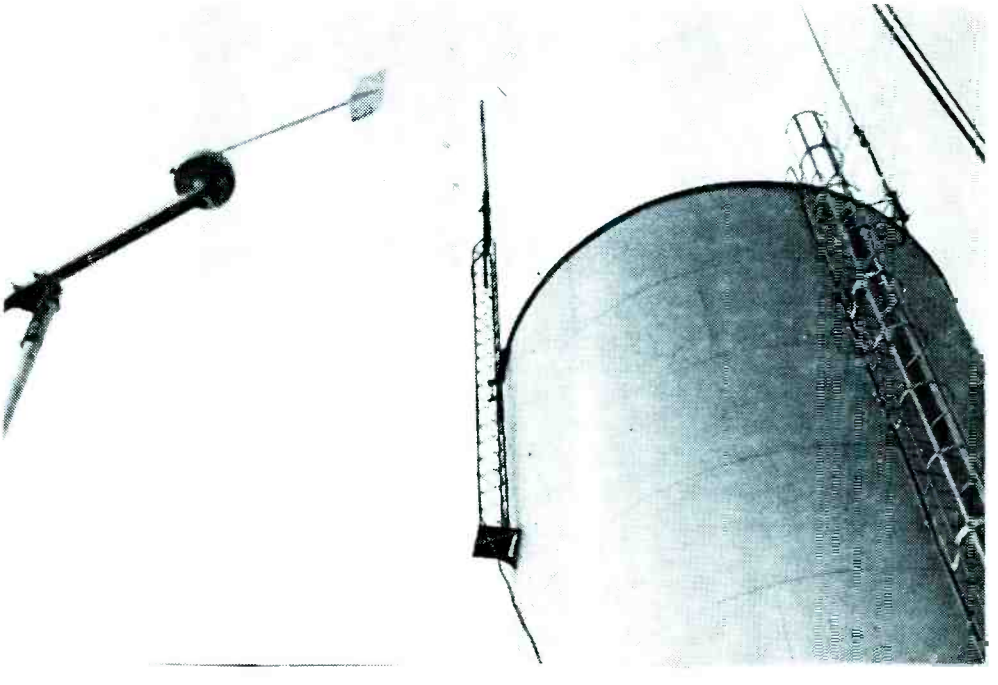
The tower itself has a well-anchored center pipe that you insert a pipe in to support your antenna. We put another pipe inside that one for extra strength, and the wind bent both. We then had 45 MPH winds for several days with it vibrating like a tuning fork, and we sweated a lot, hoping the pipes did not finally break from bending back and forth and metal fatigue. Finally the wind went down slightly at night, and I managed to get a nine-foot larger pipe (in the dark) down the middle of the tower and fastened down.

A police car came by and shined his spotlight up in my eyes, and I don't know if he thought I was up there stealing an antenna or what.

Discovery Network (music video clips) comes on the Comstar D-4 satellite on June 1, full time, on 10-H. Contact Dain Eric at 12401 West Olympic, West Los Angeles, CA 90064, (213) 820-2900, for information and demo tape—tell them what tape format.

Their program service to LPTV is free. You can record video clips off their service if you are an affiliate and put together your own local request programs, etc. They are in stereo and have a new holographic sound method that is revolutionary.

The next day the wind went down a couple hours—long enough so that we got two 18-inch long U-bolts around the outside of the whole thing and tightened them up together per the lower photo. The angle of the bent antenna bracket just about ruined reception in the opposite direction from the tilt where it pointed up; getting it straight again got all reception back to normal. The antenna is a Scala SL-8, so be sure and use a longer, heavier pipe down the middle (alongside), what you would normally consider strong enough. Then U-bolt them all together.



LO-POWER COMMUNITY TELEVISION
7432 EAST DIAMOND
SCOTTSDALE, ARIZONA 85257

A

FIRST CLASS

John R. Powley
1536 Logan Avenue
Altoona, PA 16602
8/85

Lo-Power Community TV

FCC Opens Alaska Window

PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET N.W.
WASHINGTON, D.C. 20554

News media information 202/254-7674. Recorded listing of releases and texts 202/632-0002

NOTICE OF OPENING OF ALASKA LOW POWER TELEVISION/TELEVISION TRANSLATOR FILING WINDOW ON JUNE 3, 1985

Released: May 1, 1985

Commencing on June 3, 1985, and continuing thereafter for a period of 15 days, to and including June 17, 1985, the Commission will permit the filing of applications for new construction permits or for major modifications of existing facilities in the state of Alaska.[1]

It is emphasized that ONLY applications for locations in the state of Alaska may be filed. Applications for any other location will be returned. Further, applicants are reminded that all applications must be "complete and sufficient" when filed as there will be no opportunity for corrective amendments following the close of the 15-day window. Further, applicants must use FCC Form 346, the July 1983 edition, that specifies an expiration date of 7/31/84. An original and two copies of the application and all required exhibits must be received at the Commission by the close of business (5:30 p.m.) on June 17, 1985.

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1 For detailed information as to "window" filing procedures, see Report and Order in MM Docket 83-1350, released November 19, 1984.

May 1985

What's Happening

The FCC window opening in Alaska caught us by surprise. Released May 1, we didn't catch it till I got back in town on the 14th and went through the FCC releases. This issue was set for being printed after the May 22 industrial video show (in Los Angeles) to cover information on the latest video equipment. However, with the window opening, we decided to get this issue right out, and the video info will be in the next issue.

Interest in LPTV has further dwindled, with our subscription list continuing to shrink monthly. The National Translators Low Power Convention was canceled along with the LPTV West Convention because of a lack of people interested in attending.

It appears the commission has almost successfully killed off low power by dragging it out for years. Entrepreneurs that are go-getters just do not hang around anything that is as much pain and frustration as applicants have had to go through to get permits. Many of them are so disgusted with the whole thing that when they finally do get a permit, they have lost all of their enthusiasm to do anything with it.

One example of the hassle you have to put up with to stay in this business, is an applicant who filed many applications for the March 8, 1984 cut-off, and they were returned because they were on an obsolete form. The applicant had called the FCC in Washington for the forms and was told it would be quicker to have the local regional FCC office send them to him. They sent the obsolete form, which he used. To prove it was the FCC's error, he had the same regional office send forms to his congressman (this was after his applications had been returned), and they still sent the wrong, obsolete forms to the congressman. Presented with this evidence of the fact it was an FCC office error for reconsideration of his applications, the staff still said, 'tough, they are on the wrong form and that's that'.

It is that kind of demoralizing treatment that the commission has been handing out that has demoralized an entire industry.

However, from my view, it has sorted out the men from the boys, and those left are the serious, stick-to-it types who set out to do something and hang on like a junkyard dog.

Many big broadcasters are now sopping up some permits, and when 80% of LPTV's have been taken over by them, you will finally see a whole different treatment of the LPTV industry by the FCC. Until then, it's dribble, dribble, road block after road block. We predicted that way back at the start but nobody listened.

Funai is now setting up its own distributorship for video players. We mentioned in an earlier issue that they were available from Porta Video. Porta Video is now handling players made by a manufacturer in Korea.

Winners in the April 29, 1985 lottery are:

Sunburst Broadcasting, ch. 55, Phoenix, AZ; Frontier Gulf Broadcasting, ch. 69, New Orleans, LA; Russell Communications, ch. 15, Springdale, AR; Minerva Rodriquez Frias, ch. 7, Stephenville, TX; Judith Acevedo, ch. 12, Falfurrias, TX; Full Gospel Fellowship, ch. 28, Candu, ND; Jose Armando Tamez, ch. 3, Garden City, KS; American Television Network, ch. 39, Vail, CO; Morris Dimsdale, ch. 21, Laramie, WY; National Innovative Programming, ch. 19, New York, NY; Citzens' Television, ch. 58, Buffalo, NY; Catholic Views Broadcasts, ch. 46, St. Louis, MO; Focus Translators, ch. 66, St. Louis, MO; Lidia Rodriquez, ch. 13, Willmar, MN; Contemporary Communications, ch. 50, Louisville, KY; Gulf Publishing, ch. 48, Biloxi, MS; University of Arizona, ch. 27, Tucson, AZ; Western Slope Communications, ch. 35, Aspen, CO; Mountain TV Network, ch. 20, Brookings, OR; Local Power Television, ch. 33, Coos Bay, OR; Mountain TV Network, ch. 29, Lakeview, OR; Clearvision Communications, ch. 15, Vero Beach, FL; Que Television, ch. 26, Medford, OR; Weatherford News, ch. 27, Weatherford, OK.

April 11, 1985

BROADCAST STATION TOTALS FOR MARCH 1985

The Commission has announced the following totals for broadcast stations licensed as of March 31, 1985:

AM Radio	4,778
FM Radio	3,757
FM Educational Radio	1,185
UHF Commercial TV	370
VHF Commercial TV	539
UHF Educational TV	182
VHF Educational TV	115
UHF Low Power TV	123
VHF Low Power TV	217
Total Radio	9,720
Total TV	1,546

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor: Harlan L. Jacobsen.

Postmaster: send address changes to **7432 East Diamond, Scottsdale, AZ 85257.** (602) 945-6746.

You May Be Building and Feeding an LPTV Electronic Dinosaur

They're still selling new LPTV builders with a lot of equipment that becomes obsolete before they even start to pay for it. What very well may turn out to be an electronic dinosaur.

A party just called who is building an LPTV in a 30,000-people southern market and has been convinced he will be spending $300,000 for putting up an LPTV. Now that's fine, that's nice; I'd love that kind of a budget, but we will probably be adding another LPTV to our large 'For Sale' list within a year. In fact, I'd bet on it.

That quote is $10 per person to construct—far out of line, in our opinion, for that small of market. You can expect something like $5 to $15 worth of advertising revenue per television set (not per person). Even full powers do not invest $10 per person, so I'd say that's out of line.

They plan 11 employees, which I believe is also out of line. We use a formula of one employee per 10,000 population served. This here sounds like a three-employee LPTV station (to start) to me.

First of all the permit is a 1,000-watt with an expensive Bogner antenna. That can be easily modified down with the FCC in weeks.

Knowing the territory, I'd say that there is very little increase in number of viewers by covering past 20 miles.

The original transmission package puts it into the over-$100,000 bracket—nice, but not absolutely necessary to start. A 100-watt system would cover the town adequately and out 20 miles almost as good as the 1,000-watt—viewers would only need to buy an antenna to receive it.

I'd go 100 watts with $22,000 worth of transmission equipment (including antenna) and up the power later by adding a 1,000-watt amplifier when I was solvent (in the black). I'd file for an increase during a window and have it for when I was ready.

They plan to spend $20,000 for a microwave link. I'd spend $4,000 for General Electric's new micro-link (which may have an outage in snow storms) with a satellite receiver built right at the tower on network feed and a video detector to switch to the satellite when you shut off your STL microwave, or if it goes down.

They plan $22,000 for each of two satellite receivers—total $44,000. I'd spend $2,500 for each of two satellite receivers ($5,000) in that same market.

The second satellite commercial receiver would be installed at the studio. If your microwave goes down for any reason it switches automatically to the tower satellite receiver. If you want to use two satellite channels, you switch to the transmitter location satellite by shutting off your microwave.

On studio equipment, they are going $175,000; I'd invest $12,000.

Let's look at the overhead, including interest, on their $300,000:

15% interest on $300,000	$45,000
11 Employees (7 @ $10,000; 3 @ $20,000)	$140,000
Power, Transmitter maintenance (1,000 watts)	$6,000
Miscellaneous	$35,000
	$226,000

15% Interest on $39,000	$5,850
3 Employees (@ $10,000)	$30,000
Power, Transmitter Maintenance (100 watts)	$750
Miscellaneous	$15,000
	$51,600

There are 10,000 television sets in the coverage area—they will have to do $22.60 per set worth of ads while we would only have to do $5.16. We have a good shot of making it the first year. I'd say they will be years before (if ever) they get their income to $22 per set.

They are planning (in additional overhead) to buy and ship in and out ¾-inch syndicated program tapes, which will up their overhead considerably more, making their planned overhead closer to $30 per set.

Now, about that electronic dinosaur that is going to be eating them up. Electronic equipment is changing so fast that in three years the big investment (other than the transmitter and antenna) will be obsolete and worth only ¼ of what new and far-better equipment can be bought for then. There are tremendous advances each year. The longer you can hold off on the niceties (like to have but not absolutely essential) the better off you will be. By then both you and your staff will know what the hell you are doing (and really need). This will be far better to struggle along initially with a little make-do, than to be saddled with paying for an obsolete dinosaur for years.

Matter of fact, I think I'd put it on for six months with a satellite receiver only (plus transmitter and antenna). That would be $24,000 investment at 15% for six months, plus $150 monthly tower rental, maintenance and electricity. That first six months (of satellite programming only) will cost $1,800 interest on your transmission equipment (programming is free), plus $900 additional expense, a $2,700 six-month start-up investment while you get the rest together. You will be building an audience already established when you finally start local programming.

Think about it. Do you really need a dinosaur that may eat you up? (Employees in LPTV will almost pay you to work for the experience necessary to get a big station job later.)

April 1985

RadioActive

National
Association of
Broadcasters
1771 N St. NW
Washington, DC 20036

Guest Editorial

Low-Power, High Expectations

by Lee Shoblom

Much of today's new technology is like everything else: two-sided. Some good, some not so good. Low-Power Television (LPTV), for example, can be categorized as good or bad, depending on one's perspective.

If you are currently a radio operator expanding into television via this exciting new medium, it is a logical expansion of your broadcasting activities. LPTV is new, fun, and pioneering. You are learning about an entirely new world. Who knows, you might even make some money with it some day. After all, 20 LPTV stations across the land are already showing a profit!

If, however, you are sitting in your small- or medium-size town as a long-entrenched radio broadcaster, staring at a television set in your office programmed by this young "new technology" upstart—a local LPTV operator who is clearly going after your advertisers—you are probably not too thrilled. Perhaps you are thinking, "This deregulation has gone too far! Hey, this is unfair competition!" This person can leave his station unmanned, while you must have licensed operators on duty all the time. He is receiving traditional programming or music videos—for *free*—24 hours a day from some new-fangled service called "Odyssey," in stereo yet, while you have temperamental d.j.s, poor record service, and tired equipment. He has tones from the sky triggering his commercials automatically—commercials he is selling at a buck less than yours! The most bitter pill of all is that he is being revered, by young and old and even by those who cannot stand music videos, as some kind of whiz-kid "hi-tech" pied piper, leading your community into a brave new world; one which has been yours, musically, but now they've added pictures!

The LPTV broadcaster is currently living with a new situation. When LPTV camera operators are showing up at Chamber of Commerce functions and City Council meetings, and everyone is talking about what they saw on their local station last night, all of a sudden it is not just an interesting service to read about but something that is right in your lap.

How to play this LPTV game? It depends on the type of player you are. In our case, it was "if you can't lick 'em, join 'em." We added K45AJ, a 100-watt LPTV station, to our AM, KFWJ, and our FM, KBBC. It is a natural connection. After all, we are the broadcasters here! We can share people, buildings, towers, vehicles, and more. We already have the contacts: advertising, news, and political. Plus we can promote all day long on our radio stations that the mayor is going to mud wrestle the head of the PTA tonight at 7:30 on TV45! I mean, who could compete with us, right?

When LPTV comes to your community things will turn into a whole new ball game, and you had better learn the rules—*fast!*

There are those who do not feel LPTV is "broadcasting" in the true sense. I would argue that point. They have studios, transmitters, audiences, and advertisers. In my case, we have the best picture in town, both in signal strength and color. Our town has no primary TV reception, using six UHF translators instead. We have the same power, on the same band, but we are 11 miles closer to town. We are either local/live or on satellite while they retransmit degraded signals from cities hundreds of miles away. Clearly, no contest.

Okay, so you are interested. What now? Your attorney and engineer can properly instruct you on the normal procedure, but currently there are more obstacles than in a mine field. First, there is a freeze on new applications while the FCC slowly works its way through 30,000 applications with a lottery process. Currently, about 50 construction permits a month are being granted from the backlog. You will automatically receive a "demerit" for the simple reason that you already have a radio station in your community. Doesn't seem fair, does it? We were most fortunate to have received our license before the FCC began using the lottery process for LPTV. For radio types, the traditional application way is not the best way.

How about the "back door" approach? See if any construction permits have been granted, or filed for, in your town. Many applicants have lost interest over the years, and construction permits are expiring all over the country. Permittees would be delighted to get back their engineering and attorney fees and transfer the C.P. to you.

Statistics also show that when one low-power station comes on the air, other permittees in the same area are not that interested in adding a second facility for economic, competitive reasons. Those construction permits are often available for a song. You, being the excellent broadcaster that you are, with the added help from your radio facility, could make competing with any stand-alone LPTV a walk in the park.

Other possibilities include picking up a local LPTV station after a year or so of operation (after the owner learns the problems involved in our business). In this instance, it is a full license, however—not a C.P.—and they can ask any price they feel they can get. It has already been constructed, of course, and you save yourself a lot of technical headaches.

Low-Power TV will be in your life one way or the other very soon. Wouldn't you rather be "with 'em" than "agin 'em"? ■

Lee Shoblom is president of Shoblom Broadcasting, Inc., in Lake Havasu City, Arizona. He is also president of the LPTV Community Broadcasters Association and an NAB Board member.

PUBLIC NOTICE

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Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-8 Released: April 10, 1985

BMPTT-830228IT
State of Alaska
Trapper Creek, Alaska — Channel 24

BPTTL-830309KB
Mountain TV Network, Inc.
Hazen, North Dakota — Channel 54

BPTTL-830312M6
Mountain TV Network, Inc.
Hazen, North Dakota — Channel 52

BPTVL-820319OZ
Douglas Televiewers, Inc.
Douglas, Georgia — Channel 2

BPTVL-821004TQ
Steven C. Nelson
Fairmont, North Dakota — Channel 8

BPTVL-820326TW
Harlan L. Jacobsen
Mitchel & Woonsocket,
South Dakota — Channel 12

BPTTL-801121JI
Graphic Scanning Corporation
Wichita, Kansas — Channel 69

BPTTL-830314F7
Mountain TV Network, Inc.
Hamilton, Montana — Channel 45

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-9 Released: April 23, 1985

BPTTL-830311PG
Mountain TV Network, Inc.
Malta, Montana — Channel 64

BPTTL-830309C3
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 55

BPTTL-830309S3
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 33

BPTTL-830309S6
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 31

BPTTL-830309RW
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 63

BPTTL-830309QU
Mountain TV Network, Inc.
Chamberlain, South Dakota — Channel 60

BPTTL-830309Q8
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 67

BPTTL-830309RV
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 61

BPTTL-830309RU
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 59

BPTTL-830309S7
Mountain TV Network, Inc.
Chamberlain, South Dakota — Channel 68

BPTTL-830309QT
Mountain TV Network, Inc.
Chamberlain, South Dakota — Channel 62

BPTTL-830308FS
Mountain TV Network, Inc.
Chamberlain, South Dakota — Channel 56

BPTTV-801030IC
State Board of Directors
For Educational Television
Mitchell, South Dakota — Channel 9

BPTTV-810302IR
Bear Paw TV Club
Lloyd, Montana — Channel 11

BPTTL-830309QW
Mountain TV Network, Inc.
Chamberlain, South Dakota — Channel 64

BPTTL-830309D2
Mountain TV Network, Inc.
Chamberlain, South Dakota — Channel 58

BPTVL-810217HK
John W. Smith Sr., and
Mary L. Smith
Jeffersonville, Indiana — Channel 5

BPTTL-830309ZR
Mountain TV Network, Inc.
Wishek, North Dakota — Channel 36

BPTTL-830309VS
Mountain TV Network, Inc.
Wishek, North Dakota — Channel 44

BPTTL-830318JY
Mountain TV Network, Inc.
Dubois, Wyoming — Channel 23

BPTTL-830312YN
Mountain TV Network, Inc.
Rugby, North Dakota — Channel 62

BPTTL-830309VW
Mountain TV Network, Inc.
Wishek, North Dakota — Channel 54

BPTTL-830309VR
Mountain TV Network, Inc.
Wishek, North Dakota — Channel 68

BPTTL-830318JX
Mountain TV Network, Inc.
Dubois, Wyoming — Channel 25

BPTTL-830314F8
Mountain TV Network, Inc.
Hamilton, Montana — Channel 47

BPTTL-810330KD
Regents of the University of
New Mexico & Board of
Education of the City of
Albuquerque, New Mexico
Albuquerque, New Mexico — Channel 32

BPTT-821007TC
Arapahoe County T.V. Club
Gallup, New Mexico — Channel 30

BPTT-830126TU
North Tillamook
County Translators, Inc.
Rockaway (and Vicinity), Oregon — Channel 53

BPTT-840301ID
North Tillamook County
TV Translators, Inc.
Rockaway (and Vicinity), Oregon — Channel 44

BPTT-830126TV
North Tillamook County
TV Translators, Inc.
Rockaway (and Vicinity), Oregon — Channel 57

BPTTL-831109SF
Rentel
Boise, Idaho — Channel 47

BPTTL-830609IG
North Sherman TV Co-op
Wasco, Oregon — Channel 67

BPTTL-810112LC
World Out Reach
For Deliverence
Keokuk, Iowa — Channel 60

BPTTL-830318JV
Mountain TV Network, Inc.
Dubois, Wyoming — Channel 62

BPTTL-830318JB
Mountain TV Network, Inc.
Dubois, Wyoming — Channel 64

BPTTL-830318IV
Mountain TV Network, Inc.
Dubois, Wyoming — Channel 31

BPTTL-830321JA
Mountain TV Network, Inc.
Wheatland, Wyoming — Channel 28

BPTTL-830321IQ
Mountain TV Network, Inc.
Wheatland, Wyoming — Channel 36

BPTTL-830321IT
Mountain TV Network, Inc.
Wheatland, Wyoming — Channel 28

BPTTL-830309Q9
Mountain TV Network, Inc.
Bonilla, South Dakota — Channel 65

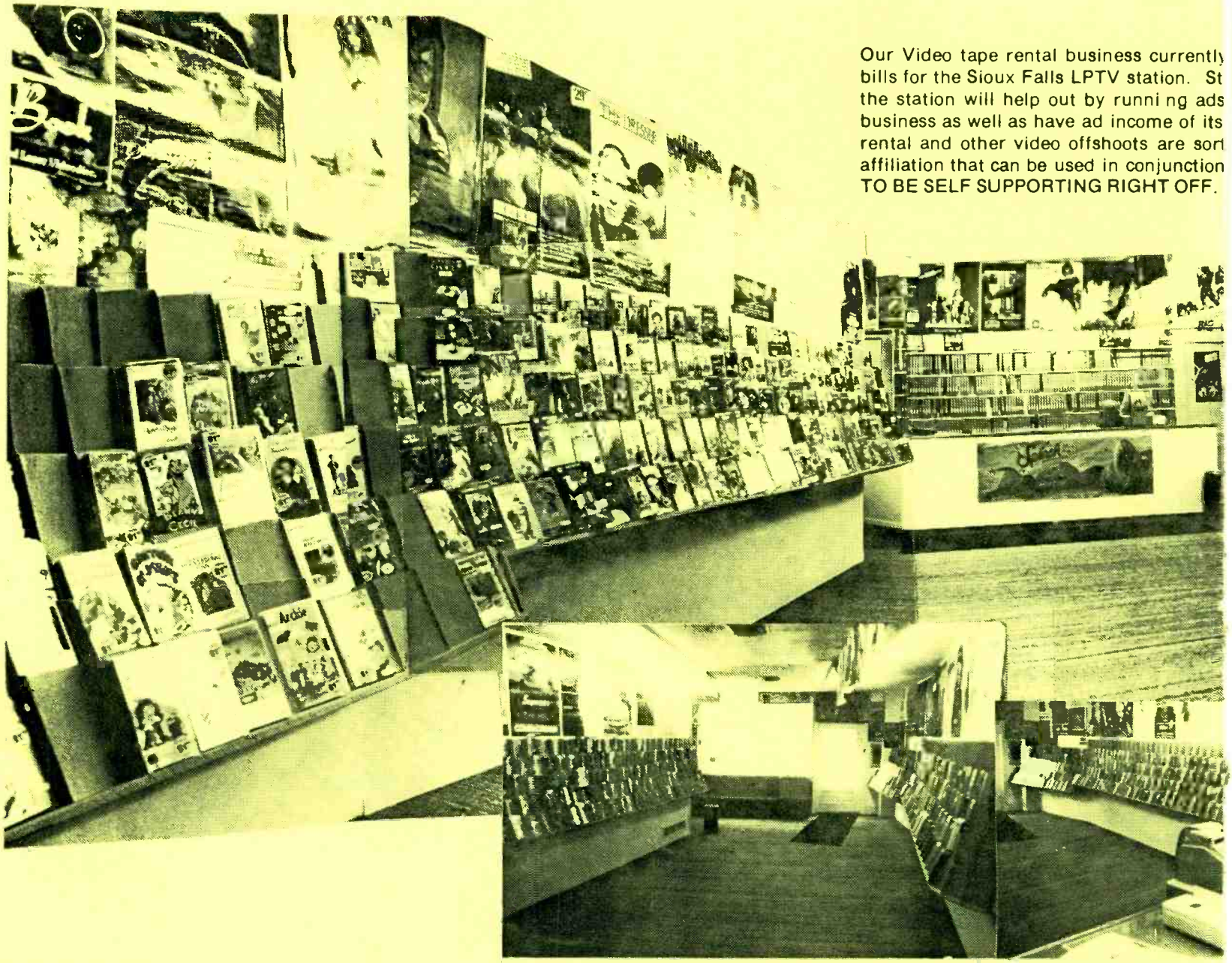
BPTTL-830309W4
Mountain TV Network, Inc.
Reva, South Dakota — Channel 68

BPTTL-830314N9
Mountain TV Network, Inc.
Hyannis, Nebraska — Channel 51

BPTT-810119KI
Five County Public
Telecommunications Project
Lake George, Colorado — Channel 62

BPTTL-830314S7
Mountain TV Network, Inc.
Hyannis, Nebraska — Channel 53

BPTTL-830314S6
Mountain TV Network, Inc.
Hyannis, Nebraska — Channel 49



Back of store looking toward street.

False slant walls have sto

Our Video tape rental business currentl
bills for the Sioux Falls LPTV station. St
the station will help out by runni ng ads
business as well as have ad income of its
rental and other video offshoots are sor
affiliation that can be used in conjunction
TO BE SELF SUPPORTING RIGHT OFF.

Before installing our microwave and studio in Sioux Falls, we decided to move the video tape store to the larger half with a low ceiling and use the half with a high ceiling for the studio. We spent 3 weeks building slant walls and tape racks and remodeling the north half of the building for the tape business. The racks are different then those commercially available because the hand built racks disply each tape in its own compartment and each is slanted forward. Movie titles and boxes normally just sort of run together and make it hard for the public to decide what movies they want to watch that day. Our design is different and seems to be working well. At least 2 parties that subscribe to this publication have gone into the video tape rental business as a result of our articles on the subject and we assume they would get something from this up date. Incidently, if you are not aware, May is the poorest income month of the year for the rental business. Our bottom dropped out and we expect it to come back about June 15.

The counter with the cash register pictured here was purchased used from the bus company for $50.00 and has lots of great drawers and storage compartments. They also thru in the bus bench you see inside the front window.

LPTV: The Facts and Figures

So, after more than four years of existence, how is the LPTV industry shaping up? Recent research by the Milwaukee-based media consulting firm, Kompas/Biel and Associates, reveals some interesting facts about the field.

According to a survey conducted by Kompas/Biel, there were 134 low-power licensees and contract holders as of December 31, 1984. Fifty-six of these are translator stations which have switched over to low-power transmission, and only one station still operates in the translator mode. Of the 78 respondents to the survey, preliminary results show that four of these stations are temporarily off the air, and two are casualties of last year's LPTV royalties dispute with the U.S. Government. Sixteen of the respondents are nonprofit religious broadcasters; eight are subscription television operations; 10 are nonprofit educational stations, and 16 function as commercial broadcast stations (14 of which have made a profit).

Programming sources for these stations include SPN, CNN, C-SPAN, UPI, AP and syndicators. The stations charge advertising rates that range from $4 to $50 for a 30-second spot, $6 to $100 for a 60-second spot, and $45 to $500 for a one-hour program sponsorship.

While in 1984 the average operating budget for low-power stations was $185,000, budgets ran from $18,000 for a small station with free satellite programming, to $360,000 for a full-service station with 20 hours of locally originated programming per week.

6's Video Classifieds, enabling clients to buy an ad package for both.

Advertising revenues range from $15 for a 30-second spot to $28 for 60 seconds during the news. For long-term contracts, rates go from $10 for a 30-second daytime slot to $22 for a 60-second nighttime spot.

The bread-and-butter revenue of the station comes from producing ads for retailers who buy time on the air, though Channel 6 rarely produces tapes for other clients. The station uses a remote package with two Sony ¾-inch VCRs and Ikegami ITC-730 cameras. The studio is equipped with all Sony ¾-inch editing decks, a JVC KM2000 switcher and a film chain for movies. A staff of seven full-time and two part-time people share the administrative, technical and production responsibilities.

Although Channel 6 lost money for the first year-and-a-half of operation, it was successful in the last quarter of 1984. But station manager Phil Vega says the biggest problem facing his station and LPTV as a whole is the national and regional advertising revenue. "According to the NAB, 42 percent of the revenue of major full-power independent stations comes from local advertising and 58 percent of the revenue comes from the national and regional advertising," says Vega. "We may be getting all we can get out of the local, but we don't have the regional and national ads. To be super successful, somehow, somewhere, that's got to happen. There's only so many mom-and-pop stores that have a budget to continue to advertise with us."

• • •

Attracting advertisers is only one of the problems. In the past two years, the LPTV field was forced to overcome a number of obstacles to its growth. One major drawback was the FCC's relatively slow pace in granting construction permits (CPs). These permits are required prior to being granted a license.

Because of the slow pace at which CPs are being granted, it has been difficult to reach a substantial number of operating stations, thus limiting, to some degree, their ability to buy programming and attract investment capital. Because CPs have not been granted in many of the more desirable markets, it is difficult to show just how profitable and practical LPTV stations really are. But the FCC's low-power branch has just announced a new procedure for filing, which will go into effect during late 1985 or early 1986 and which should ease the lottery process.

Another problem that is slowly being solved is that of quality programming. LPTV stations provide local programming that is unique to their communities, but original programming of any type is expensive. Therefore, much of the schedule is filled with the best available material, ranging from music videos to first-run feature films. Many stations are mixing together national news (CNN Headline News), economic news (Financial News Network), local and national religious programs, and the general programming that makes up much of standard independent television fare.

One answer to the problems in the field has been the formation of a national trade association, the Community Broadcasters Association. It was formed from a number of smaller groups, and arose following a lobbying effort to overturn a copyright ruling that would require cable operators to pay royalties on LPTV as "distant signals." It was the industry's first major victory in Washington.

From the beginning LPTV has had an annual trade show sponsored by the National Institute of Low Power Television. Since the creation of the CBA, it became possible for a single entity to represent low-power operators in matters of national policy and lobbying efforts. The NILPTV and CBA have agreed to jointly sponsor the next major event, LPTV West, which will be held in Los Angeles on May 15 and 16. It will bring together all of the key players in the low-power field—station managers, manufacturers, consultants, programmers and station operators.

In the next year, an increase in the number of CPs issued should greatly assist the growth of LPTV. Those of us in this field believe it will truly change the face of American TV by making it increasingly responsive to local community needs—a prospect that should considerably diversify and enrich American television.

TV 18's dishes access satellite signals while truck handles local production.

Channel 18's news studio, equipped with Hitachi cameras.

interviews with people in the community on the half-hour. Because of the constant stream of programming with music videos, neither station carries subscription television or syndicated shows.

Thanks to the success of ad revenues, Low Power Technology, which charges roughly $25 per 30-second spot during the news, expects to break even within six months. The Lawrence station presold $25,000 worth of advertising before it went on the air, and its sister station in Anchorage sold $119,000 in contracts during the first three weeks of January, 1985.

Cable carriage is not critical to Channel 22's exposure in Anchorage. This low-power station, one of only five television broadcasters in the whole market, is very popular in an area with only about a 25 percent cable penetration. "We'd like to charge the cable system if they'd like to run our programming," says Jeffrey Nightbyrd, president of Low Power Technology.

Low Power Technology has invested in sophisticated broadcasting equipment, including a computer-controlled automated playback system for ¾-inch tape at its Anchorage facility. But the benefits of "techno-rapture" have been mixed. Says Nightbyrd of the automated playback system, "It's been very unworkable. I'm giving it bad marks, recommending that nobody use it." He indicated that the station cannot wait the many months required to get the bugs out of the software.

Low Power Technology's remote equipment includes Sony DXC-M3 and Hitachi FP-Z31 and FP-10 cameras. Studio equipment includes a Crosspoint Latch switcher, Sony decks, Microtime TBCs, a Fortel image enhancer for its duplication operation, and a Ramsa audio board.

The staff situation at the Lawrence station is bolstered by a unique agreement with the University of Kansas. Channel 30 has access to upwards of 50 student interns who get college credit for on-site training at the station.

TV 18, Cumby, Texas

Channel 18, K18AL, which has been in operation in Cumby, Texas for almost two years, is doing well. According to general manager Bill Heyman, the station is carried by seven cable systems in Commerce, Greenville, Mineola, Paris, Whitman, Sulphur Springs, and Winsboro, Texas, and has access to 29,000 households. Recently, Channel 18 was appraised by Broadcast Investment Analysts at $1.95 million and is now approaching the break-even point. Heyman expects to be in the black by the end of the first quarter of 1985.

Programming on Channel 18 includes real estate and agricultural services, women's programming, news, syndicated shows, movies from 20th Century-Fox and 60 percent of the American Christian system's programs.

Channel 18's financial success may be partially due to its captive market. It is the only low-power operator in the area. Says Heyman, "We don't have any competition except for radio. Dallas cable carries the networks, and the independent stations from Dallas, Tyler and Longview. None of the stations are selling any time in the area which comprises our coverage."

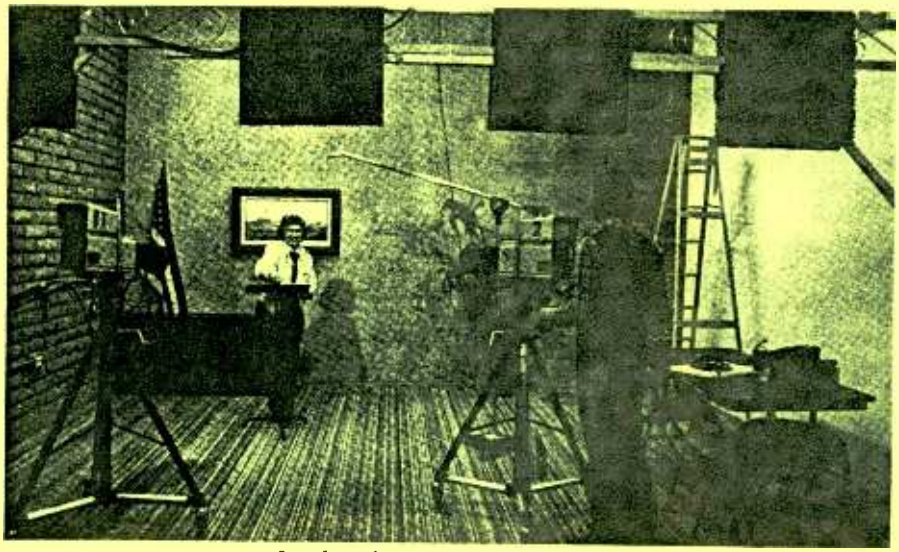
TV 6, Junction City, Kansas

Channel 6, K06K2, is owned by *The Daily Union*, the only newspaper in the town of Junction City, Kansas. With the Fort Riley military base next door, the station has a potential audience of 14,000 households and 45,000 people.

Channel 6 operates in an area with high cable penetration. Fort Riley has its own cable system and Junction City has one of the first cable companies operating in Kansas.

The 24-hour programming schedule has a high local orientation. A 30-minute news program is repeated twice, during the dinner hour and late evening. *JC Sports Beat*, a magazine-format show, is repeated five times each week. Sports coverage includes high school athletics, with highlights, and interviews with kids. Each month the station produces a 60-minute special covering Junction City events such as the July 4th Sundown Salute, and the Family Month Festival. Outside program sources include the popular *All-Star Wrestling*, Biznet and the Odyssey Music Channel. The newspaper advertisement operations of *The Daily Union* are coordinated with channel

Broadcast programming switched through Channel 18's master control.



Local production in TV 45's studio.

TV 45, Lake Havasu City, Arizona

Nestled on the Colorado River near the California border, in Lake Havasu City, Arizona, is station K45AJ. The station is operated by Lee Shoblum, president of the newly formed Community Broadcasters Association (CBA), and owner of two radio stations. Although the local population numbers about 18,000, K45AJ's area is poorly served. "There's no primary television coming in at all," says Shoblum. "Everything we watch is on the UHF dial."

As a result, the station benefits from sharing a transmitter with the other broadcasters, which are 11 miles out of town. K45AJ, in contrast, is right in the center of town. "I'm the envy of most low-power operators in the land," Shoblum says.

At present, K45AJ's local programming is minimal, according to Shoblum. Shoblum fills the rest of the schedule with programming from a variety of services. He has used the Financial News Network, the now defunct JPD Network, and has an agreement with C-SPAN, which brought the station gavel-to-gavel convention coverage. Shoblum recently purchased a building that formerly housed a cable television station, and which includes a 21-foot satellite dish. With FDA financing, he intends to build a new television station that will also house his two radio stations, KXWT-AM and KBBC-FM.

The station invested approximately $75,000 in studio equipment and $50,000 in a 1,000-watt transmitter. All of K45AJ's field production is shot on a single-tube Panasonic camera with Panasonic decks. The studio hardware includes three Ikegami cameras and a JVC editing system.

Shoblum economizes by sharing costs between the television and radio operations. For example, all the stations use the same mobile unit and news staff. In addition, the two radio stations have provided all-day promotion for the low-power station. But, Shoblum sometimes finds that he's competing with himself. "I've studied this in the past through NAB files," explains Shoblum. "I started the AM station in 1970, the FM station in 1974, and later the television station came on as an extension of the broadcast entity. There is some dollar swapping between radio and television ad revenues, but [on TV] there's stuff I've never been able to get on radio with any consistency before. Television has added a whole new level of advertising. It can get moving color pictures that the advertisers really like."

Shoblum is enthusiastic about the future of the entire low-power field. In particular, he feels the formation of the Community Broadcasters Association has been a great boon, raising the confidence of the programmers, the FCC and the industry's equipment manufacturers. Shoblum sees proof of increased support in "the fact of the many phone calls I've been getting—the renewed interest. Perhaps '85 is the year we get our act together."

TV 30, Lawrence, Kansas TV 22, Anchorage, Alaska

Low Power Technology, Inc., which acts as a consultant for people applying for low-power licenses, operates two stations of its own: in Lawrence, Kansas (Channel 30), and Anchorage, Alaska (Channel 22). Low Power Technology also has approximately 500 applications and eight construction permits in the works, and plans to launch from five to eight stations during the coming year, primarily in college markets.

The college market has been central to Low Power Technology's programming strategy, called "metro television," in which the stations narrowcast a schedule anchored by music videos. Channel 30 and Channel 22 run five-minute news spots on the hour, and two-minute

TV 30's Hitachi minicam doubles as studio unit.

Systems operator at TV 30's broadcast operations console.

On the news set in TV 51's studio.

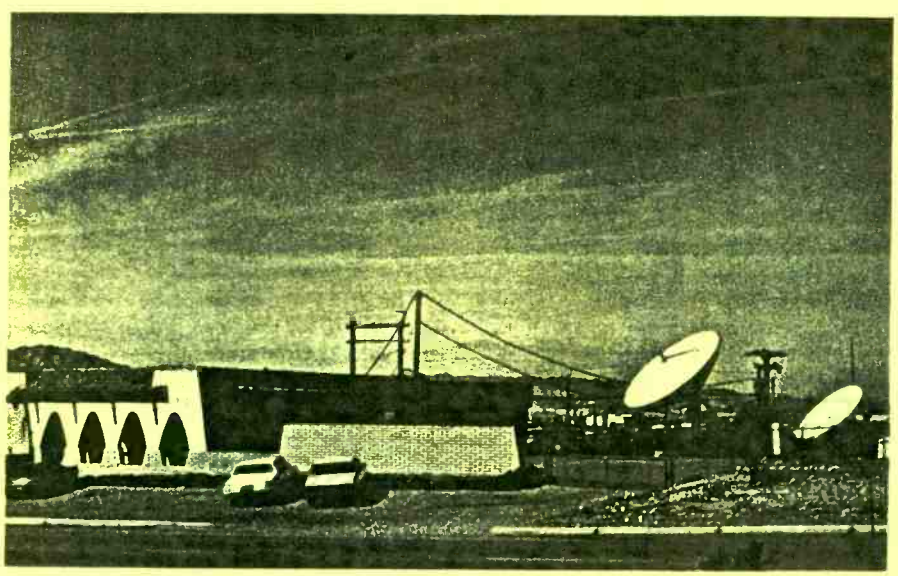
TV 51's operation manager at master control.

sion unanimously voted to create a new broadcast service. Charles Ferris, chairman of the FCC at the time, initiated LPTV in hopes of creating a democratic form of television and of opening the airwaves to new voices, particularly to those of minorities and community groups. The FCC's approval of the new service sent eager applicants scrambling to stake a claim with the commission.

What is low-power television and why is it so attractive? Technically, a low-power station is modeled on a translator station, which uses a low-power transmitter to amplify and rebroadcast the signal of a distant, full-power station. Although there are strict guidelines concerning channel selection, the FCC allows these services to broadcast whatever signals they please without the burden of the regulations imposed on full-power stations.

For example, low-power stations are free to broadcast original, locally produced material in addition to prerecorded programming and material fed by microwave or satellite. Stations can broadcast on standard UHF or VHF bands, from channels 2 to 69, at low power without disturbing the signals of full-power stations on the same frequency in nearby cities. Low power refers to the wattage of the transmitter. With 10 watts for VHF and 1,000 watts for UHF, stations can broadcast within a range of 5 to 40 miles. The actual power of the signal broadcast from the transmitting tower can range up to 30,000 watts with a 1,000-watt transmitter. The signal strength depends upon such factors as the height of the antenna above the average terrain, as well as the pattern and type of antenna used. TV 22, a low-power television station in Anchorage, Alaska, for example, can effectively cover the entire city with a 1,000-watt transmitter.

The diversity of the industry as a whole is evident in the differing locations and characters of the stations, and in the station operators themselves. Here's a look at six low-power operations:



TV 45's studios and offices, with satellite receiving dishes.

TV 51, LaSalle, Illinois
TV 42, Ottumwa, Iowa
TV 38, Jackson, Tennessee

Rick Hutcheson runs three low-power stations located across the middle of the United States. TV 51 of LaSalle, Illinois has been on the air since February of 1984; TV 42 in Ottumwa, Iowa, since November of 1984; and his newest venture, TV 38, started broadcasting in Jackson, Tennessee in January of 1985.

All three stations share similar philosophies and programming. Says Hutcheson, "We do a lot of buying on a three-station basis. The centerpiece of all the markets is local programming." A typical program day on any of the stations may include two or three broadcasts of the local news, music videos, SPN programming, a talk and game show, the syndicated soap opera *Dark Shadows* and a prime-time feature film presentation.

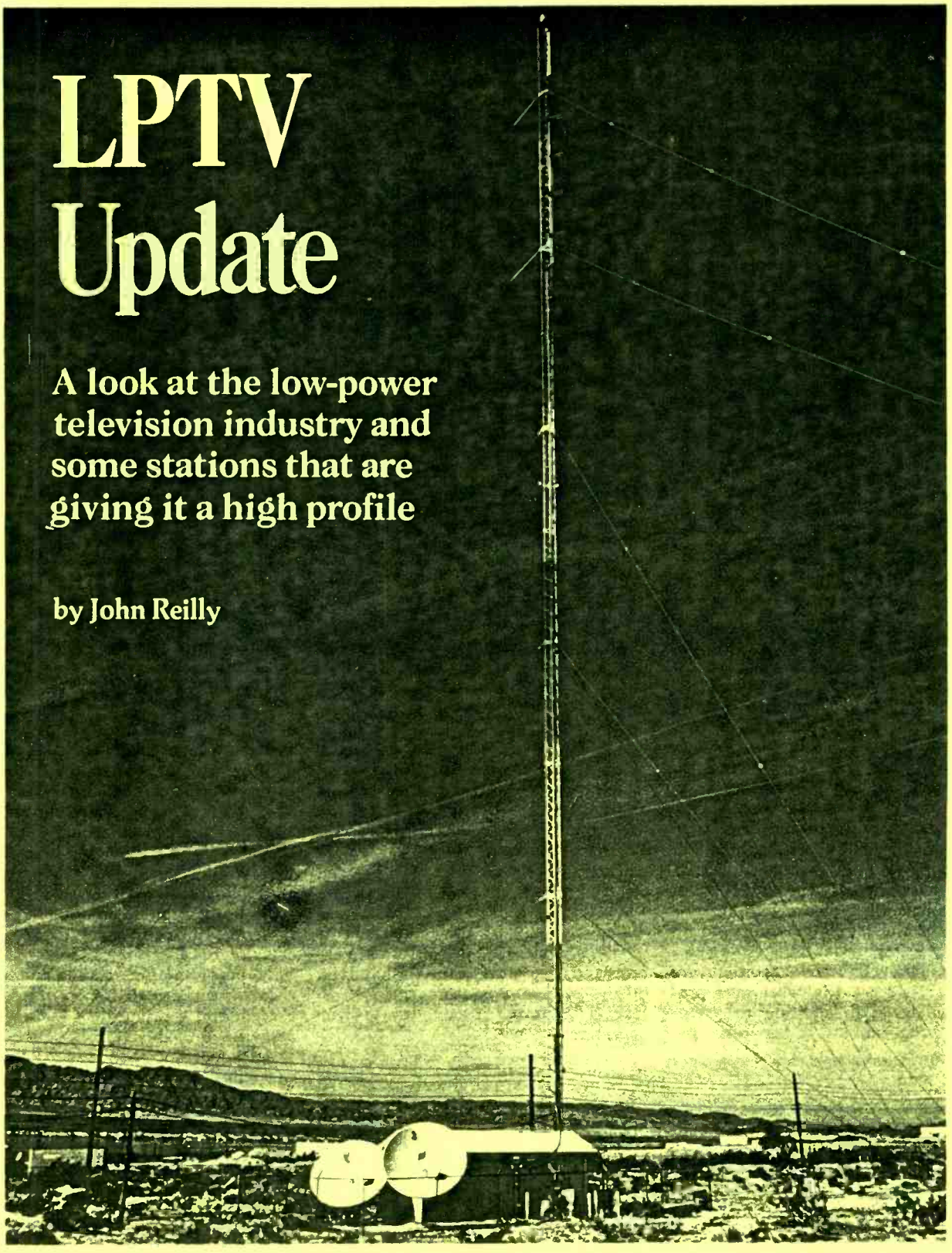
An important coup was a programming deal Hutcheson made with 20th Century-Fox. Getting the deal was hard work, he says: "We called a lot of salespeople at 20th Century-Fox until we found the guy that was willing to work with us to put the deal together. We also were able to benefit from the fact that we were buying on a three-station basis." The deal proved good for both parties, according to Hutcheson. Fox receives "good rates for each title," and Hutcheson's operations gain access to movies like *Butch Cassidy and the Sundance Kid* and *The Poseidon Adventure*.

Advertising rates for the three stations range from $5 and $7 per 30-second spot on the low end to $30 on the high end, a price comparable to that of local radio stations. Hutcheson finds that local programming attracts advertisers, "because nobody else can match the local stuff."

LPTV Update

A look at the low-power television industry and some stations that are giving it a high profile

by John Reilly



The good news about low-power television is that it really exists, since so many technologies never seem to get off the gound. Although LPTV has not grown as rapidly as first hoped, today there are 260 such stations in operation, with 134 in the continental United States and the rest in Alaska. Dozens of small TV stations are offering local television for the first time to small and medium-sized cities all across the country.

When it first began, LPTV promised to create local television for hundreds, perhaps thousands, of small communities that have no local stations, or none that serve the community. Many of the most innovative and interesting of these stations resemble a cross between a local newspaper and an FM radio station.

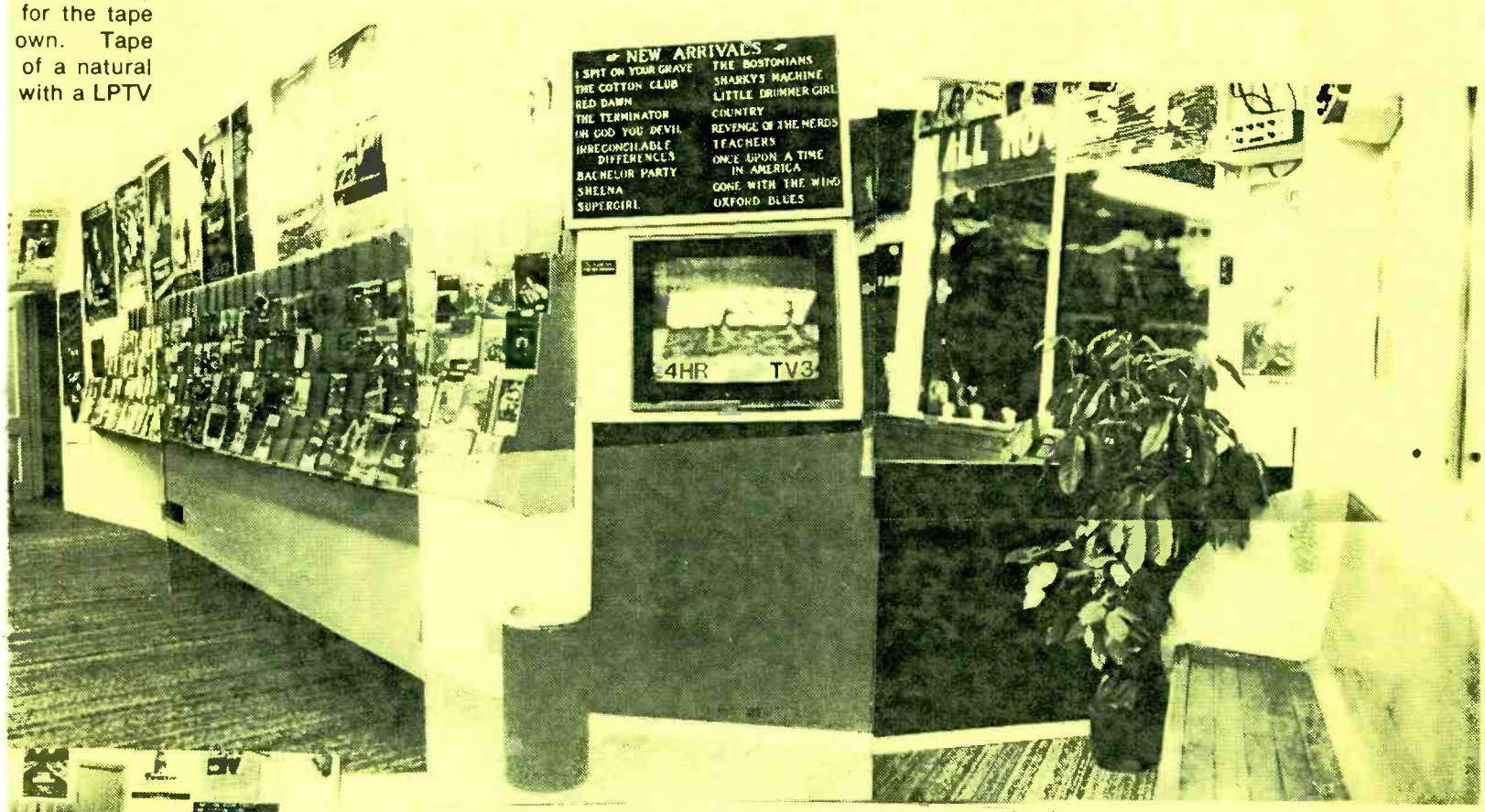
The LPTV age began on September 9, 1980 when, for the first time in 20 years, the Federal Communications Commis-

Above: TV 45's broadcast tower standing tall in the wide open spaces of Arizona.

John Reilly is founder and executive director of Global Village, a major independent video group in New York. He is also on the board of the Community Broadcasters Association, director of the National Institute of Low Power Television, and holder of four construction permits for LPTV facilities.

Reprinted from **Videography**, April 1985.

pays all the
arting in July
for the tape
own. Tape
of a natural
with a LPTV



Composite photo (experiment) with several glued together. Plate glass mirror at right of TV set is on angled wall and gives autos going by illusion of tape inventory in right half of building.

The Boom in TV Station Sales

age behind.

Some recent publications have articles on the boom in TV station sales since the FCC changed the limitations on full service TV station ownership.

The May 13 **U.S. News and World Report** had some of the following quotes of interest to low power investors interested in keeping abreast of the broadcast property market.

'Gulf Broadcasting is selling a Tampa TV station to Taft Broadcasting of Cincinnati for $197.5 million. Purchase price for the same station six years ago, $17.6 million.'

'. . . . stations in Dallas and Houston will soon have their third owners in less than a year.'

In reference to the FCC change to allow more stations owned by one party and the large number of stations changing hands, '. . . . there will be more networks, more music, even prime time news.

'. . . . investors also realized that broadcasters turn a profit that is not only predictable but also keeps well ahead of inflation.'

'. . . . stations that once went for 10 times cash flow now go to as much as 40 times that.'

'. . . . increasingly, limited partnerships with investments of as little as $50,000 are being established to purchase stations. There are some tax shelter advantages, but the primary attraction is the money to be made when the station is turned over to those anxious to get into broadcasting.'

In addition, the **Business Week** cover May 20: 'With TV stations and a film studio, Rupert Murdoch is finally a U.S. media baron. One possibility, a 4th TV network, headed by Barry Miller of 20th Century Fox.'

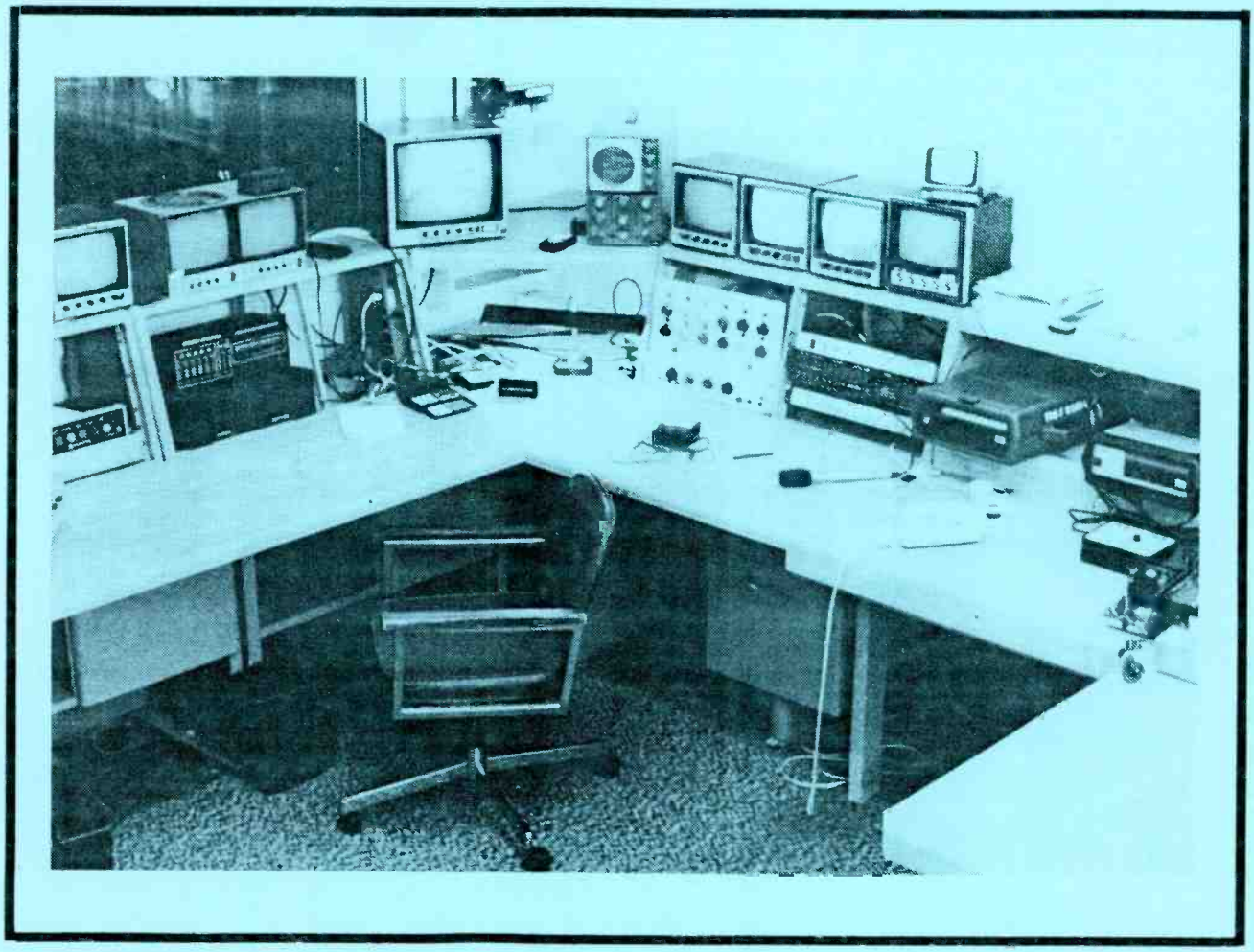
Advertising Age also carried considerable front page news on Murdoch starting a 4th network.

To low power applicants it may mean another source of programming that is significant. Our experience in contacting the three networks about an affiliation for several areas that have no network coverage is that they do not even answer the mail. Others have had the same experience, while others have been told if you can get permission to pick up and rebroadcast one of our affiliates it would be okay.

The whole thing seems ridiculous when LPTV applicants could start with a perfect network picture off of satellite but have to use a second or third generation off the air pick-up from some distant station in order to carry anything from the three majors.

Our point has been that full powers entrenched are fully protected by the FCC from competition and the networks are just as nervous about irritating the politically powerful full powers with dividing up their present viewers no matter how fringe. A fourth network would be a welcome addition.

Lo-Power Community TV



Start of the Sioux Falls Studio Control Room

June 1985

What's Happening

Our editorial position has long been that the FCC is no longer (maybe never was) an agency regulating the spectrum for maximum service and benefit for the American public.

Quite to the contrary, it has long since become a captive agency of the industry's entrenched broadcasters (monopolies) who want to keep it that way.

Because of technical mumbo-jumbo, the public is never the wiser, totally unaware that they are being short-changed by this bureaucratic, tax-supported arm of congress. For example, the 5,000 translators serving rural America came about in spite of the FCC, not because of it. Unfortunately, I am probably the only so-called journalist (also with applications pending before the commission) that has the guts to call a spade a spade.

The commission took away TV channels 70 to 82, formerly used by translators, and gave them to two-way radio. This move alone did away with at least two LPTV or translator channels in each market. They have told set manufacturers they no longer need to manufacture sets to receive channels 70 to 82, and they no longer do.

In the large markets you can support as many channels over air on LPTV as there are channels on cable systems. This will never be allowed to happen because the full service stations are so entrenched and politically powerful that the agency has protected them from significant over-the-air competition down through the years.

Now the commission is giving away more UHF channels, eliminating LPTV in the top markets. Proposed for re-allocation are UHF channels 19-27, 28, 33 and 34 in New York; channels 26 and 32 (or 32 and 36) and channels 42, 48, 60 and 66 in Los Angeles/San Diego; channels 41, 47, 64 and 68 in Chicago; channels 24, 28 (or 34 and 28) and 18 in San Francisco; channels 26 and 32 (or 42 and 46) in Philadelphia; channels 36 and 30 (or 39 and 35) in Baltimore/Washington; channels 41, 35 (or 63 and 69) and 16 in Houston; and channels 41, 35 (or 66 and 62) and 17 in Dallas.

If you have an LPTV application pending in any of these, kiss it good-bye if this goes through (and it will—the big broadcasters love it). The LPTV association doesn't even have a toothless tiger lobbying effort and will probably sleep through this one too. Robert Powers, FCC chief scientist, says that anywhere from 100 to 1,000 LPTV applications could be affected by this re-allocation. If other LPTV applications cannot be amended to protect these proposed land-mobile allocations they will be dismissed.

The commission has recently actually finalized giving three more UHF channels away to two-way radio. This time channels 15, 16 and 17 for two-way use in the Gulf of Mexico. If you have applications there on those channels, they are already gone.

Some FCC spokesmen have recently been quoted as saying they are not going to let channels sit idle. They haven't been used for UHF TV so they are going to be re-allocated to other services that can put them to use. What they do not tell the media is that American entrepreneurs would have snapped up these channels years ago for TV use if it were not for the FCC bureaucratic red tape. We in LPTV know why those channels aren't used because you can't get them licensed for TV use.

> The UHF taboos, long since technically obsolete, have been retained to keep down the commission's wordload and keep out competition for the politically-powerful, established TV stations. Twenty television outlets per market could be on the air if the channel scarcity (solely political) was removed and maximum service to the public was the rule. The present commission wants to fix it permanently so this can never happen by giving away more channels as quickly as possible.

The commission still maintains the UHF taboos of six channels apart (instead of every other channel), which was set up when UHF first came out because manufacturers did not yet know how to build UHF tuners good enough to separate them. That was obsolete years ago, but the commission still clings to it religiously because it keeps down the number of channels available for broadcast use. It also keeps the workload down for the staff.

> Few (or none) of LPTV of LPTV manufacturers will advertise in this publication because of our editorial position of telling it like it is. Other publications, advertisers and applicants all constantly butter up the commission from whom all blessings flow!

Who is for more channels? The FCC staff? No, they would prefer no applications, no work—just pay. The public? They have no idea that they should be able to receive at least 20 channels off the air in each big market. The broadcasting industry? They are against it, they like it the way it is, no more competition, do away with regulations, but do not allow any more TV competition. If you do give out new licenses do it with lots of fanfare and painfully slowly so it never amounts to anything. The average TV station last year cleared over $1 million profit. Not because they performed such wonderful services, but because the FCC totally kept out new competition for them. The FCC maintains and polices their monopoly position for them instead of serving the public.

Who is for more channels? Me—and maybe you, but, frankly, we haven't been getting anywhere, have we? Have you figured out yet why that is?

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor/Publisher: Harlan L. Jacobsen.

Send address changes to 7432 East Diamond, Scottsdale, AZ 85257; telephone (602) 945-6746.

Super Beta Hi-Fi

We finally obtained some literature on the Sony Super Beta system industrial equipment. Along with that, we have information on the new Sony 8MM (uses cassettes the size of audio cassette players). The 8MM is the coming format. However, everything you need to use for LPTV maximum use has not yet come out nor is it yet available. However, the new Sony editor we are going to tell you about here, they have made useable either with the new 8MM or Super Beta. The Betamovie industrial machine GCS-1 (recorder-camera combo) is not only a Super Beta, it also records in hi-fi. (If you do not remember what Beta hi-fi is, it is a new sound process that records and plays back sound quality superior to **any** sound equipment in the best radio station until now.) Hi-fi plays back almost exactly as recorded.

Super Beta is a new improvement to Beta ½-inch that rated a two-page article in the June issue of **Videography** magazine with a sub-headline that says, 'Suddenly, Beta gains a useful place as a production medium in professional television. This is due to the advent of Super Beta'. Farther down the article states, 'Since many video productions require only three generations (master, editing and release) it is now possible to obtain a Super Beta-produced release print equal in quality to first generation standard Beta'.

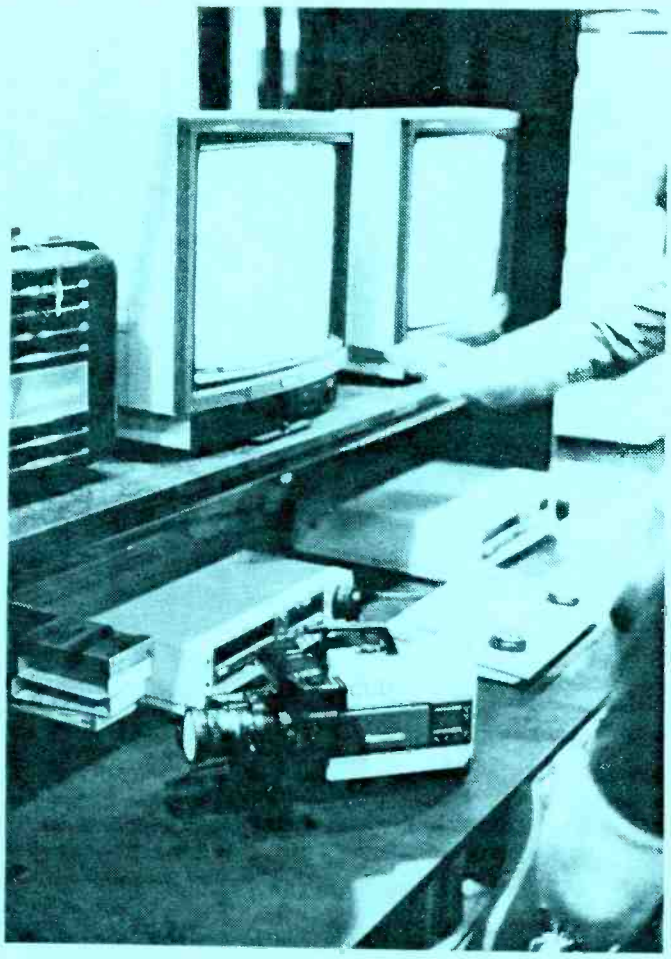
(**Editor's note:** Standard Beta is considered slightly better quality-wise than VHS.)

Up until now, the main disadvantage of ½-inch tapes was that dubbing down, the quality suffered badly. The fourth generation was almost unwatchable. With Super Beta, Sony representatives claimed (at NAB) that the fourth generation Super was equal to first generation standard.

Now we and others were amazed at the improvement in quality of Super Beta originals over standard, yet recorder specs only claim 270 lines of resolution. Standard Beta is about 240 lines. This 270 lines of resolution is obtained using Beta II (three hours on a tape). Three hours on ½-inch tape that costs you about $4 compared to ¾-inch at nearly $20 for an hour. Smaller than VHS, Beta stores 12 hours of recordings in the space occupied by one hour of ¾-inch. 8MM will quadruple that. When you are doing a lot of local, you will want to retain tapes and ½-inch is low enough in cost to save and file everything you ever shot. This gives you a valuable video morgue of local material. The fact you already have mostly ¾-inch or VHS does not mean you should not consider going to Super Beta for taping masters and for editing. Make your third generation VHS and you are back to your normal VHS with the quality at this point equal to former VHS originals.

The GCS-50 VCR has a large jog/shuttle dial for fast access to the exact frame. Besides the new Super Beta format operation, you can also use it for all standard Beta formats. The machine gives you solid pictures in slow motion and still-frame modes.

The Camcorder recorder combo can stick in index points on the tape as well as the editing VCR itself can ad index points (control marks recorded). You can go through and mark up to 64 events which are memorized so you then have programmed assembly

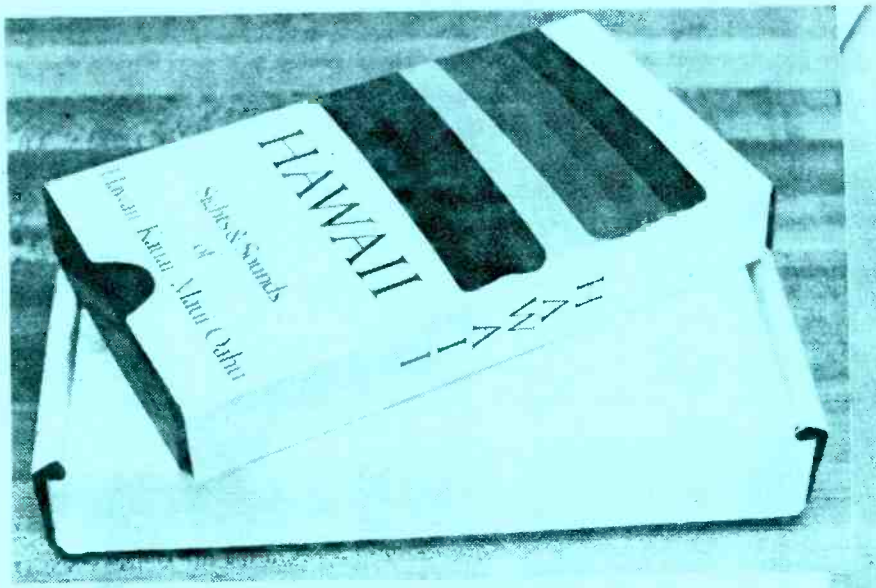


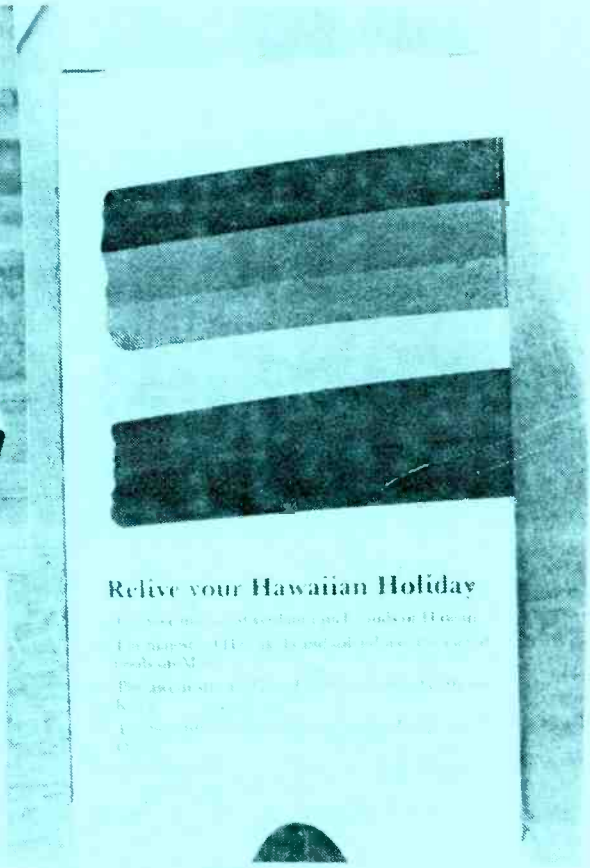
editing. Once you have put marks at exact frames you want to start and end the editing at, all this means is it can automatically edit another (or as many as you like) second generation copies. This is called programmed editing. Preview functions on the new editing device (also can be used with 8MM) allows you to preview any sequence of edits before being actually performed (model RM-E50).

List price on the two VCR's and the editor will be around $5,000. You should be able to buy it sometime in August or September. The Beta movie (recorder-camera) will sell for around $1,500. Remember, these are all in hi-fi as well as Super Beta. Incidentally, all consumer (everything) is now being made by Sony **only** in Super Beta. Standard Beta is no more. So if you are buying a standard Beta, it is an old model machine.

The professional Beta movie GLS-1 uses a solid state pick-up that has better definition (260,000 pixels compared to 187,000 previous) and resolution than similar previous solid state (no camera tube) cameras. Main advantage of CCD (solid state) camera over the tube type is no lag. Lag is when you move (pan) past a light and it leaves a comet tail. Disadvantage is they normally require more light than some of the new camera tubes. This one requires only 20 lux (two-foot candles). Signal to noise is 45db.

The camera has a date and time character generator that functions continually once set and is handy to use at the start of all tapes so you later know when this material was recorded.





The Video Postcard

Constantly looking for ways to ad additional income to your LPTV operation, we are now trying out another new idea. (We do the pioneering and get all the arrows.) If this works out as well for us as we think it will, well, then you might want to try it in your area.

The main distributor of postcards, film and slides, etc., to tourist businesses tells me that the film business was off 50% last year. He thinks it is because people just do not want to get out their projectors etc., anymore. 20% of the population now have VCR's and the number is growing rapidly. This is probably a far higher percentage of the population than ever owned slide projectors or 8MM movie outfits. The VCR is always already hooked up so if you buy a video postcard, all you have to do to show relatives and friends your trip and things you saw is pop this cassette in the VCR.

Pictured at the top of this article is a box for Hawaii. Colorful rainbow across the top is apparently used for all of the different versions for different islands. We know nothing about this Hawaii tape except we got the box in a lot of samples that a manufacturer sent us when we were shopping for boxes. We decided that we needed to sell this tape for $19.95 (or less) to get a big market and to keep others from jumping in on top of us.

Getting into this, we discovered that the South Dakota state development department had shot thousands of slides and hours of video footage and almost everything we wanted had already been shot and was available for our use free.

I spent a half day going through thousands of slides and picked out 150 that could be worked in. Picking mostly views of things that do not move like mountains, lakes, etc., you can zoom in and out on these and, as far as your shooting it on videotape, is the same on these non-moving things as shooting them there in person. Putting each scene up five to seven seconds keeps the thing snappy. We will go back and put in music and commentary (story) as to what you are seeing.

We debated whether 30 minutes would be just right or 60 minutes; cost of duplication is very little different. So we settled on the one hour, since it gives them more for their money, and the people that buy this may be the ones that want all the detail they can get, not just the highlights.

Cost of the one-hour tapes will be around $3.00. Reproduction can be hired done for $1.50 a copy or less (we plan to do our own). Box and labels come to another 60¢, so we hope to produce these at $5 out-of-pocket—tops. Wholesale them for $12, or in quantities of 12 or more, at $10. The stores then mark them up and sell them for under $20.

We are shooting this in ¾-inch, editing in ¾-inch (in Phoenix) and will duplicate on ½-inch using the ¾-inch master.

Stay tuned and we'll tell you if this sells.

VIDEO POSTCARD

the Mt. Rushmore Story

60 MINUTE COLOR VHS

COPYRIGHT 1985

Small emblem, above , is part of our labeling of the two tapes we are starting with, The Mount Rushmore Story and the second one, The Black Hills of South Dakota.

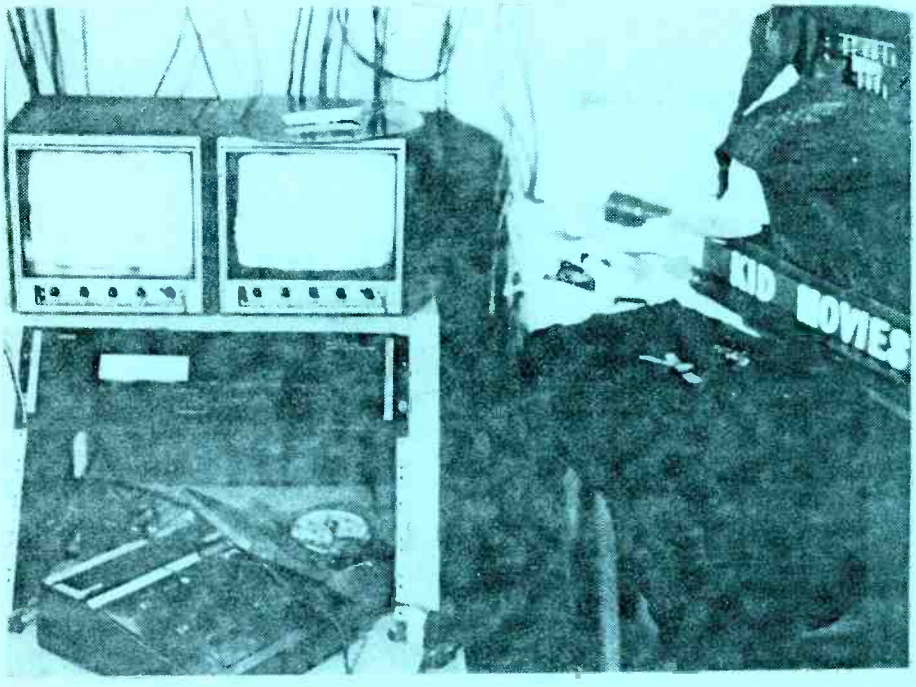
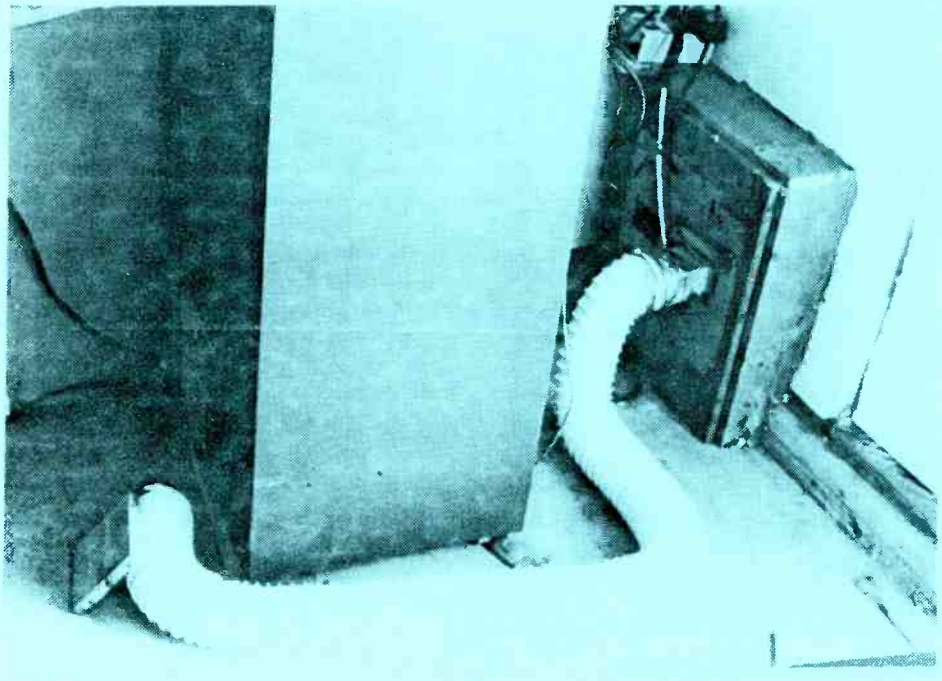


Photo above is at our transmitter shack showing monitors at top, satellite receiver next below, Sony SEG 2000 left and timer at right with cover open.

Transmitter Cooling



One of the problems that come with the summer season is how to keep heat from melting your transmitter and how much it will add to your overhead.

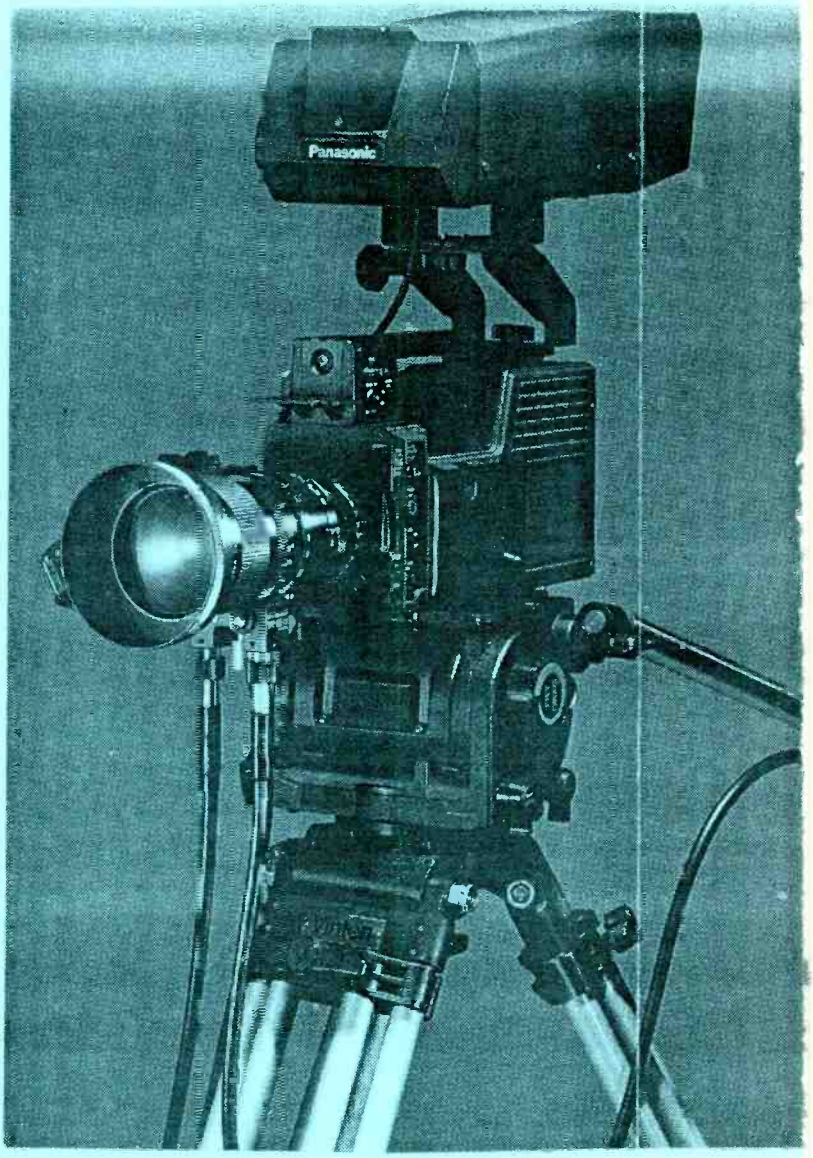
South Dakota has several days a year that get over 100 degrees, but it is not for too long a period. The little tin transmitter shed has styrofoam insulation on the inside so the hot tin shed does not add as much heat—it is mostly a job of getting heat from the transmitter out. Normally, we found that the building was about 18 degrees warmer inside than it was outside. When it got hot outside and the sun became a factor, we added a blower and it was still about the same ratio. We understand you never want the air in your transmitter shack to get over 120 degrees Fahrenheit. Over that and your transmitter won't be cooled enough, so you will have to add air conditioning and cool your building down. Transmitter manufacturers like you to keep them operating in a comfortable like-room temperature.

However, we operated ours well below zero last winter with no ill effects. To keep from having 120 degree air in our transmitter building going through our transmitter to cool it, we reasoned that if the outside air (tops of 105 degrees) fed right into the air intake of the transmitter, it really shouldn't matter too much how hot it got in the shack. Running some clothes dryer duct from one side of the blower (large surplus computer blower, used $8) to near the transmitter air intake, one squirrel cage output blows outdoor air near the transmitter blower's air intake. Air coming in is filtered and the outlet is also screened to keep out bugs, spiders, etc.

To cut down line surges, spikes, etc., you see in the photo, below, on top of the blower box a $65 on-a-lite surge and spike suppressor. In addition, a second RCA ($16) spike suppressor is used on the modulator. An audio transformer is used on the audio input to the modulator to isolate whatever it is that normally likes to take out the audio IC in the summer in these modulators.

The outside-in blower comes on automatically (thermostat from Grainger, about $15) when the temperature in the shack gets to 90 degrees. If we had more than one 100-watt transmitter or had a 1,000-watt transmitter, we would have to air condition the shack for sure. Our transmitter is a tube-type.

Panasonic S-1

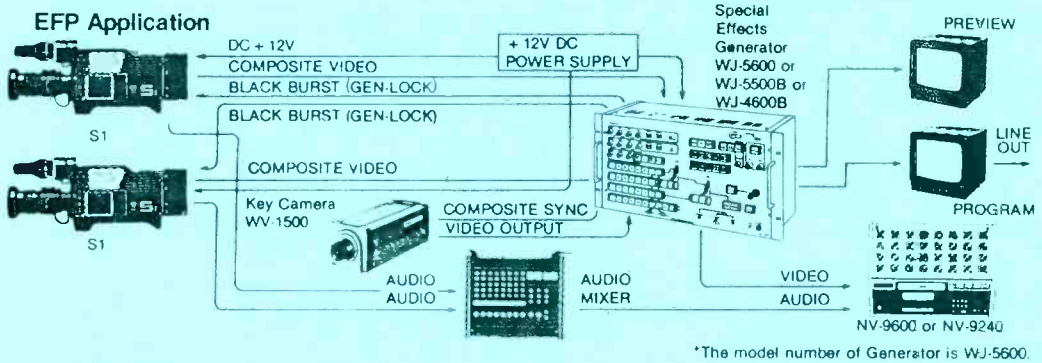


We promised to tell you what was new at the industrial video show. Our piece on the Super Beta and this one on the new Panasonic single-tube S-1 were of primary interest to LPTV operators. Available in several different versions, the single-tube S-1 camera puts out a high resolution picture comparable to three-tube models and has a signal-to-noise ratio of 50dB. In the studio configuration (pictured) it will set you back about 3 G's; ENG (electronic news gathering) version about $2,300 ($2,990 list), (EFP means electronic field production). A complete line of accessories are available for the camera. Advantage for low power use—an extremely good picture for an easy-to-maintain, one-tube camera (three tubes are a lot more trouble) and a good price for a camera of this resolution. Something new, called a two-line enhancer, built in, improves quality of second and third generation tape dubs. Literature on the camera available from Panasonic, One Panasonic Way, Secaucus, New Jersey 07094.

SYSTEM DIAGRAMS

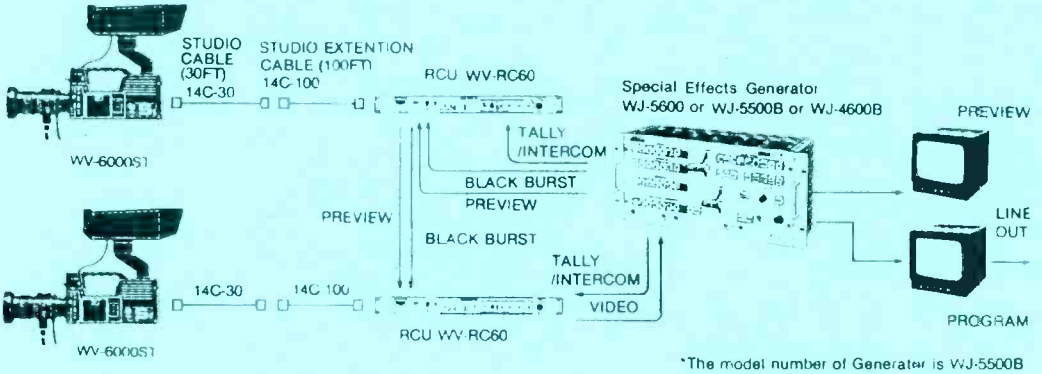
ENG Application

EFP Application



*The model number of Generator is WJ-5600.

STUDIO Application



*The model number of Generator is WJ-5500B

PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET N.W.
WASHINGTON, D.C. 20554

News media information 202/254-7674 Recorded listing of releases and texts 202/632-0002

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-13 Released: May 28, 1985

Notice is hereby given that the television translator and low power television application(s) listed below have been accepted for filing. These applications, which are not mutually exclusive with other LPTV and TV translator applications have been fully reviewed and in the absence of petitions to deny, the applicant(s) appear to be grantable. Petitions to deny the application(s) may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application listed below.

BPTTL-830311JD
Mountain TV Network, Inc.
Beaver, Utah — Channel 39

BPTTV-GO0308UL
Sunshine Television, Inc.
Klamath Falls, Oregon — Channel 13

BPTTL-810226IS
SWC Network, Inc.
Santa Fe, New Mexico — Channel 57

BPTT-821015SV
Arapahoe County T.V. Club
Stanton, Nebraska — Channel 35

BPTTL-830311D6
Mountain TV Network, Inc.
Grangeville, Idaho — Channel 35

BPTTL-830311H8
Mountain TV Network, Inc.
Council, Idaho — Channel 38

BPTTL-830311I4
Mountain TV Network, Inc.
Council, Idaho — Channel 34

BPTVL-810406IU
Joe F. Bryant M.D.
Lebanon, Tennessee — Channel 11

BPTTL-830314A7
Mountain TV Network, Inc.
Weiser, Idaho — Channel 35

BPTTL-830314S5
Mountain TV Network, Inc.
Weiser, Idaho — Channel 41

BPTTL-83031460
Mountain TV Network, Inc.
Scipio, Utah — Channel 53

BPTTL-8303144X
Mountain TV Network, Inc.
Scipio, Utah — Channel 45

BPTTL-830311QS
Mountain TV Network, Inc.
Beaver, Utah — Channel 35

BPTTL-830311IO
Mountian TV Network, Inc.
Council, Idaho — Channel 28

BPTVL-810827IA
Benny Carle Broadcasting, Inc.
Florence, Alabama — Channel 3

BPTTL-830311J2
Mountain TV Network, Inc.
Steel City, Nebraska — Channel 57

BPTTL-830311I7
Mountain TV Network, Inc.
Steel City, Nebraska — Channel 39

BPTTL-830317LG
Mountain TV Network, Inc.
Dillon, Montana — Channel 14

BPTTL-830310TO
Mountain TV Network, Inc.
Pioche, Etc., Nevada — Channel 62

BPTTL-830310TS
Mountain TV Network, Inc.
Pioche, Etc., Nevada — Channel 64

BPTTL-830310IX
Mountain TV Network, Inc.
Pioche, Etc., Nevada — Channel 42

BPTTL-830309ID
Mountain TV Network, Inc.
Tonopah, Etc., Nevada — Channel 28

BPTTL-830309IF
Mountain TV Network, Inc.
Tonopah, Etc., Nevada — Channel 34

BPTTL-830309X3
Mountain TV Network, Inc.
Tonopah, Etc., Nevada — Channel 22

BPTTL-830315QK
Mountain TV Network, Inc.
Winnemucca, Nevada — Channel 35

BPTTL-830315NL
Mountain TV Network, Inc.
Winnemucca, Nevada — Channel 31

BPTTL-830315LE
Mountain TV Network, Inc.
Winnemacca, Nevada — Channel 25

BPTTL-830315MH
Mountain TV Network, Inc.
Winnemucca, Nevada — Channel 23

BPTT-830610IE
Communications Engineering, Inc.
Nevada Test Site, Nevada
(U.S. Energy Research and Development Administration) — Channel 35

BPTTL-830315LQ
Mountain TV Network, Inc.
Winnemucca, Nevada — Channel 41

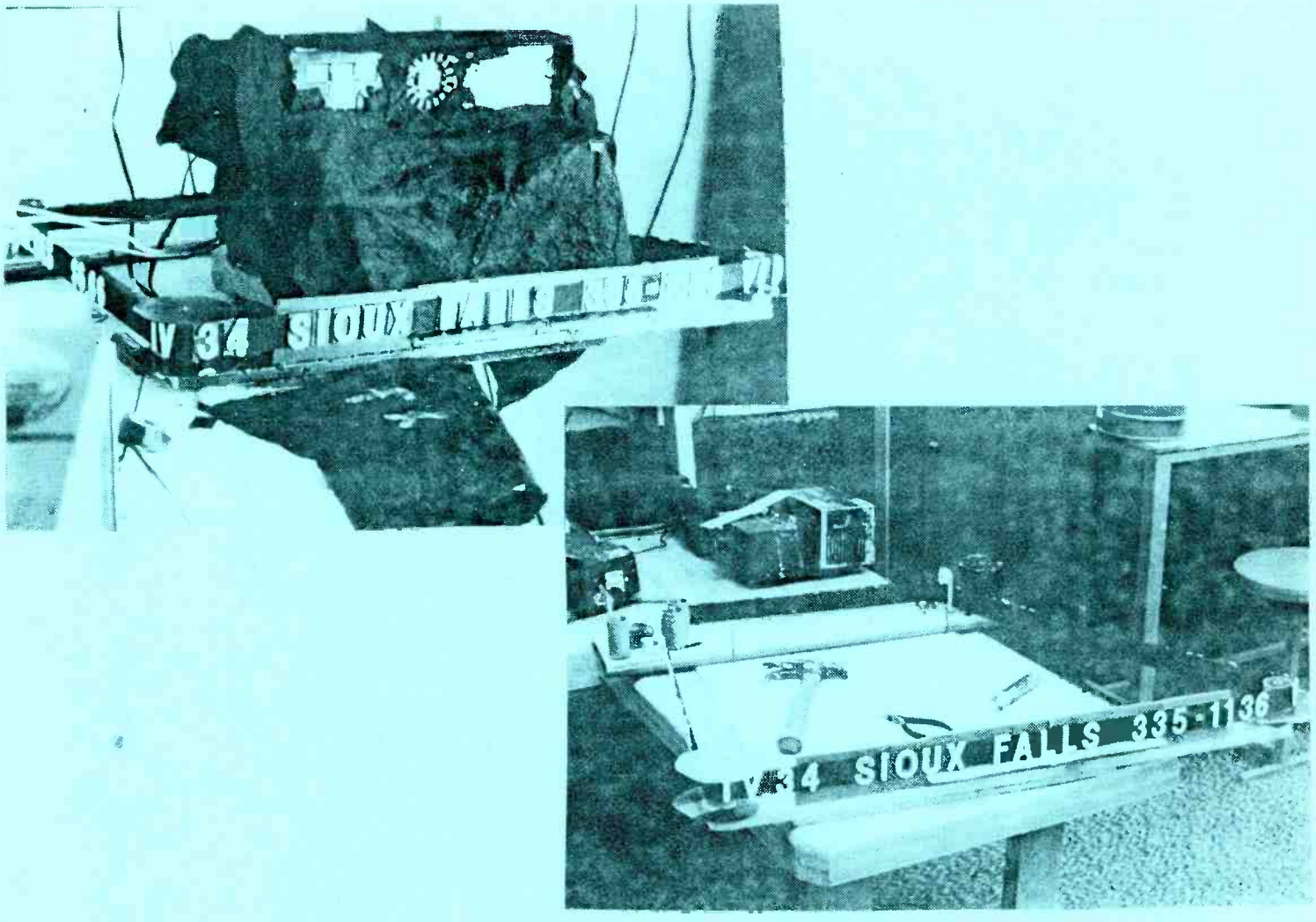
BPTT-830610ID
Communications Engineering, Inc.
Nevada Test Site, Nevada
(U.S. Energy Research and Development Administration) — Channel 41

BPTTL-830412AZ
John F. Craven, III
Smith, Nevada — Channel 60

BPTVL-830908JC
Brainerd Daily Dispatch
Brainerd, Minnesota — Channel 2

BPTTL-830802JD
Kentel
Rawlins, Wyoming — Channel 21

BMPTT-830228IN
State of Alaska
Trapper Creek, Alaska — Channel 16

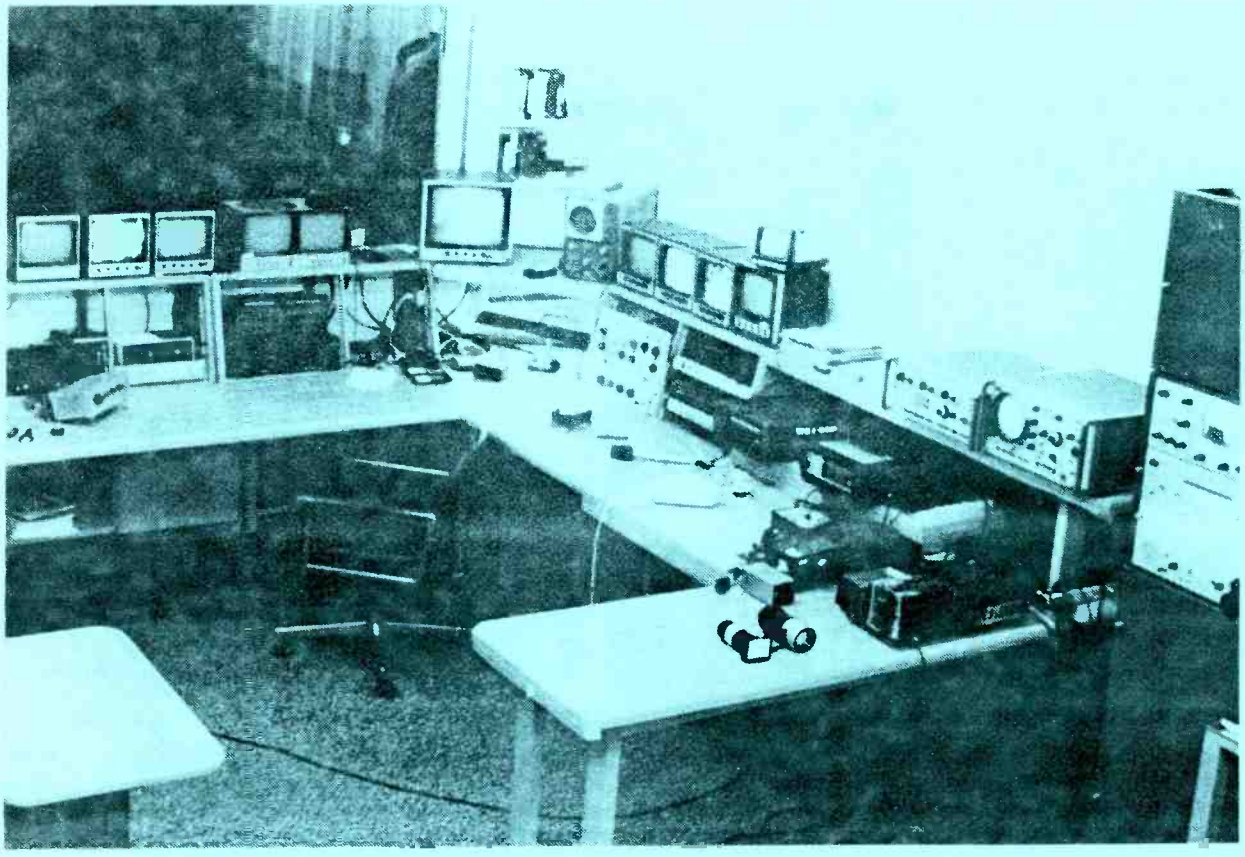


Low Cost Velcro Character Generator

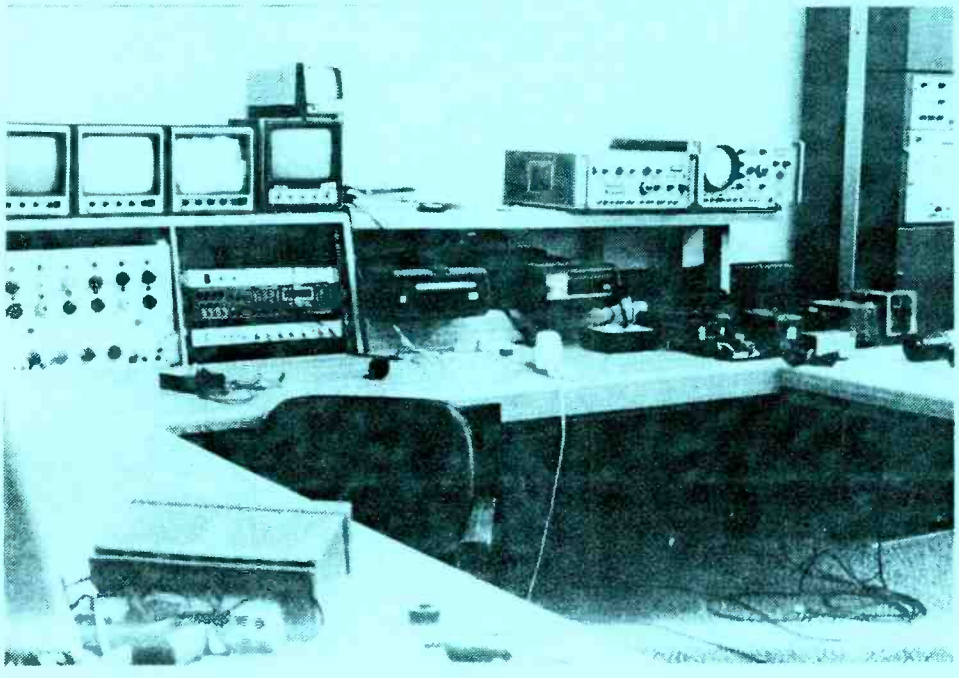
Used With B & W Key Camera

In past articles, we have shown you how to set up a low cost B&W camera with a Sony special effects generator (model SEG 2000) to put your station break or call letters on automatically (camera about $200, SEG 2000 about $200). We have also shown you how to use the Heathkit weather computer to add temperature, time, date, barometric pressure, wind direction and speed as well as chill factor.

Now we have built (works great) a low cost character generator using Velcro and white plastic letters. We buy the Velcro belts of loops (about 10 feet long holds 85 characters) at a surplus material place for about $8 each (we use four belts with four different messages so we do not have to change letters). The letters change easily if you just cement on (contact cement) ¼-inch squares. Originally we used black hook squares the same size as the letters, but you need a crow bar to get them off. In our photo here you see lots of black felt we use for a black background. The B&W key camera sees the white letters, the lit numerical temperature, etc., and superimposes that over the top of the satellite picture in any one of seven colors (we change colors every now and again by changing the dial). The timer (from Grainger) comes on for 20 seconds every 15 minutes. We picture our station identification here on the belt. We have since put the station break part up on the stationary felt, and that allows us the full 85 characters for commercials (we advertise our tape store). We could make it so it starts at the same point each time, but it seems to work out well just starting anywhere since it cycles through almost twice in the 20 seconds. The timer turns on a light, turns on the video (so it superimposes) through the Sony SEG 2000 and turns on the little motor that moves the tape. The plastic letters are white and you could use them to stick on a board of Velcro hooks (black) and make full-page character generator also. You could also use a Velcro drum and rotating it would give you rising words like credits in a movie. Just aim your B&W key camera at it and superimpose (key) over your regular picture. You can dial up any color background (if you do not want to superimpose) and have a full color page with white letters. This is another option.



Start of a Studio Control Room



We have started to build our studio control room in Sioux Falls and pass along information on where we are and how we built it. (With the large number of stations we are scheduled to be responsible for putting on by July, I may not be back to finish it for a month or two.)

After having visited dozens of stations around the country and seeing not only how to but also how not to put an LPTV station together, we are building ours for ease of operation. We plan, eventually, to program three channels (hopefully) from this console.

First of all, many LPTV installations have monitors and equipment as well as recorders mounted up and down racks, some with VCR's you have to load on your knees, etc., etc. Everything here is above the counter and everything is switchable from one chair position. Monitors are arranged in the same order as the equipment (four more monitors still to be installed). We will have a monitor on the output of everything (also every stage or step, such as after processors, just before microwave and off-the-air). If something is not right it will be immediately apparent where the trouble starts. We also have switchable audio monitoring of every output, stage and step.

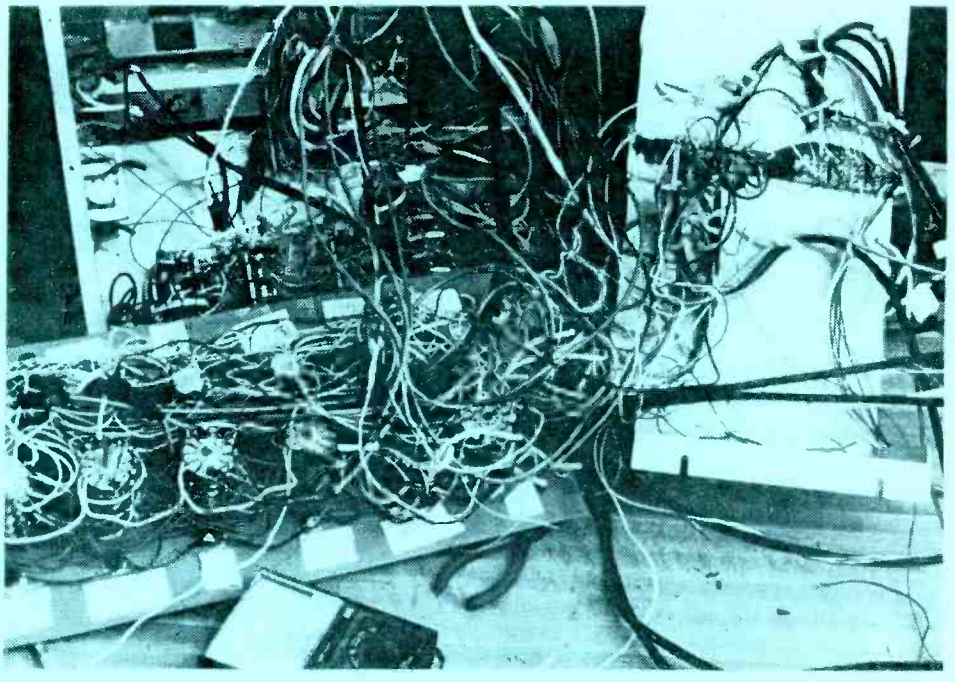
At the stage pictured here, we still have considerable amounts of VCR's and equipment to be installed. Basic foundations for this setup are three desks formerly used in high schools for their audio system and the three slant racks on top of the desks (bought used, surplus for $30 each). Other top row of wood shelving was added. The far right counter projection with several projectors will be used for an optical multi-plexer (home-made) that will combine slides, 16MM, 8MM, etc. We used K-Mart butcher block formica-like counter tops and will do a little drawing here to show how we got the material to finish it on all edges the same.

In a later article we will explain what each item is, what it does, why you need it and how much it costs.

Our microwave, not yet installed nor operational, is at the extreme right. The studio itself (main) will be on the other side of the glass window. We will also do some production on this side of the window.

The device with all the knobs in the center is the front view of our routing switcher (see "Spaghetti" article and photo).

Spaghetti



(When you switch video and audio at the same time it is called an audio-follows-video routing switcher. Our version switches video and two audio channels (stereo). Everything (12 things) can be connected to everything else in an instant.)

Pictured above is the underside of our routing switcher. We have been unable to find a low cost (so far, still looking) routing switcher that can connect everything to everything else instantly. You can use patch cords (that's what Pete Warren uses at Alamogordo, N.M.), and that's pretty foolproof but slow and cumbersome.

We want to be able to hook together everything and route any of it, microwave it out to transmit. At the same time, we want to be able to connect anything to anything else while any combo is being transmitted. For example, you are transmitting from satellite 1 and you want to run in through your special effects generator key, set up to superimpose (alphanumeric) something about a program coming up tonight at 6 p.m. You just switch that in.

At the same time you want to record a program coming in on satellite 2 and you want to route it through an enhancer to add detail to make up for running a tape later and the detail you might lose. You connect it to enhancer 1 and tape deck 3. At the same time someone has sent you a commercial on ¾-inch and you want to dub it off to ½-inch, so you connect the ¾-inch through enhancer 2 and to tape deck 2.

We designed and darn near finished it a year ago and took it to Sioux Falls to finish a couple weeks ago when ready to finish it and put it into use when we discovered someone had thrown away the wiring diagram (the only one in existance). The unique thing was that we had designed and wired in a set of relays that can be controlled by a computer with no wires between using the Sears household wireless appliance control modules. We spent a week recently trying to figure out the wiring and will finish it soon. We have done preliminary tests on two tape decks and it works fine. We can show you how to build a simplified version and will probably do so in a future issue. A lot of people call and ask how much they would have to spend to switch between two tape decks or a tape deck and a satellite receiver. The answer is $10,000 up, and you can probably buy it all at Radio Shack

Winners in the May 22, 1985 lottery are:

Capitol Telecasters, ch. 63, Mesa, AZ; International Cultural Network, ch. 38, Hauppauge, NY; LPTV Services, ch. 45, Park City, UT; Worldwide Enterprises, ch. 42, Fort Wayne, IN; Guadalup Carmona Cantu, ch. 47, Farmington, NM; Jo Ann's Balloon Boutique, ch. 11, Grand Rapids, MI; American Television Network, ch. 4, Evansville, IN; Mountain TV Network, ch. 43, Malta, MT; James Connell, ch. 30, Cortez, CO; Evarista Romero, ch. 7, Falfurrias, TX; Mountain TV Network, ch. 67, Battleview, ND; Owen Broadcasting, ch. 20, Elgin, ND; Nightwood, ch. 31, Elgin, ND; Second Local Power Television, ch. 51, Olean, NY; Tel Radio Communications, ch. 20, Brownwood, TX; KOAT Television, ch. 12, Hobbs, NM; Meyer Broadcasting, ch. 65, Crosby, ND; Minerva Rodriguez Frias, ch. 7, Eagle Pass, TX; Brooks Broadcasting, ch. 7, Manhattan, KS; Owen Broadcasting, ch. 13, Uvalde, TX; Lidia Rodriguez, ch. 4, Manteo, NC; BTV, ch. 9, Williamsport, PA; Trinity Broadcasting, ch. 28, Key West, FL; Mountain TV Network, ch. 26, Kingman, AZ; Community Television, ch. 63, New Orleans, LA; Mountain TV Network, ch. 32, Poplar, MT; Arapahoe County TV Club, ch. 44, Virginia City, MT; Oralia Lozoya, ch. 11, Altus, OK; Black Media, ch. 60, Hopkinsville, KY; M&M Communications, ch. 61, Nashville, TN; Heidi Terrill, ch. 5, Honolulu, HI; Rosa Moreno Maroquin, ch. 21, Portsmouth, OH; Arapahoe County TV Club, ch. 24, Pendroy, MT; Mountain TV Network, ch. 30, Poplar, CO; Mountain TV Network, ch. 22, Poplar, MT; Mountain TV Network, chs. 24 & 40, Lewistown, MT; Mountain TV Network, ch. 61, Battleview, ND; Minerva Rodriguez Frias, ch. 11, Bend, OR; Oralia Lozoya, ch. 10, Boise, ID; Southwest Radio Enterprises, ch. 50, Vero Beach, FL; Mountain TV Network, ch. 45, Denison, IA.

The Latest

70% of transponders on Canadian ANIK satellites are currently unused and 40% of U.S. birds are idle, yet new launchings continue according to a quote in the January/February issue of **Channels** magazine. The item states there will be 1,000 transponders (channels) on satellites by decade's end.

Bill Daniels (the big name in cable brokerage) says within 10 years, 25 entities will own 80% to 90% of the cable systems in the country (they already own 80% of the subscriber base—**Editor's note**). Unfortunately, these are, for the most part, the same entities that control the majority of coverage of owned full service radio and TV stations. The commission removed the cable road blocks when this group took over cable.

The current commission has been pushing for deregulation for these entities but does everything possible to inhibit or delay competition for them. Despite new technologies there has not been a diversity of media control.

Commissioner Dawson, in a recent quote in **Broadcasting** magazine regarding another technology, is reported to have said, 'Not another service we do not need like low power television'.

Stereo television is moving up fast with 45% of the nation now reported to be in range of at least one stereo TV station.

Eight or nine new full service stereo systems are reported to be coming on monthly with the new stereo systems.

Another 'Discovery' network, this one a science-type, 'non-fiction' channel free for cable systems, launches June 17. Whether this channel will be available to LPTV if not carried by the local cable is not known yet. Stay tuned.

$510 million is the new high figure for sale of a full service TV station, this one, KTLA, an independent in Los Angeles, sold to the Tribune Company for cash.

Purchased by the sellers for $245 million in 1982, it went up in value $285,000 a day between their original purchase and recent sale to the Tribune. This figure is 12 times cash flow; up until recently, 10 times cash flow was normally the highest paid.

This non-network affiliate KTLA is an independent VHF.

The Chicago-based Tribune Company already own stations in Chicago, New York, Denver, Atlanta and New Orleans and are a good bet to set up their own full time satellite programming network. Now that they have a Los Angeles outlet, this new network, if initiated, could be available to LPTV. The Tribune already produces several programs that are available free (barter) to LPTV off the satellite.

Lo-Power Community TV

July 1985

What's Happening

The U.S. Court of Appeals has overturned the 'must-carry' rules for cable systems. The FCC has a chance to redo the rule to meet constitutional limitations and, in addition, the decision is being appealed.

Some cable systems have limited channel capacity, and the FCC must-carry rules made them drop satellite services to carry local stations, translators and other stations that had significant viewers in the area. Some of these duplicated network coverage already on the cable.

The rule was used by some LPTV stations to get mandatory cable coverage by acting as a translator 51% or more of the time for an outside, regular full-service channel.

Regular LPTV operations were not must-carry's so nothing has been lost for standard low powers. Clarification of the legal appeal and FCC changes could take a year or two.

The court rules that the FCC's present must-carry rules are 'insufficiently tailored' to justify their interference with the cable systems' first amendment rights and are, therefore, unconstitutional, leaving the way open for the FCC to retailor the rules.

The FCC is considering allowing TV stations (including low power) on channels 50 through 59 to offer almost any type of service, including land-mobile and portable communications.

The FCC proposal to give many UHF channels to two-way radio means the death of many LPTV applications within 100 miles of the top 100 markets.

An article in **TV Technology** says, in part, if an LPTV application appears to conflict with land-mobile operations, the FCC said it will withhold the grant. If the LPTV applicant can eliminate the predicted interference by a minor amendment, a CP would be issued, the commission said. However, if the application cannot be amended and the FCC continues to find that the conflict with land-mobile continues, the LPTV application will be dismissed, the commission said.'

Regarding UHF band sharing—the FCC will submit a final report on UHF band sharing by March 1986. For more information, contact Rod Small at the FCC—202/653-8169.

Satellite & Video Movies Up-- STV Down

An advertising agency, Young & Rubicam, is reportedly keeping an eye on VCR growth, stating that when it gets to 30% saturation it will have arrived at a 'critical mass' needed to be considered a 'mass media'. This saturation is expected in 1986.

The rapid drop in VCR prices expected when Taiwan and Korea entered the market has not yet appeared with VCR prices holding stable. (Super Beta is now out in consumer, industrial versions in September, with VHS not yet announcing anything of similar quality to compete.)

Meanwhile, a VCR letter put out by Paul Kagan now projects $2.26 billion worldwide for Hollywood movies and $2.14 billion for video in 1985. Kagan says that Pay TV, which Hollywood had expected to be a gravy train, accounts for only 700 million, or 13% of the total pie.

Recent home satellite sales figures indicate that over 30% of satellite installations are going into backyards of city people that have (or had) cable. Cable subscribers who have been paying up to $40 for service, including a movie channel or two, are finding that satellite reception gives them the same channels plus a whole lot more with no monthly cost once the equipment is paid for.

The cable industry is counting on the satellite programmers eventually scrambling. However, there are so many channels on the birds (including so many different movie services) that if a few scramble it really won't matter. (Congress recently passed a law making home satellite reception legal.) Two more new satellites are set to go up in September with 24 transponders of video on each. 180 new transponders expected in the next 18 months.

Cable industry spokesmen say 'pay per view' is going to save them from VCR and satellite competition. This means viewers will only have to pay for movies they watch. Expected to be around $4 per movie, this is still far higher than the dollar or two you can rent a tape for, and with a tape you watch what you want when you want. You can stop it while you go to the bathroom or refrigerator (or answer the phone) and individual family members can watch it when they want.

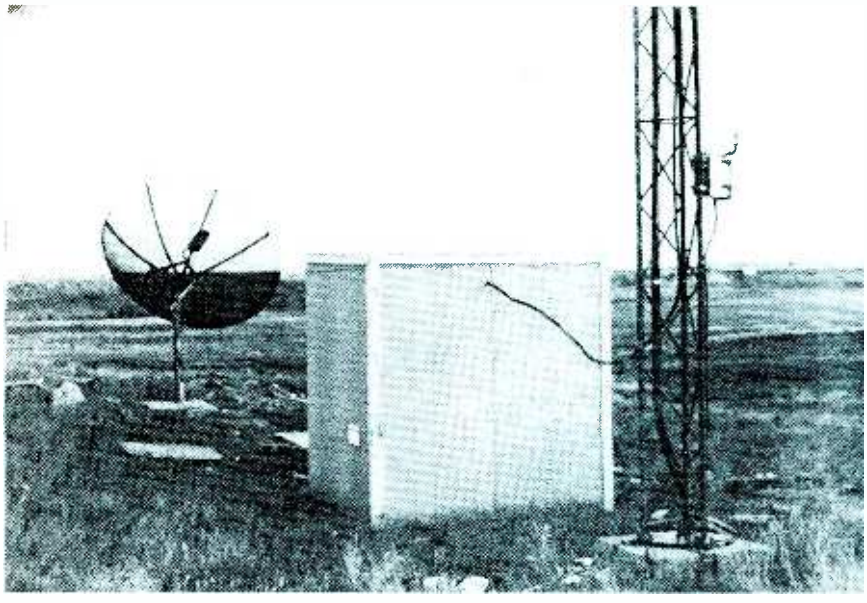
Pay per view is dependent on most cable systems spending considerable money for equipment to tabulate and report on viewing to allow individual billing, etc., for movies watched. MDS movie operators report they are rapidly losing subscribers to satellite installations.

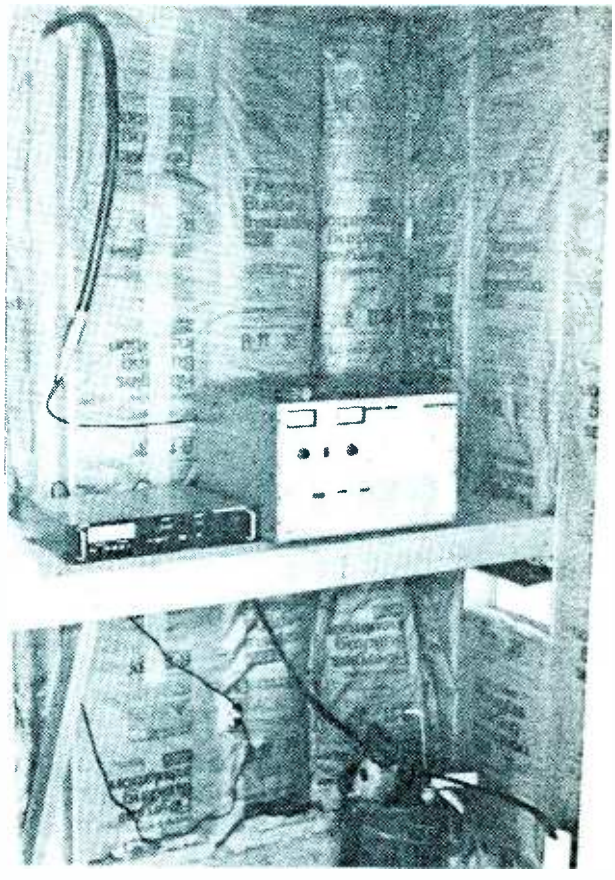
Our advice is, LPTV operators considering STV (subscription operation) may want to rethink their business plan.

Next issue we will do a piece on SCA (subcarrier audio) and how it can pay all your LPTV bills while you get your main carrier income in gear.

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor/Publisher: Harlan L. Jacobsen.

Send address changes to 7432 East Diamond, Scottsdale, AZ 85257; telephone (602) 945-6746.





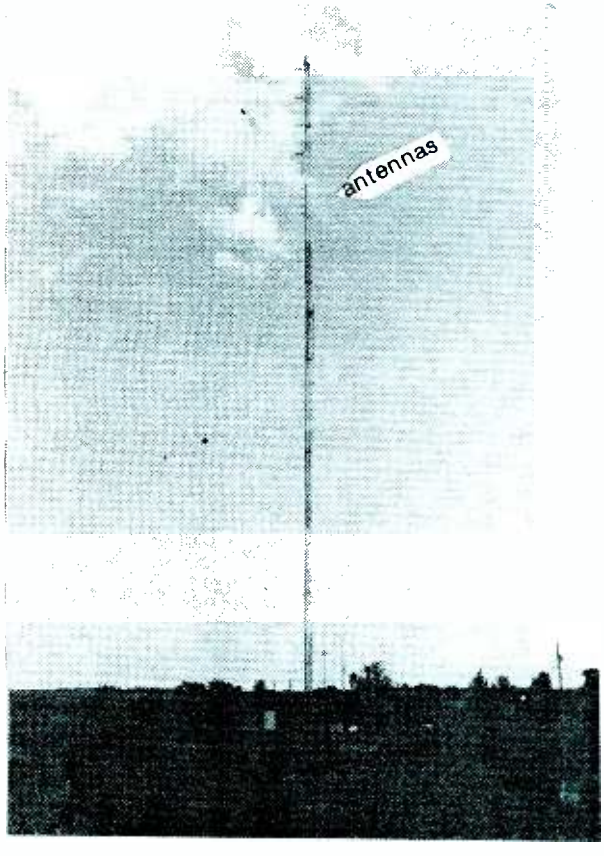
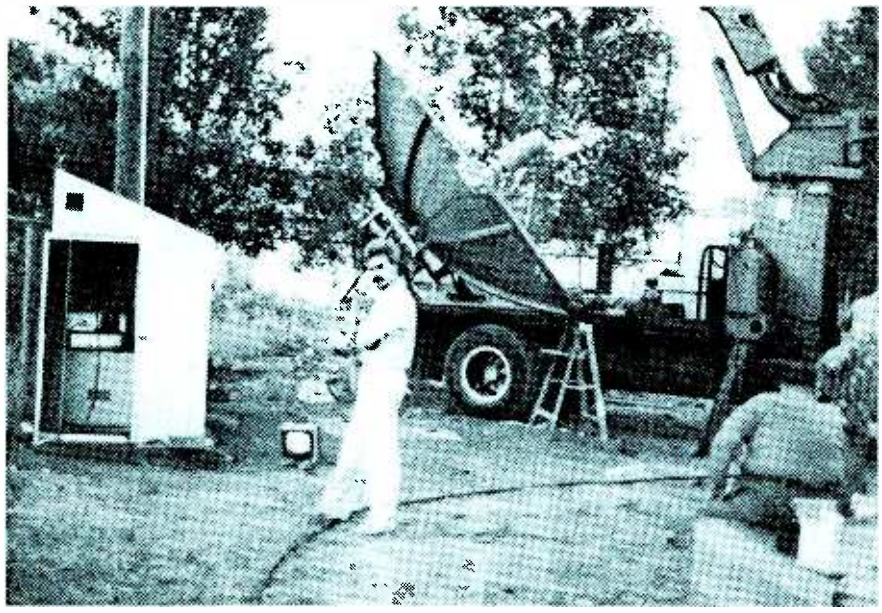


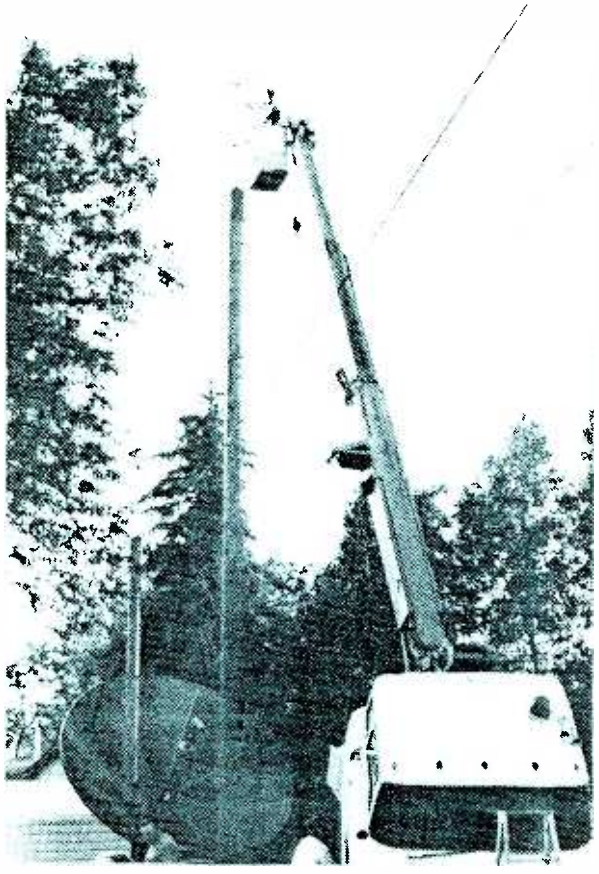
Photo top left shows the 8 x 8 x 8 building constructed to house the 10-watt channel 11 transmitter and Drake commercial satellite receiver shown in photo above right. Ten foot Winegard satellite dish and 85 degree LNA delivers Odyssey programming 24 hours a day to the Cheyenne, Wyoming community.

Four 2-element channel 11 Scala antennas on the tower shown at left deliver a signal east to the community. Tower is a standby FM used only when higher tower out of town four miles has difficulties. Space is leased from the FM station owners. LPTV station channel 11 shown here was installed for Russell Communications.

Building cost approximately $250 for materials, $150 for foundation slab, and two men for a day and a half.

Vents on both sides of building close for winter operation. Side braces for the dish had not been installed when photo was taken.





James Russell of Russell Communications is shown above during the construction of channel 5 in Flagstaff, Arizona.

Crane in photo at left had truck engine trouble and antenna installer had to stay up in cherry picker for nearly four hours until they got it running again.

Metal pre-fab transmitter building houses an International crystal commercial receiver and TTC 10-watt transmitter.

Flagstaff is in the mountains, and dryer vents on both sides of building provide adequate air circulation for summer operation. ten-foot Winegard dish is shown in the photos.

Inexpensive Routing Switcher

In past issues we have shown diagrams of how you need to connect your studio equipment together and a simple switching arrangement that you could build.

Now Radio Shack has come out with what looks like just the ticket for a simple switching system, and it is lower cost than building our setup.

First of all, you need to understand the terminology. Routing switchers route TV (and in some cases, audio) from one thing to another such as one VCR to another VCR, or a VCR to transmitter, satellite to transmitter, etc., etc., and change it at a push or twist of a button—instead of having to use cumbersome patch cords, etc. If the routing switcher also switches audio it is called audio-follows-video-switching. In other words, one switch or knob switches the audio at the same time as you switch the video.

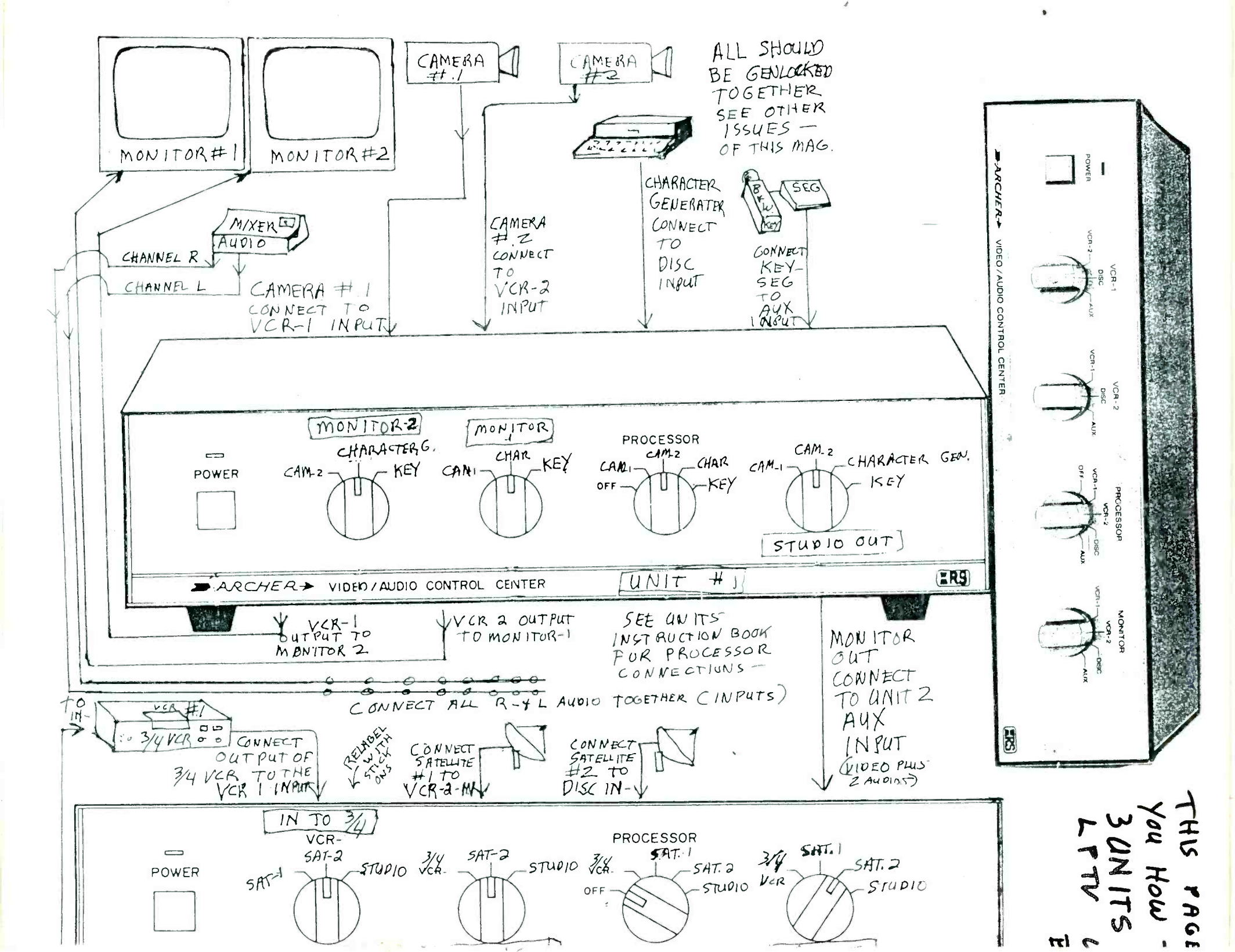
So here you are broadcasting a satellite program and you want to switch in a commercial from either tape recorder one, two or three. With this Radio Shack device, a twist of a rotary knob will select and switch it along with two tracks of audio. If you want it to go through a processor on the way, turn another knob.

Selling for $70 each, these are so new your Radio Shack dealer may not even have one, or as in my case, they had one and didn't even know it (or what it was). Ask for stock #15-1263 ($69.95).

We have figured out how to hook three of these units together for LPTV use (or you can use two or one, etc.). First of all, it has four knobs. One for VCR's 1 and 2. One knob labeled processor and one labeled monitor. It has inputs for VCR's 1 and 2, and disc and auxilliary (as well as connections for a loop-thru arrangement of a processor, or two, outputs from the two VCR's and an output for a monitor). The trick here is to relabel several things.

For a simple switcher between a character generator key setup and two color cameras (genlocked together preferably—or an SEG or two could be connected to these terminals), label VCR-1 input camera one input; VCR-2 input camera two input; label disc input character generator input; and aux. either slide camera or SEG keyed overlay input. Connect all those things to the back and use only the one monitor switch, other than the processor knob, if you connect one here, use it; if you use a processor only later on down the line, just set the processor switch here to off. Switch between camera 1, camera 2, character generator or keyed out setup. The keyed output could mean you have it set up so the character generator and whichever camera are superimposed together (overlayed) in 'key' position. The monitor output goes to your VCR if you are out in the field taping, etc. If you are using this for a simple studio or field switcher, you will need to tie all the audios together and input one audio from an audio mixer. That way no matter which video you switch to, all of your audio comes out of one audio studio panel.

Now comes the second use, tying in the studio camera output from the first Radio Shack unit mentioned above. The output of the video monitor jacks on unit 1 go to the auxiliary input on unit 2. When you rotate the switch on unit 1 between camera 1, 2, character generator or key, whichever you select appears along with audio on the auxiliary input of unit 2. Since we are using what was originally labeled the 'monitor' knob, whatever we select on monitor knob of unit 2 is our output. On unit 2 we have ¾-inch tape input connected to VCR 1. Satellite input on VCR 2, satellite 2 input on disc in and, of course, are connections to unit 1 is connected auxiliary. Switch monitor knob (relabeled OUT) to VCR 1, you get the ¾ tape out. Switch to VCR 2 (relabeled Sat. 1) and you get sat. 2 out. Rotate the switch to disc and you get satellite 2 out. Set the switch to auxiliary position relabeled 'studio' and you get the output of unit 1. You can again use a processor or, if not, just set the processor knob to off. If you want to record on ¾-inch tape 1 from the studio, set the VCR 1 knob (still labeled VCR 1) to aux. At the same time, you want satellite 1 to be going to the transmitter; set the 'out' knob (formerly marked monitor) to sat. 1 (formerly labeled VCR 2), or you could tape sat. 2 instead of studio. Now comes unit 3 with two ½-inch tape decks. Change all labels of VCR 1 to VCR 2 and change VCR 2 markings to VCR 3. Use the monitor output of unit 2 as the auxiliary input on unit 3. Left over now as unit 3 is disc input. Take the ouput of sat. 1 of unit 2 and connect it to unit 3 disc inputs. (This may all sound terribly complicated, but it will all be simple once you get used to it—see our diagram page.) You can now connect up VCR 1, VCR 2, sat. 1 or ¾-inch or sat. 2 or studio all to each (or both) of the ½-inch recorders at the same time no matter what you are using for 'out' on the unit 3 for transmit. You can dial up also, play either ½-inch decks for out to transmitter. The only thing you can't do is connect either ½-inch recorder outputs to ¾-inch to them on it. You probably wouldn't want to do that anyway. For $210 here, you get a switching setup that is ideal for a small LPTV.


MONITOR #1
MONITOR #2
CAMERA #1
CAMERA #2
ALL SHOULD BE GENLOCKED TOGETHER SEE OTHER ISSUES — OF THIS MAG.
CHARACTER GENERATER CONNECT TO DISC INPUT
B&W
SEG
KEY
CONNECT KEY-SEG TO AUX INPUT
MIXER
AUDIO
CHANNEL R
CHANNEL L
CAMERA #1 CONNECT TO VCR-1 INPUT
CAMERA #2 CONNECT TO VCR-2 INPUT
MONITOR-2
CHARACTER G.
CAM-2
KEY
MONITOR-1
CAM-1
CHAR
KEY
PROCESSOR
CAM-1
CAM-2
CHAR
OFF
KEY
CAM-2
CAM-1
CHARACTER GEN.
KEY
STUDIO OUT
POWER
ARCHER VIDEO/AUDIO CONTROL CENTER
UNIT #1
RS
VCR-1 OUTPUT TO MONITOR 2
VCR 2 OUTPUT TO MONITOR-1
SEE UNITS INSTRUCTION BOOK FOR PROCESSOR CONNECTIONS —
MONITOR OUT CONNECT TO UNIT 2 AUX INPUT (VIDEO PLUS 2 AUDIOS)
CONNECT ALL R-&-L AUDIO TOGETHER (INPUTS)
TO IN-
VCR #1
3/4 VCR
CONNECT OUTPUT OF 3/4 VCR TO THE VCR 1 INPUT
RELABEL WITH STICK ONS
CONNECT SATELLITE #1 TO VCR-2-IN
CONNECT SATELLITE #2 TO DISC IN-
IN TO 3/4
VCR-
SAT-2
SAT-1
STUDIO
3/4 VCR-
SAT-2
STUDIO
PROCESSOR
3/4 VCR-
SAT-1
SAT. 2
OFF
STUDIO
3/4 VCR
SAT-1
SAT. 2
STUDIO
POWER
VCR-1
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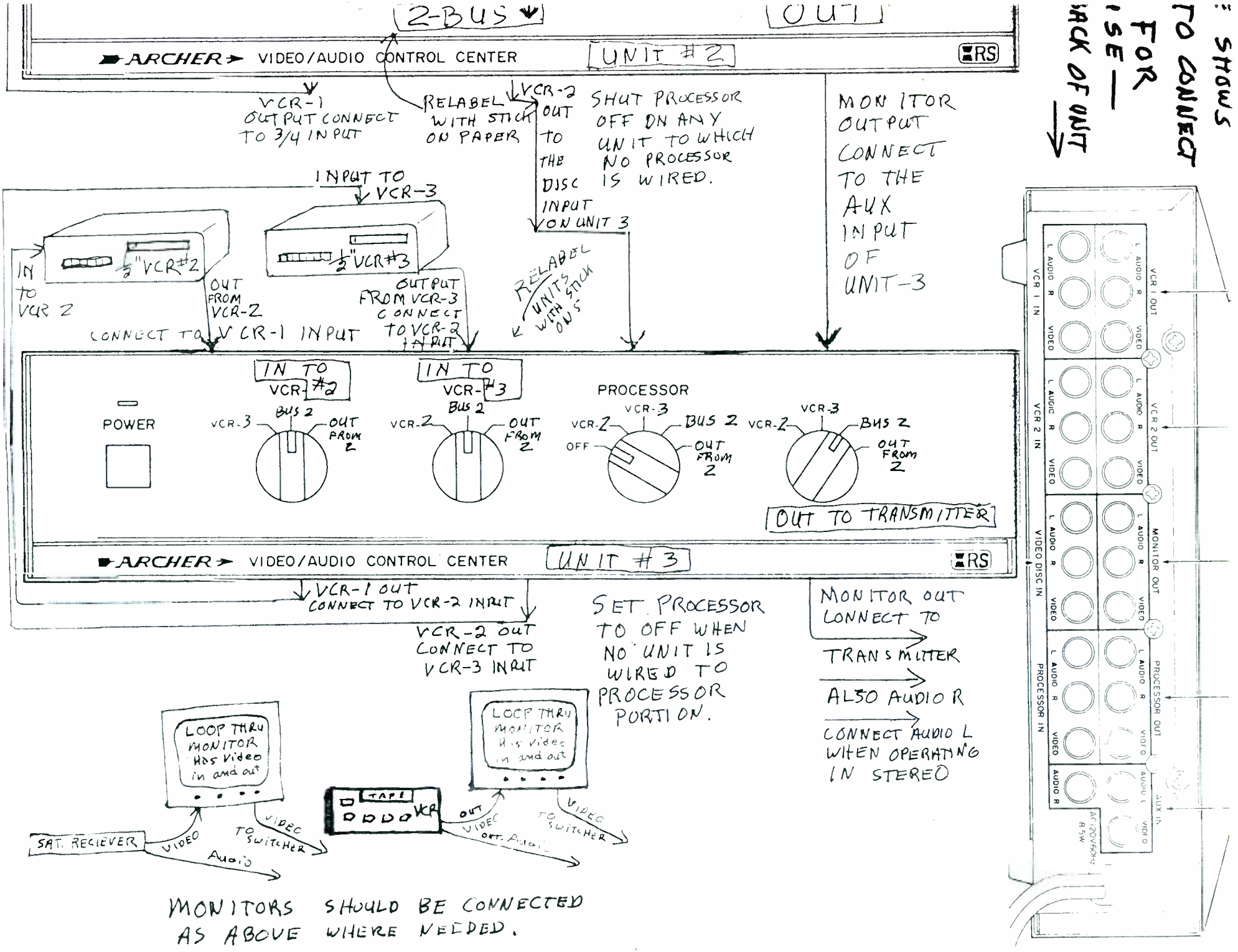


SHOWS TO CONNECT FOR USE — BACK OF UNIT

Lottery Winners

Winners in the June 28, 1985 lotteries are:

Mountain Broadcasting, ch. 51, Tallahassee, FL; **Lowell Dallin**, ch. 15, Las Vegas, NV; **Sur Este Broadcasting**, ch. 41, Richmond, VA; **He's The One Broadcasting**, ch. 67, Green River, WY; **American Christian Television**, ch. 19., Santa Fe, NM; **Trans America Television**, ch. 52, Birmingham, AL; **Community Service Television**, ch. 62, Tucson, AZ; **Domsat**, ch. 46, Naples, FL; **Bogner Antenna**, ch. 58, San Antonio, TX; **Southwest Radio**, ch. 14, Homosassa Springs, FL; **Tel Radio Communications**, ch. 13, Nashua, NH; **Antonio Rivera Pagan**, ch. 19, Kenai, AK; **Vision Unlimited**, ch. 56, Dayton, OH; **Capitol Telecasters**, ch. 53, Peoria, IL; **Evangelina Garcia Garza**, ch. 10, New Haven, CT; **Jose Armando Tamez**, ch. 48, Ogallala, NE; **BTV**, ch. 24, Williamsport, PA; **Blacks Desiring Media**, ch. 36, Scobey, MT; **Jose Armando Tamez**, ch. 3, Augusta, ME; **Lidia Rodriguez**, ch. 4, Tomahawk, WI; **Lidia Rodriguez**, ch. 16, Fairbanks, AK; **Ruidoso Vide**, ch. 30, Ruidoso, NM; **Summa Communications**, ch. 6, Selmer, TN; **M & M Communications**, ch. 61, Little Rock, AR; **Owen Broadcasting**, ch. 3, Warroad, MN; **Hermelinda Rodriguez**, ch. 5, Roseau, MN; **Channel 15**, ch. 15, San Luis Obispo, CA; **Mountain TV Network**, ch. 31, Thompson Falls, MT; **Evarista Romero**, ch. 11, Kerrville, TX; **Koyukuk Village Council**, ch. 9, Koyukuk, AK; **Sandoval Burke**, ch. 12, Alamosa, CO; **Antonio Rivera Pagan**, ch. 23, Albany, GA; **Classic Video**, ch. 50, Aberdeen, SD.

More on the Radio Shack Switcher

One of the major problems and concerns of an LPTV operator (particularly an absentee operator) is equipment going down. Often it is hard to find anyone locally who can make it work again; so you pull the equipment out and send it in to someone out of town. Then you wait. Often, the repair cost is $100 or more if they just open the box. Meanwhile, your operation is handicapped while you wait for it to get back, which can sometimes be weeks.

With the $70 Radio Shack piece of equipment here, when it goes down you just throw it in the garbage and go downtown and get another one. You can probably trade it out for advertising. This way you do not have to be out of service but a short time. We try to set up our installations for our clients so maintenance is not a major problem. With the reliability of transistorized equipment, maintenance need not be a problem when you can afford to throw it away if it ever gives you trouble. Besides, solid state equipment rarely gives trouble, but under heavy commercial use it may eventually.

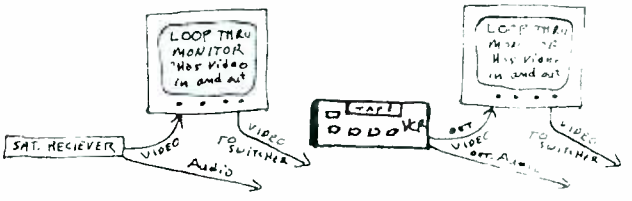
This is not a consumer report article because we haven't had this Radio Shack equipment in everyday use yet. Rather than delay doing a piece on it, we put it in this issue because I know many of you can use this equipment right away, and you may want to run down to Radio Shack and get one yet today.

You should know the limitation. This is not vertical interval switching on these units. This means it is what is known as a 'jump cut'. The picture may roll or some such (sometimes) when you switch from one source to the other. My experimentation indicates this is no big deal, but you should know there are some vertical interval switches (better) for reasonable money (under $200) but, of course, they do not enable you to connect one thing to another like this setup does. Also, the low cost vertical interval switches do not have audio-follow-video, and you have to have separate equipment for audio and punch both at the same time, etc., etc.

This arrangement here will be the handiest thing since 7-UP. Keep in mind you will need about 70 or 80 RCA to RCA cords, etc. RCA fittings are notorious for not always making good contact.

You are all set here to go stereo, but if you are mono, you could save a lot of cords by just connecting all the A's together and do the B channel later when you do go full stereo.

One of the problems on our connection, just as shown here, is easy access to sound inputs to dub in new audio on VCR's. We will do a diagram on that next issue and/or you figure out a simple way in the meantime.



We would suggest a B & W monitor loop-thru at each satellite output before it gets to those switchers, as well as a loop-thru monitor for each output of VCR's.

Two monitors on the first unit, minimum; preferably four.

Three monitors for second unit; four would be better.

Three monitors for unit three; four would be better.

Total of eight monitors helpful; 12 better.

If you cannot find reasonably priced monitors ($150 or less), use the small B & W regular TV sets and use a modulator with each; total cost of set and modulator around $70 each. These monitors make it easier for a switcher to know what he is switching to.

At least one good color monitor is essential. Regular color sets that are also video monitors can be bought locally for under $250 (try 13-inch color set by TMK, model 793C, from K-Mart).

Databurst is Here

Every seminar we have ever run on low power television, we have repeatedly emphasized that you, as an LPTV station operator, had many potential sources of income for LPTV operations other than your ad income (or subscription TV) from your main entertainment channel. In fact, we have repeatedly brought out your SCA (subcarrier audio channels, up to 20) and your VBI (vertical blanking interval, 25 lines below the picture, unseen) had potential for more income than your main entertainment channel. We have done and will do articles periodically on how you can use these to make a buck as we get to doing some of this ourselves in our stations and for our clients, and we will pass our experience and 'how to' along to you.

You should know that we share LPTV information and ideas with the people of this industry free because, whether you know it or not, the income from this publication does not cover the cost of printing and getting it delivered to you. Also, whether you realize it or not, there are really only about 150 to 200 serious LPTV people in this business (despite the large number of names on file), and a lot of these serious people do not subscribe to this publication. Try breaking even on a publication with that little subscriber potential.

Meanwhile, back to the additional source of income we want to talk about today. A new word for you called 'Databurst'. We have explained the potential for electronic publishing several times before, in fact, we said in a few years (maybe two) our publication here will probably no longer be in printed form—it will be electronic. We will send it to you via satellite in what we will call this Databurst system. Twenty percent of the population now have VCR's and, if you are in LPTV, we will, in a year or two, assume you have one, too.

We will put the magazine in full color pictures and pages of TV screen text. We will record this in still frame (one to three frames at a time); there are 30 frames per second, so if we use three frames per page we can send you 600 pages of pictures and text in one minute. Actually, by using single-frame, we could send you 1,800 pages of full color still pictures and text, but we have discovered that many VCR's that have so-called single frame advance sometimes or quite commonly clumsily advance up to three frames at a time even though they claim to be single frame advance. By putting a page on for three frames, you won't miss it on almost any late VCR. You simply push your single frame advance on your remote and advance a page (frame) each time you finish reading a page—it's easier than turning pages in a book. You can fast advance if you are not interested in some feature or you can reverse. You can hold it down and watch page numbers whiz by until you come to the item you want to read on the page number listed on the index page.

Sending this to you on satellite the first day of the month in one minute at a specified time on a specified channel would mean you would set your VCR timer to remember and record this one minute 'Databurst'. You could then play it back to read whenever you wanted. By using one two-hour tape, you tape 120 issues (10 years) on one tape and refer back to any article for rereading with no difficulty.

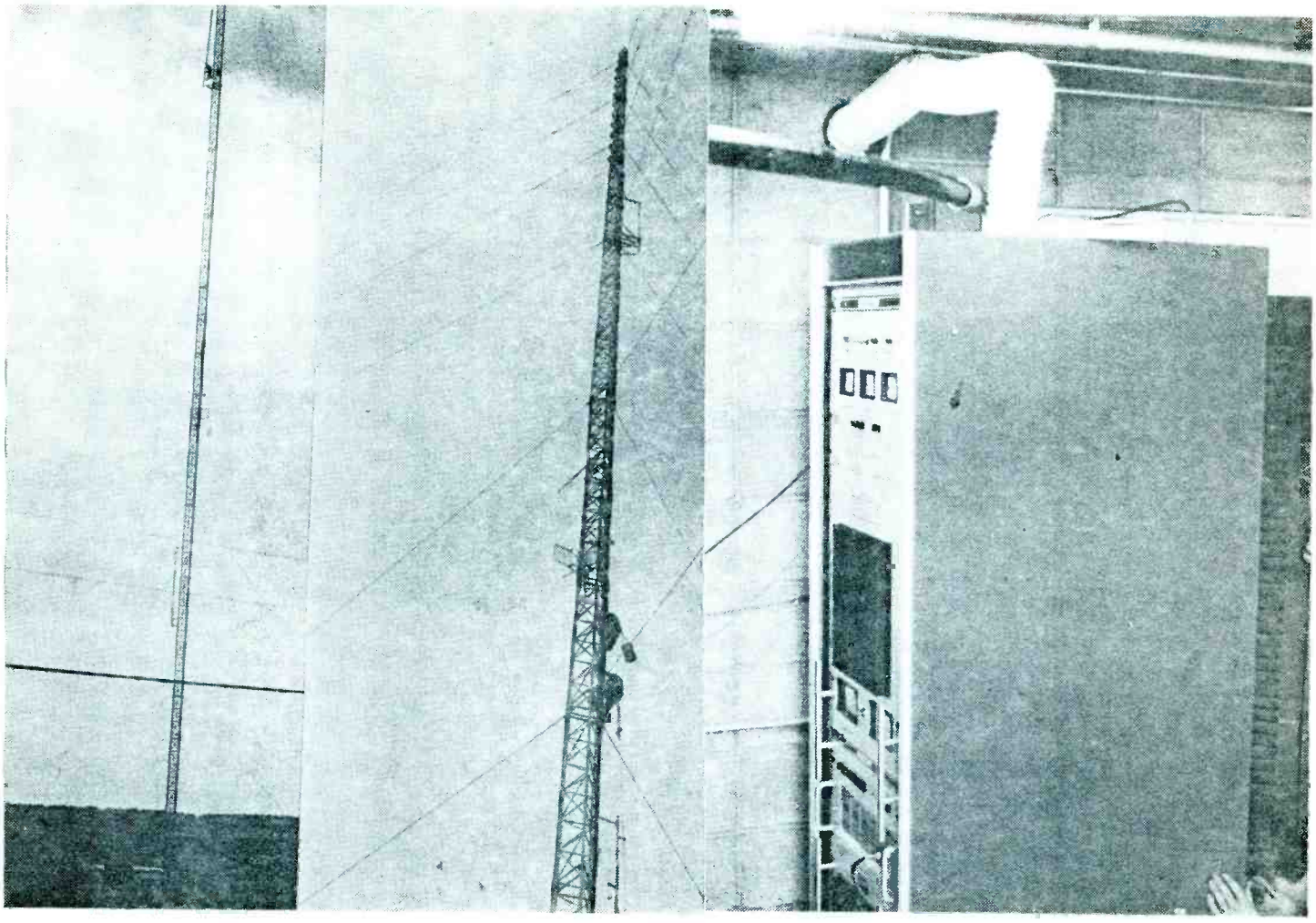
Our cost for getting it to you would be about $10 to $20 (satellite time can be bought for as little as $10 for one minute), and that's our total distribution charge for the entire nation, and it can include news right up to the day we send it. No postage, no postal delay, etc., etc.

If you have an LPTV station in Left Fork, Wyoming, and the local newspaper is going broke because farmers and ranchers get the local newspaper two or three days after it was published, they may want to switch to electronic publishing and pay you to send their publication out for them in a one-minute Databurst. All rural (and town) people record that one minute Databurst on their VCR off your channel and read the local paper on their TV screen whenever they want by playing back their VCR on single frame.

The reason we bring this up now is that a Minneapolis channel used Databurst on a talk show recently (the first such use we know of) that was discussing a controversial article that appeared in the local paper. They sent the entire article in a few seconds and told VCR owners to record it and play it back and read the article if they had missed it when it originally appeared. The public response was terrific and they now plan to use it often in other programs because of the interest. They recorded it three frames at a time, and there is our hitch—we have not yet found any low cost, handy equipment that will record readily (other than editing equipment) three-frame bursts. If you have an editor you can do it by assembling, but soon someone will come out with a recorder that will just do three frames at a push of a button. Then electronic publication will really take off (believe me, I know what I'm talking about).

Now I speak low power rather fluently but do not hardly speak a word of computer lingo, so I'll just pass on what I have heard some radio broadcasting stations have been doing, while not able to verify the accuracy of what I am saying or the accuracy of the way I am saying it. But, as I understand it, a radio show on computers weekly sends out a databurst (of tones or who knows) on each program that computer owners record over the air and use to program their computers with tricky new things. This radio databurst takes only a few seconds, but the computer owners love it. If you ran a computer program, you could do that with just audio, too.

So there's a new word for you—'Databurst', and maybe this will all set you to thinking and trying this. The only thing I ask is that you share your experience and ideas about this with us if you will, since we share ours with you. Thanks.

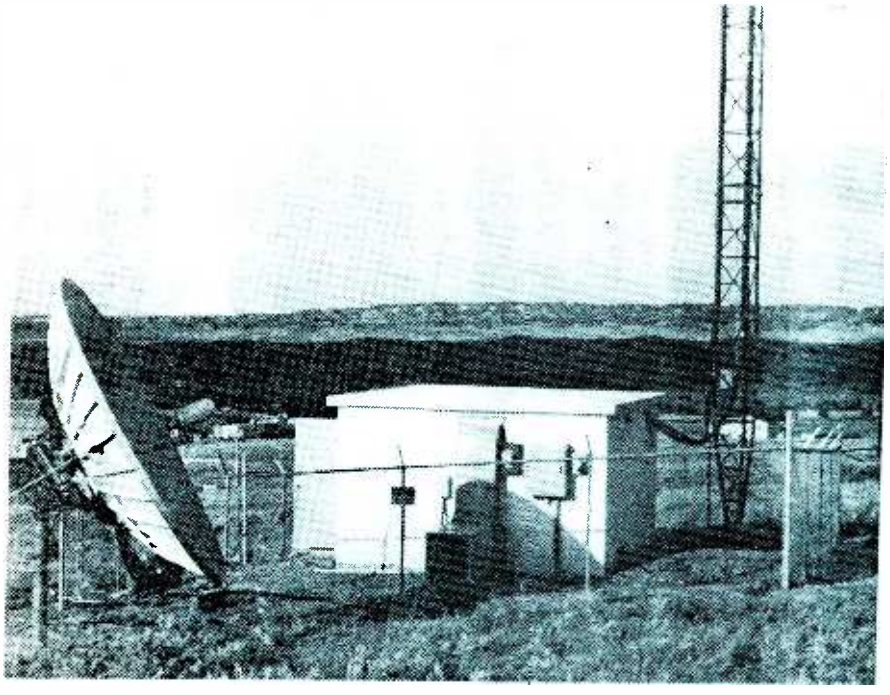


Billings channel 14, 12-foot Prodelin satellite dish is shown on the cover of this issue being constructed. Photo top left shows a tower employee standing on the antenna support brackets while guiding the 24-foot Scala SL-8 being winched into place. Antenna manufacturer recommended it be installed five feet from the tower as the 'ultimate distance'. We figured tower owners might become concerned about 'twist' from high winds at that distance, so I worked out a sturdy three-foot mounting bracket and settled for that distance, which worked out fine.

Center photo tower personnel are fastening down the 1 5/8 cable to the tower.

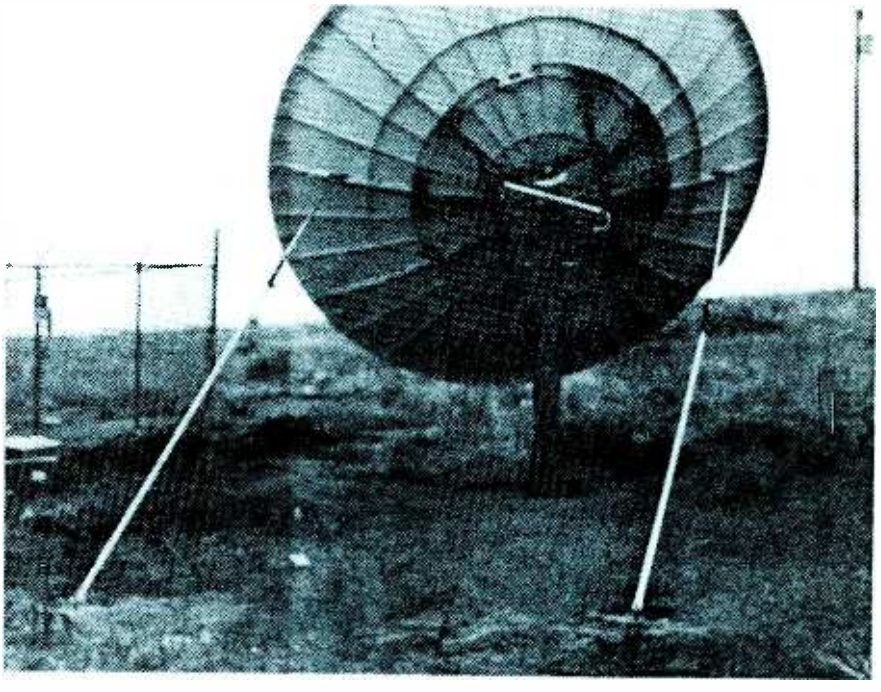
TTC 1KW transmitter, right photo, exhausts the heat from the 1KW tube outdoors. Building is air conditioned and also houses a large FM transmitter and FM STL.

Coverage of the city is same as a full power. Little or no rural residents past 10 miles. Side of antenna toward the tower has no residents other than jackrabbits.



Channel 14 in Billings was also installed in July for Russell Communications, which is why this issue is late.

Braces on each side help consumer-type dish mounts to be steady enough to operate for months at a time with no attention. One pipe fits inside another with tightening bolt allowing easy adjustment. Regular commercial mounts are not made to move from one satellite to another. Consumer-type mounts are readily movable but tend to develop movement enough over time in wind storms, etc., to not maintain perfect alignment. Side pipes are better than brace wires for holding dish secure. 12-foot fiberglass dish shown here has tremendous wind catching surface on a hill. Side braces as shown here are recommended if no attention by personnel is available for long periods. (This is from experience.)



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET N W
WASHINGTON, D C 20554

News media information 202/254-7674 Recorded listing of releases and texts 202/632-0002

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-16 Released: July 2, 1985

Notice is hereby given that the television translator and low power television application(s) listed below have been accepted for filing. These applications, which are not mutually exclusive with other LPTV and TV translator applications have been fully reviewed and in the absence of petitions to deny, the applicant(s) appear to be grantable. Petitions to deny the application(s) may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application listed below.

BPTTL-830324E9
Mountain TV Network, Inc.
Scipio, Utah — Channel 47

BPTTL-830121TR
Del Norte Cablevision
Crescent City, California — Channel 39

BPTTL-830309SA
Matlock Communications, Inc.
Colfax, Washington — Channel 63

BPTTL-830609JD
Nemont Cablevision, Inc.
Glentana
& Rural Area, Montana — Channel 35

BPTTL-830609JG
Nemont Cablevision, Inc.
Glentana
& Rural Area, Montana — Channel 39

BPTT-810309IP
Delta County
Delta
& Delta County, Colorado — Channel 52

BPTTL-830609JE
Nemont Cablevision, Inc.
Glentana
& Rural Area, Montana — Channel 29

BPTTL-830609JE
Nemont Cablevision, Inc.
Glentana
& Rural Area, Montana — Channel 31

BPTTL-830901JY
Wireless Cable
Broadcasting Company
Antonino, Kansas — Channel 35

BPTTL-830318JF
Mountain TV Network, Inc.
Pioche, Nevada — Channel 51

BPTTL-830318IQ
Mountain TV Network, Inc.
Pioche, Nevada — Channel 22

BPTTL-820324TO
Eddie Robinson
Havre, Montana — Channel 52

BPTVL-810409JQ
Micheal Charles Dimick
Eugene, Oregon — Channel 6

BPTTL-830218ZR
Mountain TV Network, Inc.
Democrat, Comanche, Rural
Comache County, Rural Mills
County, Brownwood and
Blanket, Texas — Channel 34

BPTTL-830218YC
Tel-Radio Communications
Properties, Inc.
Brownwood, Texas — Channel 26

BPTTL-820701TZ
Robert M. White, II
Lead Hill/Branson, Arkansas — Channel 15

BPTTL-820708TV
Hi-Desert Publishing Company
Bagdad/Yucca Valley
California — Channel 19

BPTTL-820615YP
Linda A. Clevenger
Thomasville, Alabama — Channel 48

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-17 Released: July 11, 1985

BPTTL-830309DJ
Mountain TV Network, Inc.
Rugby, North Dakota — Channel 52

BPTTL-830309QX
Mountain TV Network, Inc.
Rugby, North Dakota — Channel 60

BPTTL-830309QY
Mountain TV Network, Inc.
Rugby, North Dakota — Channel 58

BPTTL-830118TT
Stanley G. Emert
Westwood, California — Channel 30

BPTTL-830901JG
Wireless Cable Broadcasting Co.
Antonino, Kansas — Channel 63

BPTTL-830901JK
Wireless Cable Broadcasting Co.
Antonino, Kansas — Channel 65

BPTTV-830818IE
Dull Knife Memorial College
Northern Cheyenne Indian
Reservation, Montana — Channel 7

BPTTL-820817TT
William M. Holdinghausen
Westwood, California — Channel 22

BPTVL-820303TX
Russell Communications
Farmington, New Mexico — Channel 4

BPTTL-821124TW
Community Television
Buck, North Carolina — Channel 43

BPTTL-830309G2
Mountain TV Network, Inc.
Colome, South Dakota — Channel 67

BPTTV-830228TL
State of Alaska
Adak, Alaska — Channel 4

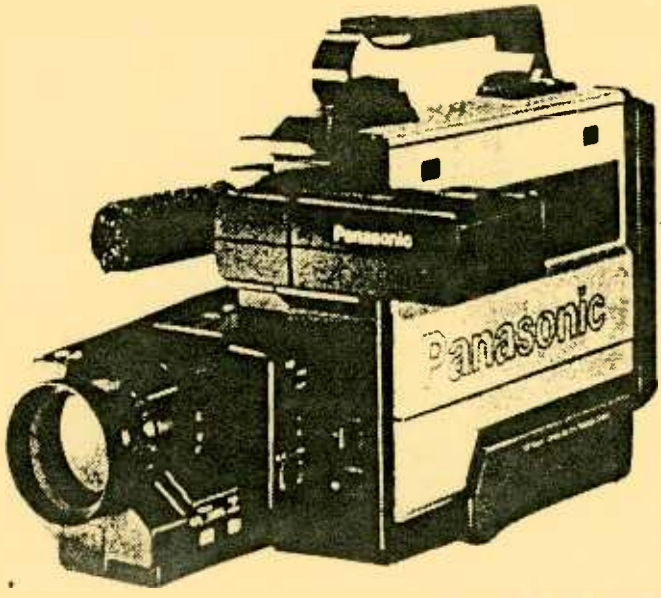
BPTTV-830217IE
State of Alaska
Nome, Alaska — Channel 9

BPTTL-8401166Y
Ponyland Broadcasting Company
Des Moines, Iowa — Channel 39

BPTTL-831214RF
American Lo-Power
Television Network
Ottumwa, Iowa — Channel 39

BPTTL-830312VZ
Harlan L. Jacobsen DBA:
Localvision
Bullhead City, Arizona — Channel 26

Lo-Power Community TV



Panasonic PV-200

September 1985

What's Happening

This month has gone by without my being in town long enough to finish this publication with what we had planned to have in it. The commission apparently has no big news to pass on to you, so we are going to have a 'puny' issue this month. Next issue we should have stories on several LPTV installations and operations.

The potential value (and actual sale price) of low power stations took a drop with the loss of must carry, even though low power was not a must carry. Neighborhood TV's (earliest applicants backed by Sears) original plan to rebroadcast their little Arizona 'country TV' full power station all over the U.S. (with satellite connection to translators in the top 100 markets) also went down the tube with the loss of cable must carry. Neighborhood TV had filed all of this as translators before the low power rules went into effect and would have been must carries on cable systems in the top 100 markets. Local translators rebroadcasting a full power (no matter where the full power was) were must carries (Neighborhood's plan was already destroyed by commission action in setting up the low power rules which left Neighborhood getting only about five of the 100). Trinity Broadcasting has a Los Angeles UHF full power on the satellite and had translators in many U.S. cities while planning many more, because they automatically got on cable systems all over the U.S. as must carries.

Full power stations had been buying LPTV grants for use as translators because it got them on cable systems. That market and use for idle LPTV grants has now also dried up with the loss of must carry.

In the meantime, several LPTV promoters have moved on to greener pastures. Some of the long time LPTV pioneers are now getting a few grants and are finding it difficult to raise money. Two such now have stock offerings out and we may be able to report next month on how that is going. Meanwhile, banks, etc., look on low power as an 'untested' industry and are reluctant to loan money for LPTV.

Manufacturers are unwilling to give banks a guarantee on equipment to buy back at 50% if the buyer defaults. The manufacturers are having a tough enough time staying in business.

The two years that it takes to get any new broadcast outlet in the black, even managed by experts, seems to be too long for investors who prefer to buy into existing profitable broadcast enterprises that have a track record and are 'already' proven profitable.

There are many success stories, such as Phoenix, where the guy bought a failing UHF for $5 million and sold it five years later for over $35 million.

We hope to have an article soon about Johnny Carson's full service UHF independent in Albuquerque going broke. Carson, who had Joan Rivers and many other big names as partners, apparently had station managers that thought they could 'buy' viewers by buying all the 'top' syndicated shows. With a supposedly unlimited amount of money to play with, they bid up such syndicated program costs in Albuquerque to several times the usual price, paying up to $7,000 for a half-hour show. Ad revenue did not keep up with that and it folded.

This proves, once again, you can go broke even if you have big bucks to play with. A license is a permit to own a highly profitable operation or a big money loser. How you operate it is the key. Witness the Phoenix operation compared to the Albuquerque debacle.

Catch 22 Achieves Nielsen Rating

Catch 22, Low Power Technology's (LPTI) music TV station serving Anchorage, Alaska, is the first LPTV station to receive a Nielsen rating. David McCubbin of Nielsen Research wrote in part: 'Congratulations on making reportability . . . you're a part of history.'

In addition, an Anchorage Dittman Media-Quest survey found that in seven months, Catch 22 had higher ratings than any radio station in the market. According to research, the top radio station in the market had 9.4% daily viewership among people over 18. Music television station Catch 22 gained 9.9% of the people over 18 tuning in on a daily basis. The 'penetration' figures are even more startling: 22% of the households tuned in the top-rated radio station, while 45% of the households tuned in LPTI's Catch 22.

LPTI marketing researcher, Charles Loving, explained: 'The figures show that we are reaching our upscale target audience between 18-40. The number of women and men viewers is virtually equal.' LPTI President, Jeffrey Nightbyrd, added: 'Anchorage is 250,000 very high income people. In ways it's like an emerging Seattle. Some say Anchorage is the number one youth market in America. At the very least, after only seven months of operation, we're the number one music outlet.'

Income Up at Catch 22

Since Anchorage TV station Catch 22 proved its success at reaching its target audience by the Nielsen and Media-Quest surveys, advertising has grown dramatically; Coca Cola, Pepsi, the Village Inn restaurant chain, Moosehead Beer and J.C. Penney are among the many advertisers. July revenue figures were at the breakeven point, and management expects August sales to show the station moving into profitability.

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor and publisher: Harlan L. Jacobsen.

Send address changes to 7432 East Diamond, Scottsdale, AZ 85257; telephone (602) 945-6746.

Cable Must Carry Rules Vacated

In its decision in **Quincy Cable TV, Inc. versus FCC**, No. 80-1283 (D.C. Cir. July 19, 1985), the United States Court of Appeals held that the Commission's regulations requiring that cable television systems carry certain local television broadcast stations violate the cable operators' rights under the First Amendment to the Constitution of the United States. On September 9, 1985, the Supreme Court refused to stay this ruling. The mandate of the Court of Appeals thus issues today, September 10, 1985. The must carry rules had remained in effect pending the issuance of the mandate.

Effective as of September 10, 1985, the Commission's must carry rules are set aside and will no longer be enforced. The National Association of Broadcasters and other parties have indicated that they will file a Writ of Certiorari in the Supreme Court. Therefore, the rules will remain codified in Title 47, Code of Federal Regulations, pending a final decision of the Supreme Court.

The Commission's Mass Media Burea has taken a number of actions related to this matter. It has dismissed as moot over 230 pending proceedings related to the must carry rules. These include requests for special relief filed by the cable systems, requests for changes to the Commission's list of hyphenated markets, and certain requests for enforcement action against cable systems.

The Bureau also issued an Order reopening for 30 days the period for filing comments in MM Docket No. 84-1296 concerning the recently adopted rules implementing the provisions of the Cable Communications Policy Act of 1984. Such comments should be limited to the definition of basic cable service in Section 76.5 (pp) of the Commission's rules.

Additionally, the Mass Media Bureau has accepted certain recently filed petitions which are not invalidated by the decision concerning mandatory signal carriage. These petitions relate to such matters as requests for declaratory rulings involving 'significantly viewed' status. Such status is still a matter of interest under the Commission's new rules related to effective competition and/or copyright.

For further information, contact Stephen R. Ross, Cable Television Branch (202) 632-7480. For information relating to MM Docket No. 84-1296 contact Bruce Franca, Policy Analysis Branch (202) 632-6302.

The loss of must-carry and the FCC attitude that they are not going to rewrite it to meet constitutional muster is a disaster. This commission is all for doing away with all regulations, but removing must-carry and not ever including low power in the original must-carry rules was a mistake.

An example is the Sioux Falls situation. The major TV station (full service) here gets $430 for a 30-second ad spot. The other full power in town gets $150 for a 30-second spot. The third network station (45 miles out) gets $100 for a 30-second spot.

The major full power ($430 per spot) owns controlling interest in the Sioux Falls cable system. About 50% of the population is on the cable. The cable system carries the second local full power, which is an ABC affiliate. The cable system carries another ABC affiliate from Sioux City, Iowa, so there are two ABC channels on the cable. That way, local advertisers only get half the local ABC viewers when they advertise on the local ABC station.

The cable system refuses to put our low power channel on the cable system, and will, undoubtedly, do so on any other local low powers that come on.

This full power also owns nine out of eleven theatres in town plus three video stores, in addition to a long distance phone service, background music service, an FM radio station, etc., etc., etc.

One entity literally controls what is seen (and heard) in Sioux Falls and can keep out competition or cause it to fail by denying them access to 50% of the homes in Sioux Falls. That is not right.

A comparison would be if the local newspaper owned the Post Office and would only deliver their papers, no competitors'. Other publishers would be economically unable to stay in business because they could not get delivery cheaply.

In the past, railroads owned coal mines and would refuse to deliver competitors' coal. Federal regulations changed that by making it illegal for someone in a monopoly delivery system to own the coal company, etc. The cable system is in a monopoly delivery system position.

Should the low power or independent local full power have to 'pay' to get on the cable system? If the other local full powers do not 'pay' to be on the cable system, should you have to 'pay' if you are an independent local full power or low power?

Remember, this FCC (captive agency of the big broadcasters) is for deregulation for their constituency, which they believe to be the big broadcasters, not the American public. They are for no competition for the entrenched. All regulations and actions of this commission are to deregulate for the big broadcasters' benefit, but not to generate any additional competition for the politically-powerful industry.

To push deregulation, they make claims there are all types of new technologies, such as low power, that are here now and make deregulation 'okay' to put into effect, but then they only go through the motions of granting other technologies, holding everything up for years. Cable systems making 80% of the total U.S. subscribers are now owned by the same big broadcasters. Therefore, this commission is now for 'deregulation' of cable systems.

About Our Cover . . . .

All-in-one Camcorders are now available from several manufacturers. Listing at about $1,500, they are available for around $1,200. Information and test report to come in future issues . . . .

The Fast Cut (and Short Attention Spans)

A lot of LPTV operators think they are going to put talking heads on local interview shows with local people and they are automatically going to get an audience, because it is local. Unless the interview is on something highly controversial, you are wrong; that 'local' gets big audience in competition with networks is an erroneous assumption. If you think you are going to get an audience televising the slow, local city council meetings, you are sadly mistaken again.

The fast cut started with **Sesame Street** when they assumed correctly that kids had an attention span of about 20 seconds, and you visually needed to cut to something else within 20 seconds or you started losing your audience. It then advanced to programs like **Entertainment Tonight** and other fast-cut shows (**Hill Street Blues**) etc., that are a modification of the same idea. They discovered adults have a short attention span, also.

People watching TV have gotten the mind set to the idea that if you do not fast-cut constantly, the show is boring-boring and you tune it out.

If you have watched music videos, you will notice they rarely ever leave any shot on the screen over 10 seconds. Most cuts there are four to eight seconds. If you do an interview show or an infomercial (advertising interview paid for by advertiser) with Don Anderson from your local Farmers Insurance office, you are going to be interviewing Don for 15 minutes about how exciting his career is in selling insurance. Outside of Don's relatives, I guarantee you are going to lose 90% of your audience before you are into it five minutes if you just show Don and the interviewer with the same shot all the time. You need to pop in some full motion shots, slides, etc., every 30 seconds or so of local accidents, local fires, etc., that Don was the agent who wrote the policy that saved these local people's financial shirts. If you keep switching between that type of local disaster shots and Don talking on camera so you never leave anything on screen more than 30 seconds (stills never more than 15 seconds), then you have a fast-moving show that they will stay with, even though the subject may be boring.

We suggest you shoot everything that happens in your community and retain the tapes. Keep track of what's on each cassette with a $150 computer. If you cannot find something quickly, it is worthless to save the tapes. For example, you shoot a car accident scene and you put it on tonight's news. Then you do a news show at the end of the month that says this has been a bad month for accidents in Smallsville, and you show these accidents in fast cuts with a recap of all the other local accidents this month.

Later there is a controversy at city hall over a street light system on a certain corner, so you run an editorial (your station's opinion) and show all the accidents that happened at that corner in the last six months. So you can use this accident shot again.

Then, at the end of the year, you do a program with fast cuts of 1985 Smallsville in review. You show this and other 1985 accidents, the local fires, etc., a slice of a parade, high school graduation, etc.

Then, of course, you use the accident shot again here in Don's insurance program. So you have used this one accident shot many times.

Fast cuts use up a tremendous amount of material, but by keeping everything you ever shot (if you shoot on 1/2-inch, it is only about $2 an hour), you will soon have a large morgue of material you can draw on of local happenings. By combining these shots with something happening now, you can do local shows packed with fast-moving local interest. This requires editing, etc., but if you have switchers sitting around waiting to put this or that on the air, switch satellites, etc., then you have them edit this type of thing while waiting.

There is no reason why you cannot do fast cuts on local programming. Zoom in gradually on a slide, pull back gradually on the next one, keep everything moving and changing all the time. Nobody need get bored with what you have on the screen, even though you are a low-budget operation.

A good way to get your crew in shape and into the practice of using the fast cut is to make local backgrounds (video clips) for records you want to play but have no videos for. Shoot local clips and edit them all together with fast cuts to somehow go with this music. Eight to fifteen seconds is the longest you leave any one shot up unless it has a lot of moving in the scene. You can play this local music video over and over, and they'll love it. You can run fast-moving shows, such as Don's insurance interview, several different times. Remember, the networks and all TV producers run all of their shows more than once. You can amortize the cost of producing something over many showings, but make them fast-moving or viewers won't even stay with it the first showing.

Regarding the city council meeting—unless it is controversial, do not bother covering it live in full. Put clips on your news shows and do a summary of what happened with fast-cuts again.

Just because it is 'local' does not mean you can get away with presenting it in a boring format.

September 12, 1985

BROADCAST STATION TOTALS FOR AUGUST 1985

The Commission has announced the following totals for broadcast stations licensed as of August 31, 1985:

AM Radio	4,793
FM Radio	3,818
FM Educational Radio	1,202
UHF Commercial TV	379
VHF Commercial TV	541
UHF Educational TV	186
VHF Educational TV	113
UHF TV Low Power	127
VHF TV Low Power	220
Total Radio	9,813
Total TV	1,569

Lottery Winners

Tentative winners in the August 28, 1985 lottery are: Evangelina Garcia Garza, ch. 8, Riverton, WY; KXMC-TV, ch. 59, Crosby, ND; Meyer Broadcasting, ch. 57, Crosby, ND; Mountain TV Network, ch. 53, Bowman, ND; Mountain TV Network, ch. 35, Bonilla, SD; Mountain TV Network, ch. 29, Bonilla, SD; Robert Sandstorm, ch. 8, Bend, OR; Minerva Rodriguez Frias, ch. 12, Morris, MN; Sandoval Burke, ch. 10, Davenport, IA; B & J Communications, ch. 23, Aberdeen, WA; EEF Trust, ch. 2, Rio Grande City, TX; Glenda Kassis, ch. 5, Sheridan, AR; American TV Network, ch. 13, Minneapolis, MN; Jo Ann's Balloon Boutique, ch. 10, Lawton, OK; Ambassador Media, ch. 17, Soda Springs, ID; Communicators of America, ch. 49, Baton Rouge, LA; Presidio Enterprises, ch. 65, Fort Worth, TX; Mountain TV Network, ch. 42, Burns, OR; Women's LPTV Network, ch. 55, Dickinson, ND; Charles Baca, ch. 49, Memphis, TN; JLR Broadcasting, ch. 24, Gillette, WY; Far Eastern Telecasters, ch. 5, Clear Lake, TX; Forward Broadcast, ch. 31, Biloxi, MS; American Christian Television, ch. 16, Columbus, GA; Millard Oakly, ch. 8, Myrtle Beach, SC; Evarista Romero, ch. 5, Park Rapids, MN; Evarista Romero, ch. 12, Watertown, SD; Telecrafter, ch. 18, Havre, MT; Malheur Publishing, ch. 19, Ontario, OR; Inspiration TV, ch. 26, Boise, ID.

One-Hour Sponsors for Music Videos

Those of you carrying music videos from Odyssey, etc., may be able to sell sponsors on running an ad saying this hour of music videos is brought to you by _____, and run all of your five minutes of spots for that firm during that hour. Odyssey approves of this.

One of your pitches when you run music videos and the advertiser complains your channel is not on the cable, is that most second sets, even in cable homes, are not on the cable. The younger adults watch much of their TV on the second set or even third set. New TV sets are now down to $59.95, so many have their own TV in their own room, etc. A big percentage of those second and third sets will be on your music channel, even though the main house set is on the cable.

Next Issue . . . .

We will show you how to tap into your BSR phone answering unit to put on a slide by telephone and do live, local audio announcements over an ordinary phone from anywhere.

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-20 Released: September 11, 1985

BPTTL-830324D4
American Translator Development, Inc.
Telluride, Colorado — Channel 21

BPTTL-830309RP
Mountain TV Network, Inc.
Leadville, Colorado — Channel 25

BPTTL-830315LC
Mountain TV Network, Inc.
Winnemucca, Nevada — Channel 19

BPTTL-850117LI
Salish Kootenai College
Pablo/Ronan, Montano — Channel 54

BPTTL-850117LH
Browning Public Schools
Browning, Montana — Channel 56

BPTTL-850117LJ
Salish Kootenai College
St. Ignatius, Montana — Channel 56

BPTTL-820723TU
Ackerman Cable TV Company, Inc.
Ackerman, Mississippi — Channel 19

BPTTL-830901LD
Wireless Cable Broadcasting Co.
Gorham, Kansas — Channel 67

BPTTL-830314H3
Mountain TV Network, Inc.
Limon, Colorado — Channel 62

BPTTL-8303142F
Mountain TV Network, Inc.
Gove, Kansas — Channel 25

BPTTL-8303147D
Mountain TV Network, Inc.
Gove, Kansas — Channel 23

BPTTL-830314C4
Mountain TV Network, Inc.
Gove, Kansas — Channel 31

BPTTL-830314C2
Mountain TV Network, Inc.
Gove, Kansas — Channel 33

BPTTL-8303142E
Mountain TV Network, Inc.
Gove, Kansas — Channel 43

BPTTL-830308I9
Mountain TV Network, Inc.
Medicine Lidge, Kansas — Channel 52

BPTTL-8303144P
Mountain TV Network, Inc.
Buena Vista, Colorado — Channel 56

BPTTL-830308I5
Mountain TV Network, Inc.
Medicine Lodge, Kansas — Channel 50

BPTTL-8303142D
Mountain TV Network, Inc.
Gove, Kansas — Channel 21

BPTTL-830104TF
Shuttle Communications
Dover, Delaware — Channel 67

BPTTL-8303147C
Mountain TV Network, Inc.
Gove, Kansas — Channel 15

BPTTL-830308J5
Mountain TV Network, Inc.
Medicine Lodge, Kansas — Channel 56

BPTTL-830311E4
Mountain TV Network, Inc.
Ajo, Arizona — Channel 32

BPTTL-830311H4
Mountain TV Network, Inc.
Vernon, Arizona — Channel 32

Reprinted from Broadcasting magazine, September 9, 1985.

Monday Memo

A low-power television commentary from Michael Couzens, attorney, San Francisco

LPTV: still afloat after a rough five years

Today, Sept. 9, marks the fifth anniversary of an FCC open meeting that rocked the TV broadcast business. In one day, the commission added four VHF drop-in channels, proposed to add many more and launched the low-power television service, the first new broadcast service in more than 20 years.

Five years later the first four drop-ins are an accepted fact, and the stations will be there once the litigation dust has settled. But the strong medicine of generic drop-ins has not come to an FCC vote, and may not for additional months or even years. Meanwhile, the agency's broadcast station totals for July showed some 343 licensed LPTV stations, a number that grows steadily. Why this difference?

My contention is that LPTV was a exception, proving the rule that the FCC will open established markets to new competitors only under duress. The "free market" is free principally for incumbents. A look back at the five years of LPTV shows this to be true.

My chore on Sept. 9, 1980, was to present the staff's recommendations for LPTV. From Chairman Charles D. Ferris on down, none of us regarded Jimmy Carter's re-election two months later as a certainty. A new and changed FCC would implement these ideas. Moreover, during the inquiry stage of LPTV, the National Association of Broadcasters had pressed the view that there was lack of demand for, need for and interest in a new TV broadcast service. NAB would be around to repeat that canard to our successors. Our choice of tactics was as follows:

We decided to graft LPTV onto the existing rural translator service. This gave the service a "motherhood" patina, rural America being a concept that always stood with mom and apple pie. Indeed, our staff was sincere in its belief that isolated communities, especially in the mountains, got poor broadcast service and would be helped by our moves. In building on the TV translators, we also carried over the policy that LPTV was "secondary"—that it could be bumped by primary services, and taken off the air if it caused interference.

Next, we prepared a "front loaded" notice of proposed rulemaking. It was so hefty and so complete that no commenting party could sweep it under the rug without leaving a disfiguring lump. We worked the press. The meeting was reported on the *CBS Evening News*, and on the front pages of *The New York Times*. And we covered all bases. The commission's vote was unanimous.

Michael Couzens has practiced communications law since 1976, first in Washington and, for the past two years, in in San Francisco. He joined the FCC in 1978 as an attorney for the Network Inquiry Special Staff and from 1979 to 1981 chaired the Low-Power Television Inquiry Staff

Best of all, we hit upon the idea of "interim processing." During the pendency of the rulemaking, applications for LPTV would be entertained ad hoc, on a waiver basis. No freeze would be imposed. To make doubly sure that there would be applicants, I collected mailing lists and worked into the nights copying information packets. We figured that if enough people showed up demanding licenses, LPTV would have a political cheering section—overnight.

On my last day as a government employe, Feb. 28, 1981, the Court of Appeals rejected a request by the Corporation for Public Broadcasting to "stay" the interim processing procedures. LPTV was off and running.

In retrospect, the astounding thing is that, with all of these precautions, LPTV nearly failed to take off. Our avalanche inducement program worked too well, and the agency was choking on nearly 5,000 applications. On April 9, 1981, it did the "logical" thing. It imposed a freeze (with exceptions for the smallest TV markets).

During the Fowler years the freeze was modified, and periodically relaxed. It continues in effect. The commission adopted LPTV rules in 1982, but overall it took nearly three years for the agency to find a right mix of procedures and top-flight personnel to crank out grants.

Congress saw the application backlogs, and reacted strongly. It fashioned a lottery mechanism in the summer of 1981, and told the FCC to come up with rules for a lottery in 180 days. On the last day, the FCC declined, saying that it disliked preferences for ethnic minorities. It also made a claim, as ludicrous as it seems today, that the process of determining lottery preferences would take just as long as comparative hearings. Congress ordered the commission to try again, and a lottery finally was voted in March 1983. The first chances were drawn on Sept. 29, 1983.

Somewhere along the way, the "secondary" status of LPTV was lost sight of as a planning tool. The technical standards went through two revisions, adding restrictions to prevent predicted interference, in a service where actual interference must not occur on pain of forfeiture. LPTV also was saddled with the most restrictive design change provisions of any broadcast service. LPTV facilities cannot be changed in any way that increases service (to the public) in any direction of radiation, without opening the license to challenges.

Five years later, LPTV is not up and running, but it is up and crawling. Some of the transmitter manufacturers have stayed in the business. In rural America, the facilities change problem is solved easily today by making the changes and not reporting them. LPTV's are pervasive in Alaska, and more than 150 have taken root in the "lower 48." Monthly lotteries have been held since September 1983, and new stations are coming on line at a clip of perhaps a dozen a month. By 1990, LPTV will have more than doubled the total of America's TV broadcast stations.

This brings us back to the VHF drop-ins. In the panoply of new communications technologies, I don't think they are the horse to beat, unless you like beating a dead horse. If the agency saw fit to add layers of interference prevention to LPTV—a service that by its secondary structure cannot interfere—one can imagine the waves of interference prophylactics that will be poured on the VHF drop-ins. As a political reality I can live with this, but I wish the purveyors of it were less shrill in their claims that it's a free market they promote at the agency.

BPTTL-821025TF
Owen Broadcasting Enterprises
Lake City, Colorado — Channel 48

BPTT-830502I0
Gunnison County Metropolitan
Recreation District
Crest Butte South, Colorado — Channel 47

BPTTL-830309RK
Mountain TV Network, Inc.
Virginia City, Montana — Channel 19

BPTTL-8303147W
Mountain TV Network, Inc.
Limon, Colorado — Channel 56

BPTTL-830308H2
Mountain TV Network, Inc.
Medicine Lodge, Kansas — Channel 34

BPTTL-830621IN
Kentel
Garden City, Kansas — Channel 24

BPTTL-830118TZ
Arapahoe Silent Majority, Inc.
Pagosa Springs, Colorado — Channel 16

BPTTL-830317MY
Mountain TV Network, Inc.
Springfield, Colorado — Channel 23

BPTTL-830317NA
Mountain TV Network, Inc.
Springfield, Colorado — Channel 47

BPTTL-830621IM
Localvision
Garden City, Kansas — Channel 26

BPTTL-830317NE
Mountain TV Network, Inc.
Springfield, Colorado — Channel 45

BPTVL-810217EB
Howard Publications, Inc.
Hutchinson, Kansas — Channel 5

BPTTL-830323F2
Mountain TV Network, Inc.
Burwell, Nebraska — Channel 16

BPTVL-820621TW
Deloy Miller
Monticello/Dermont, Arizona — Channel 5

BPTTL-830621IP
Womens LPTV Network
Garden City, Kansas — Channel 18

BPTTL-830218ZM
Mountain TV Network, Inc.
Coos Bay, Oregon — Channel 45

BPTT-830414II
KOAT Television, Inc.
Portales, New Mexico — Channel 34

BPTTL-810331PO
Gaylord Broadcasting Company
Little Rock, Arkansas — Channel 46

BPTTL-821124ST
Thelma W. Anglin
Branchville, South Carolina — Channel 55

BPTTL-830311D7
Mountain TV Network, Inc.
Grangeville, Idaho — Channel 33

BPTTL-830915JR
Kentel
Whitefish, Montana — Channel 42

BPTTL-8303147L
Mountain TV Network, Inc.
Red Lodge, Montana — Channel 29

BPTTL-830311I2
Mountain TV Network, Inc.
Council, Idaho — Channel 32

BPTTL-830204TV
Stanley G. Emert
McCool/Starkville, MS — Channel 16

BPTTL-830317MX
Mountain TV Network, Inc.
Dugway, Utah — Channel 22

BPTTL-830308E8
Harlan L. Jacobsen DBA:
LOCALVISION
Roosevelt, Utah — Channel 21

BPTTL-830308E7
Harlan L. Jacobsen DBA:
LOCALVISION
Roosevelt, Utah — Channel 23

BPTTL-830301SQ
John F. Craven, III tr/
as LPTV Broadcasting
Quartzsite, Arizona — Channel 50

BPTTL-830301SS
John F. Craven, III tr/
as LPTV Broadcasting
Quartzsite, Arizona — Channel 48

BPTTL-8303146A
Mountain TV Network, Inc.
Price, Utah — Channel 18

BPTTL-830311NA
Mountain TV Network, Inc.
Central, New Mexico — Channel 28

BPTTL-830204TX
Stanley G. Emert
McCool/Starkville, MS — Channel 63

BPTTL-820623PN
Free State Broadcasting, Inc.
Monticello, Mississippi — Channel 65

BPTTL-830312VP
Harlan L. Jacobsen DBA:
LOCALVISION
Coos Bay, Oregon — Channel 59

BPTVL-810904QH
KBND, Inc.
Bend, Oregon — Channel 11

BPTTL-820602TO
George County Times
Beatrice, Mississippi — Channel 53

BPTTL-820623QO
Free State Broadcasting, Inc.
Louisville, Mississippi — Channel 55

BPTTL-830204TY
Stanley G. Emert
McCool/Starkville, MS — Channel 69

BPTTL-GB0308MP
Ambassador Media Corporation
Montpelier, Idaho — Channel 19

BPTTL-830711D9
Christians Incorporated
For Christ, Inc.
Harrison, Arkansas — Channel 66

BPTTL-830314Z5
Mountain TV Network, Inc.
Augusta, Arkansas — Channel 60

BPTTL-830311RF
Mountain TV Network, Inc.
Teterville, Kansas — Channel 20

BPTTL-830311W9
Mountain TV Network, Inc.
McArthur, Idaho — Channel 33

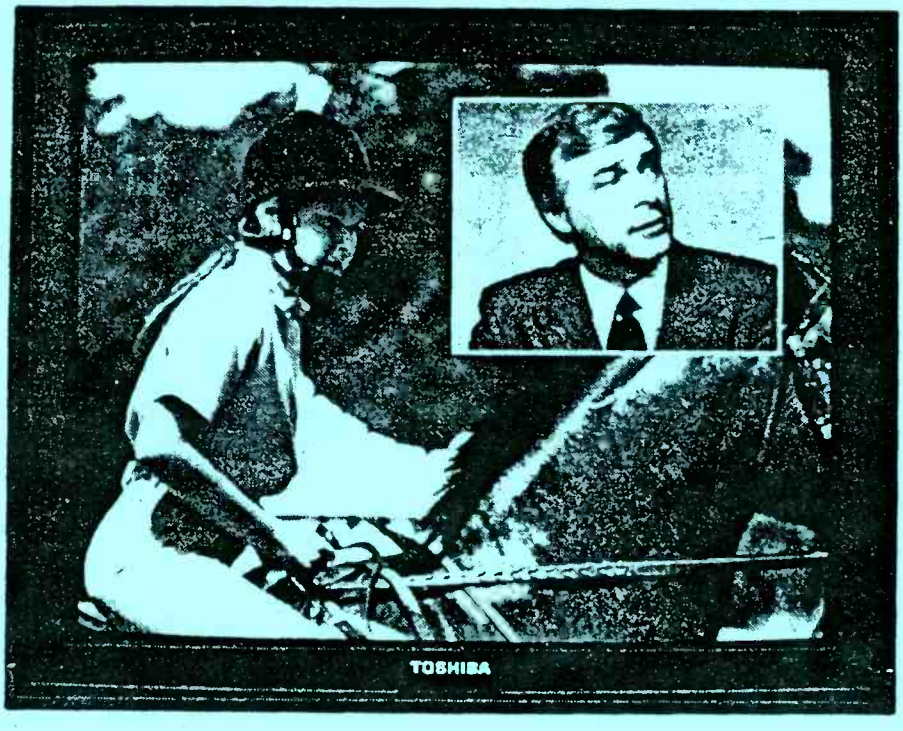
BPTTL-830311T5
Mountain TV Network, Inc.
McArthur, Idaho — Channel 43

BPTTL-830311W6
Mountain TV Network, Inc.
McArthur, Idaho — Channel 41

BPTTL-830309WJ
Mountain TV Network, Inc.
Burns, Oregon — Channel 32

BPTTL-830531IJ
Eric Jacobsen
Alliance, Nebraska — Channel 22

Lo-Power Community TV



Inexpensive Digital TV Processing for LPTV

October 1985

What's Happening

Toshiba, first on the market pushing digital sets and actually delivering them has something of interest to LPTV operators. Digital TV processing is what allows the high-budget TV producers to do things with video that seem impossible. Expect some amazing things, too, with digital TV sets. Once the processing is changed from analog to digital, you can do almost anything you want, and that's what manufacturers of digital TV station equipment have been doing. Big bucks were required then. Now that Toshiba and others are out with a consumer item (under $1,300 list), digital processing is getting down to LPTV affordability.

As shown on our cover this issue, Toshiba can insert a second TV picture on the screen 1/16th to 1/4 (adjustable) the size of the main picture; this allows you to set a news item behind the newscaster with a clean cut frame around it. It allows you to squeeze in a full width shot of the judges, referees, etc., in a little picture while showing the full screen action too. You could do this with a key set-up but it requires precise coordination with the cameramen of both shots, and you have no border line between.

Here you can take a taped shot played back and combine it with a "live" camera shot of a newsman and blend the two together in any proportion you want. You do it all with this TV set, which can also be used as a monitor.

Take the video "out" of the back of it and run that to your transmitter. Remember, this is an early model of the digital TV set and just wait—you will soon be able, with later models, to do many other things that the "big" boys have been able to do with $80,000 equipment.

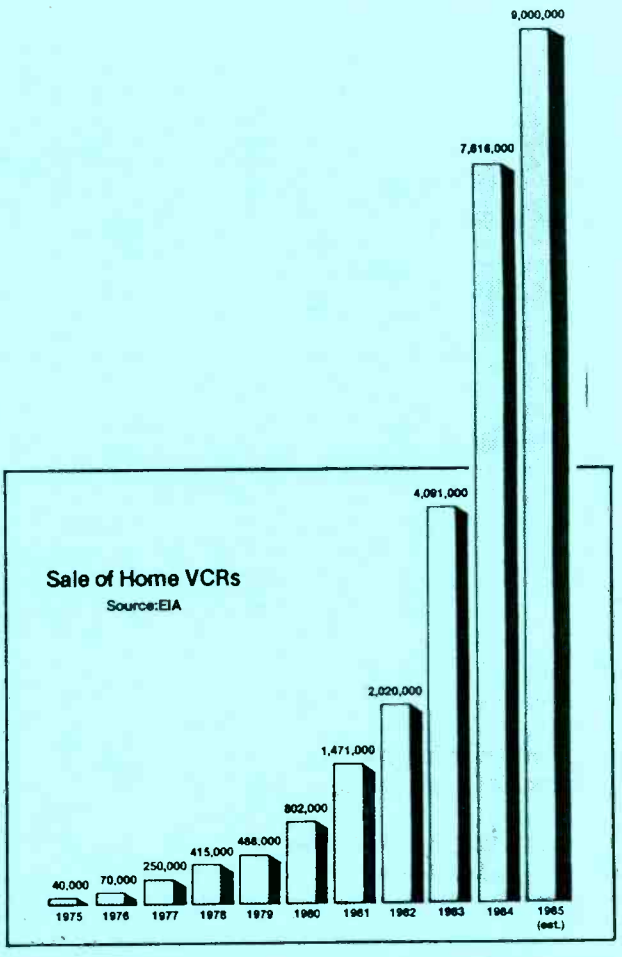


Fig. 1: VCR sales are increasing yearly. By the end of next year, 30 million VCRs will be in use.

Broadcasting magazine says that the FCC will accept low power applications next year but is not sure how it will go about doing that.

Barbara Kreisman, who is no longer head of the low power branch, being transferred to act as chief of Mass Media Bureau's legal branch, is quoted as saying that the FCC had been contemplating accepting applications nationwide, but Kreisman said that the commission, concerned about limitations of computer systems, may attempt to restrict number of applications it will be accepting. Kreisman is also quoted as saying that she thought LPTV was at a stage of having to win some respect.

The same article quotes Rick Hutcheson (three station low power operator) as saying that the elimination of must-carry had been good news for LPTV which never had must-carry under the rules. Without rules, cable companies will have more room to carry LPTV signals.

According to **USA Today**, 23% of the population now have VCR's and 1.2% have satellite dishes.

Dishes are selling at 60,000 per month with Wyoming having the highest total of backyards with dishes—5.6%.

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost. Editor and publisher: Harlan L. Jacobsen.

Send address changes to 7432 East Diamond, Scottsdale, AZ 85257; telephone (602) 945-6746.

FCC May Stack Window Deck for the 'Big Boys'

In the past, the FCC has tried to maneuver with tricky systems to cut down the numbers of low power filings. The March 8, 1984 mass cut-off listing was supposed to catch everyone unaware and result in less being filed because of the large list, instead of the small cut-off lists put out monthly. It actually resulted in more opposition filings per cut-off listing than previous small cut-off lists.

Now they are brainstorming on how to keep the filings down if they "open a window"; actually, the window idea really cuts off a lot of extraneous filings and, if the commission requires proof of tower site clearance, about half of the mass filers will stay out. The get-rich-quick applications boys have already long ago left low power and are over cultivating new suckers in cellular radio, etc. There is a terrific backlog of translator and other legitimate filings that have backed up plus increases in power, change of direction, etc., that have been denied filing for years. So there will certainly be large numbers of legitimate, serious applicants and, since no one is up on a target list (like the old cut-off lists), the filers will have to figure out their own channel availabilities, etc. The Alaska window opening recently brought relatively few filings. Nevertheless, look for this possibility.

Several paper mills have been generating hundreds of applications for cellular radio, so the commission came up with a new rule that you had to have written commitment from a bank or financial institution or some paper-backed guarantee of financing before you could file. The guarantee had to be for financing all of your filings, as I understand it, not just one. So, if your odds were one in a hundred of winning and you filed 100, you would have to have advance financing guaranteed for building all 100.

What this rule does is immediately take out the little guy, because unless you're a big outfit, no bank is going to guarantee you money for 100 stations in advance when it may even be years before they are granted. If that happens, and it may, we are right back where this commission has always been—stacking the deck once again for the big boys.

All of the top markets will be taken up by the same 25 entities that control the majority of broadcast properties and now control 80% of cable system subscriber base. The so-called "diversity of new media" winds up right back where it always was when you have the "ins" controlling a captive agency like this commission. So look for this new ploy to keep out competition. Low power was set up for the little guys to give new voices to the public on a non-interfering basis. This commission immediately added interference restrictions like these were full service stations and has done everything else possible since to keep the number of grants to practically zilch.

Translators never had the money before they had a permit. They got a permit and went out and raised the money only after they got it. Neighborhood TV and others had financial commitments and, five years later when the permits came through, the money disappeared. Others can probably raise the money when and if they get permits, provided it is within a reasonable time frame.

How do you know how much money you can raise when you do not know if you are going to get one permit, none or 100? Where will they be located? Will they be workable together? If you have money enough for 10 stations, should you only be allowed to file for 10 when, statistically, you know you'll only get one in a hundred applications that is useable with your plans?

The current LPTV lobby is presently so fragmented that this commission could probably pull this off and get away with it. Meantime, the big broadcasters will be cheering this commission on.

Scrambled Satellites

The cable industry has seen the handwriting on the wall and is putting extreme pressure on satellite program suppliers to scramble. Many, such as WGN in Chicago and other cable main stays (including the movie channels) are expected to be scrambling by the first of the year.

Cable owners are operating on the theory that they are going to be the descrambling sales agency for all the dishes "out in the country" and that these dish owners will pay them to have their movies unscrambled by going through the nearest cable system office.

Meanwhile, the satellite industry, which has become a substantial nationwide business with some political clout, is taking their case to the hill with a mass showing of dishes on the capitol steps and congressional demonstrations of what the fuss is all about and how they want the rules changed.

How this all comes out has yet to be determined, but bet that the satellite owners are going to put a lot of political pressure on congress to make reasonable arrangements for home satellite reception than paying the nearest cable system for a decoding box and the usual cable fees. Keep in mind, likely less than 10% of the transponders will probably be scrambled in the near future, leaving 80 or more channels still around for home viewing free, so satellite receiver owners are not exactly totally left out in the cold when some scramble.

Most of the big-name channels that are most watched of the satellite distribution systems, however, "made it" because of cable distribution and payments. Therefore, when panicing cable operators are saying jump (scramble), they are paying attention.

Cable systems are valued at around $1,000 per subscriber. When several subscribers buy satellite dishes each and every month, a cable operator starts seeing the value of his system going down thousands of dollars every month. If you own 20 cable systems and each has that happening, you can see the pressure being put on programmers to scramble their signals soon.

Left: Tele-Vu installation truck shown in front of the Tele-Vu office in Redwood Falls.

STV is Alive and Well

Above and left: Frank and Becky Rigenhagen of Tele-Vu shown with Zenith decoders in use and in stock at their new Redwood Falls, Minnesota operation.

STV is Alive and Well

What to do with your LPTV permit? After waiting five years and finally getting a permit, many of us who originally figured STV (subscription or pay TV) was a likely option for rural LPTV small market success have had second thoughts about the feasibility of making it as a subscription service. The following trends and developments affected our enthusiasm about our chances for success with pay TV:

1. Large numbers of STV full service pay systems folded after cable made large inroads in their subscriber lists; if the biggees were folding, how could the little operators make it?
2. VCR's became popular and many subscriber prospects opted to watch movies they wanted when they wanted; even cable subscribers rent tapes.
3. Satellite dishes are springing up all over the horizon taking out many of your best-heeled prospects.
4. Small towns of as little as 300 or 400 people, which were to be the main market for STV, have been wired for cable in the last five years.
5. Your prime STV prospects in rural America have not been prospering in the last few years, and it may get worse.

With the market and climate now changed, I went to Minnesota to visit an STV operator that had three years of history and pass along what I learned in this issue. One of the keys to keep from losing your shirt in LPTV is to find out what does not work. No need to pour a lot of money into something to find out if some methodology works or not when someone else has already tested it. Mankind's main advantage over animals is that he can learn from others; he doesn't have to keep doing all the things that do not work because he can learn from someone who has gone before him. Animals each generation have to make their own mistakes. Unfortunately, man does the same thing if he doesn't have some way of finding out what the pioneers that came before learned, not only worked, but what doesn't work in practice.

Frank and Becky Rigenhagen of Saint James, Minnesota leased a translator channel and equipment from the local non-profit translator system and went into STV three years ago. Frank had been active with the local translator people in bringing seven channels of UHF "repeated" TV to the area.

With financing from the local bank, they bought around $250,000 worth of encoding and decoding equipment and a satellite dish. Starting promoting the operation in April, they finally made it on in September. By the time they finally got on, their first 300 decoders were already out, and they had a backlog of customers waiting while they scrounged up decoders anywhere they could. They had as many as 50 waiting for decoders, Frank said, and the main problem was getting enough decoders to "catch up".

Three years later, they now have between 700 and 800 subscribers watching "Select TV' movies out of the 100-watt St. James former translator now leased for STV.

Their original research indicated they had about 20,000 homes in the 30 to 40 mile circle around the antenna site that did not have cable available. Since then, several small towns in the coverage area have been cabled.

Charging $14.95 for the standard movie fare until 10 p.m., they found as high as 90% opted to pay the extra $6 for R-rated movies after 10 p.m. Some drop this later, leaving about 60% who pay the extra $6 over the long term. This Minnesota couple never disclosed, and I did not ask, what Select TV charges them, but previous interviews with other operators indicated this was "confidential", but ran between $7 and $8 a month. They offer their St. James subscribers a 10% discount for payment of one year in advance. The St. James operation collected a $150 deposit on the Zenith decoders but now that they are operating a second pay TV system in Redwood Falls, Minnesota, they have changed that to "selling" the addressable decoders for $99.95 each, installed, including tax. The Zenith decoders' reception and decoding function can be turned off and on from a computer at their station.

Frank told me that with the $150 deposit on the decoders, the tendancy was when the subscriber was temporarily pinched, they would bring in their decoders to "cash in", get their $150 deposit and go off the service. Now when they **own** the decoder and there is no refund, they simply call in to be "turned off" for a while. When ready to go again, they simply call in and their decoder is reactivated over the air to decode again. Another move was to sell a year's subscription separately to the Select TV guide of what is on so when customers discontinue their service, they continue to receive the schedule of what is playing and what they are missing. This means many more come back on later with this system. They report that about 2% a month discontinue, which is about normal from reports in other areas. This means in the three years they have gone through 1,300 to 1,400 subscribers, so any switch of operational techniques that makes it easier to reactivate some of this 2% drop-out group can make a big difference. This gain off and on is a normal evolutionary process in STV and cable premium service and is called "churn".

The Redwood Falls station was running an alpha numeric (character generator) explanation of the coming on the air soon with STV programming. The Redwood Falls station will pick up, off the air, from St. James about 45 miles away and simply "repeat" St. James. Decoders can be turned on and off in Redwood Falls from St. James or from the Redwood Falls office. The off-the-air pick-up from St. James originally had bad co-channel interference (same channel from somewhere else) but by using a solid metal back receiving dish, the co-channel interference was eliminated.

Subscribers to the 100-watt UHF movie channel in St. James go out as far as 40 miles. Frank buys 10-element yagis, cut to channel (made specifically for his channel 48), from Channelmaster in lots of 250 for under $8 each. He reports that cut channels will out-perform the highest priced broadband UHF antennas. He also buys a very low noise pre-amp

Continued on next page.

(powered amplifier that sits on the mast right with the antenna) at under $8 each from Channelmaster, also in lots of 250. Low noise amplifiers boost the weak signal 15db and increase the signal more than enough to overcome the line loss on the way to the set. UHF, as you know, eats up fast in coax and in twin lead, the loss goes way up at UHF frequencies when the line is wet.

The $99.95 price (including tax) also includes installation. Some offer to put it in themselves but a service call is made anyway to be sure it is in and working right. At least 75% of the service calls improve the do-it-yourself reception and are necessary for following up the foul-it-up-yourself installations, because the final picture they get is the best advertisement for others for the service. They report that it takes almost as much time explaining on the phone, etc., how to do it yourself as it does to make a service call and check out or install the system equipment.

They report that a very few local customers (on the cable) actually do subscribe to their movie service, also, because Select runs less repeats than some of the movie channels carried by the cable systems.

The big development and great news for those in STV that they reported is the extreme drop in the price of encoding and decoding equipment in the three years since they started the St. James system. If they had paid the low price they pay for this equipment now when they started in St. James, they say it would have been paid off in a few months. Apparently with many major city full power STV operations going off and dumping tens of thousands of decoders, the manufacturers such as Zenith have lowered their new machine prices in the neighborhood of 75% or more.

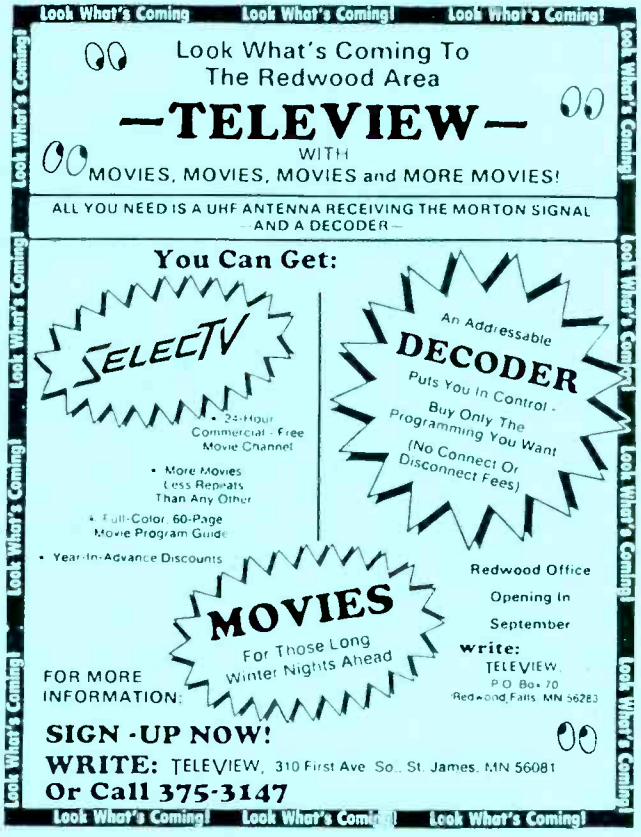
Frank was not too happy with Zenith's so-called "security", which consists, he says, primarily of an oddball screw that normal tools cannot remove. Once inside the decoder, however, the turn-it-off-and-on-only-from-the-station part can be wired around relatively easily. He was also critical of the security of the encoding system where an employee could turn on a "friend's" machine and never have to pay. However, piracy in this rural area just never has been a problem they said, and every time they heard of someone pirating their movies, when they checked into it, it turned out to be false. Everybody knows everybody else in rural areas and, as a result, pirating hasn't been the problem that it would be in major cities.

Regarding satellite competition, I observed practically no dishes in the area. Also saw no satellite dealers. Apparently, the large number of full service stations available from the elaborate translator UHF systems in the area satisfy their needs for regular TV. Frank says they have lost some subscribers to dishes, but very few.

Scrambling of the satellite movie channels in the near future means these viewers with satellite dishes will be paying for the movie channels eventually anyway, so getting it without the expense of a dish, etc., makes sense.

The Rigenhagens report here that a good STV system can now be put on with $50,000 to $75,000 worth of decoding and encoding equipment, compared to the quarter million they put up to get started at St. James. Sounds like welcome news.

Frank says he is available to act as a consultant to those starting up with STV and can save you far more than his charges. You can contact him in Redwood Falls at (507)644-5000. This rural America, Minnesota operator is succeeding at LPTV subscription TV in a very "down" farm and small agricultural town economy. The whole area is depressed and, as you look up and down the main street, you see many businesses discontinuing. Despite the local down economy, this low power operator is making it and expanding as fast as possible to other areas in the same farm belt.



3 Needed to Test Market

We had agreed, on behalf of our application clients, to run a pilot station demonstration as early as possible to prove you can make money with an LPTV in the first year. This was crucial to our own raising money to build numerous stations, and our clients also raising the money to build a large number of cities. With the stakes riding on the success of this "pilot demonstration", we would have to manage it intensely and carefully with scarcely enough time to put several on the air each month for our clients and our own. We obtained our Sioux Falls channel on the air five days after we got the construction permit and have now waited over a year and still no sign of any possibility of settling, buying trading or winning two more CP's we felt we needed in Sioux Falls to make a success right off with the first one. In the meantime, none of our clients have been able to put together three in a market over 100,000 population either, even though they have an understanding they will cooperate and trade amongst each other to allow each other to obtain three in a market.

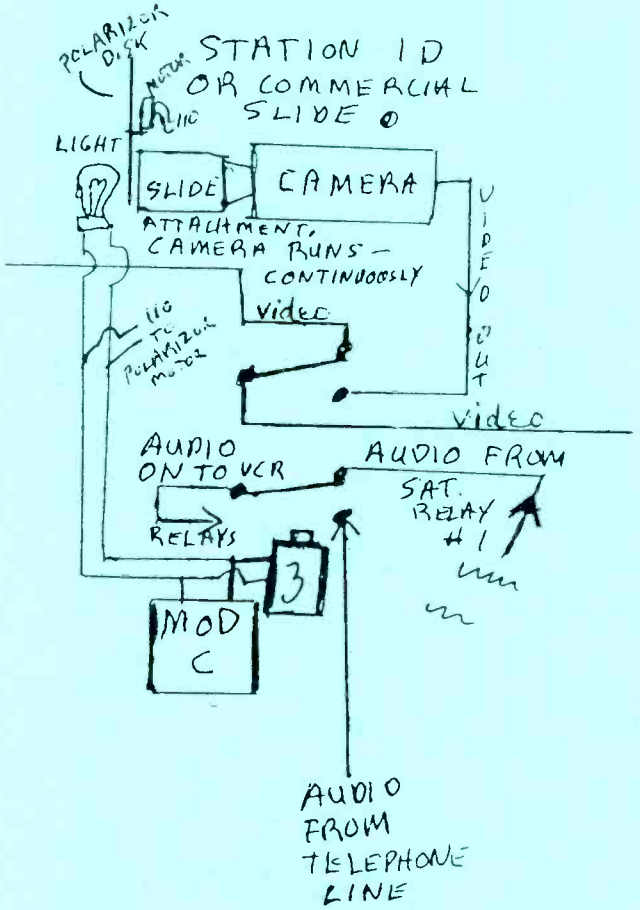
The result is CP's on stand alones in even smaller markets are expiring and are not being built because we have not yet even been able to test run a three-channel operation in a large market yet and do not want to invest in the small markets and get management tied up until we have proven it in bigger markets. The FCC auctioning of licenses would have been far better—at least you could get three in a market at one time and know what the CP's cost. The lottery system, even with filing hundreds of applications, is not conducive to putting several on the air in one area.

Low Power Television CP Forfeitures

FCC rules state that low power TV permittees have one year to construct stations. The following low power station construction permits have been forfeited for failure to construct and the call signs deleted.

AZ	K55DU	Villareal Broadcasting Co.	Flagstaff
AZ	K22AM	Mountain TV Network, Inc.	Vernon
AR	K28AH	Low Power Television, Inc.	Paragould
CA	K15AO	Ronald J. Malik	Merced
CO	K61CO	Black Coalition for Media Diversity	Howard
CO	K40AO	Eddie Robinson	Pagosa Springs
CO	K08KJ	Focus Translators, Inc.	Sterling
FL	W62BC	Minority Entrepreneurs, Inc.	Milbourne
GA	W55AU	Munsch-Westenhaver Co.	Ashburn
HI	K10MH	He's The One Broadcasting	Hanalei
HI	K54AX	Vision Unlimited, Inc.	Honolulu
HI	K24AJ	Atlantic & Caribbean Communications Co.	Lihue
HI	K29AF	Mountain TV Network, Inc.	Lihue
ID	K53BK	Creative Broadcast Communications	Burley
IL	W39AH	Ventures in Communications, Inc.	Springfield
IN	W52AC	Arthur K. and Carl H. Muselman	Geneva
IN	W54AD	TV America Corp.	Terre Haute
IA	K26AI	Mountain TV Network, Inc.	Decatur City
IA	K28AJ	Mountain TV Network, Inc.	Decatur City
IA	K22AI	Crawford Communications, Inc.	Denison
IA	K30AO	Christenson Broadcasting Co.	Humboldt
IA	K43AM	Worthington Daily Globe, Inc.	Spirit Lake
KS	K35AI	Iola Register Publishing Co.	Iola
KY	W38AE	WML TV Co.	Murray
ME	W06AT	Midsouth Broadcasters	Calais
ME	W15AC	Saco River Communications Corp.	Caribou, et. al.
MI	W60AQ	Blue Water Television Service	Port Huron
MO	K22AJ	Women's Low Power Stations	Glendive
MO	K20AH	Frank Merenghi	Maryville
MO	K42AQ	Green Hills LPTV, Inc.	Milan
MO	K08KH	Benton Community Television, Inc.	Mound City, et. al.
MO	K30AN	American Lo-Power Television Network	Trenton
MO	K12NA	Green Hills LPTV, Inc.	Trenton
MT	K08KG	Debra M. Kamp	Miles City
MT	K18AQ	Sylvia G. Franco	Miles City
ND	K10MJ	Harlan L. Jacobsen	Cleveland-Medina
ND	K12AL	Mountain TV Network, Inc.	Devils Lake
NM	K61CQ	Nathan R. Berke and Lucille D. Rubin	Alamogordo
NM	K55DV	Comsat Corp.	Albuquerque
NM	K32AO	Mountain TV Network, Inc.	Central
NM	W04BO	Globe Publishing Co.	Ironwood
NM	K52AQ	Munsch-Westenhaver Co.	Santa Rosa
NM	K54AY	Munsch-Westenhaver Co.	Truth or Consequences
NV	K26AG	Echonet Corp.	Ely
OK	K24AK	He's The One Broadcasting	Weatherford
OR	K35AE	Cascade Pacific Television	Myrtle Creek
TX	K45AP	Tel-Radio Communications Properties	Brownwood
TX	K60CA	American Christian Television System	Brownwood
TX	K09UG	Longhorn Broadcasting	Childress
TX	K55DS	Villareal Broadcasting Co.	Pecos
TX	K07TB	BT Broadcasting Co.	Snyder
TX	K02MP	Orion Broadcast Group, Inc.	Tyler
TX	K48AS	Area Christian TV Station	Uvalde
TX	K30AI	Area Christian TV Station	Uvalde
UT	K07TC	Harlan L. Jacobsen	Moab & Spanish City
UT	K35AG	Women's Low Power Television	Price
UT	K19AH	Mountain TV Network, Inc.	Scipio
VI	W33AF	Island Television Corp.	St. Croix
VI	W50AD	Island Television Corp.	St. Thomas
VA	W43AI	American Black Voice, Inc.	Newport News-Hampton
WA	K19AG	Skagit Valley Publishing Co.	Mt. Vernon-Burlington
WI	W69AT	Channel 10, Inc.	Hinkley, et. al.
WY	K19AI	Focus Translators, Inc.	Cody
WY	K46AR	Quentin L. Breen	Laramie
WY	K03GE	Telemax	Rawlins
WY	K17AG	Women's Low Power Stations	Riverton
WY	K16AI	Telemax	Riverton
WY	K16AG	Southwest Radio Enterprises, Inc.	Sheridan

Live Announcements by Telephone



In the August issue we told you how to control switching between two satellites, turn on and off a "crawl" character generator, all by calling your transmitter on the telephone. In addition, you can insert commercials or programs by calling up two tape decks and even rewind them both by phone. You can also call up a key overlay for weather computer information, etc.

When I drew this up for the August magazine, no one had built one yet (including me). George Gunter had used the BSR telephone unit we recommended for telephone switching of satellites. Well, we've built it now, and it works great, including the one extra thing you can do by telephone: call up the transmitter shack to put a slide on and do a voice announcement over the phone. We said last issue that we would elaborate in the next issue on how to connect the phone for correct volume, etc. It turned out to be relatively simple and straight forward with all parts available from your local Radio Shack. Pictured above is the relay diagram from the August issue on inserting a camera output (use slide, etc.) and below is the phone line interconnect system made simple.

You need to know the disadvantages first. After you push the tone to switch this, the device is on the air, including your telephone voice, and puts out three short beeps to let you know it is ready for the next command, and this beep (not objectionable) goes out over the air. You then can do 30 seconds of voice announcement over the phone live and unmolested, but you have to give it another tone command (even one that doesn't do anything) within 40 seconds or it hangs up on you. That "keep it busy" tone control and the one it takes to switch back to network both will go out over the air and is about 3/4 of a second of a tone burst that is not really objectionable, either. If the machine does hang up on you (because you didn't send a command within 40 seconds), it will only mean that the slide on the air will stay on until you can dial it back again (it will not answer for seven rings).

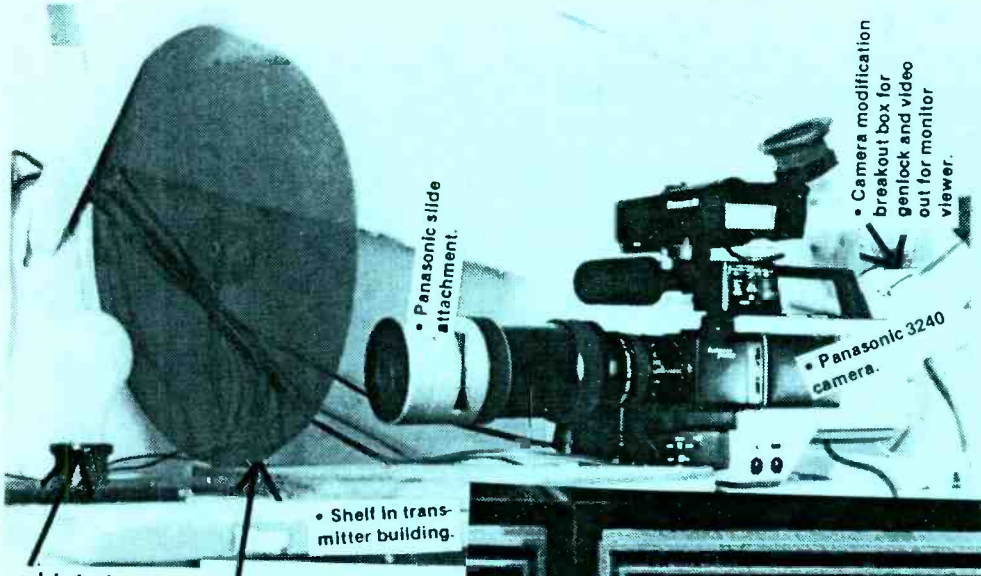
Radio Shack is handy to everybody and, if anything ever foils on you, you can buy another one cheaply enough, so do not knock Radio Shack as a source of supply for your LPTV station: the equipment we mention here all works fine.

You will need a double output jack where your telephone plugs in the wall, one side for your phone and the other side for this device. These little double jacks are available anywhere (including Radio Shack) that sells telephone equipment. That way you can use your phone as well as the equipment mentioned here. You can obtain the next piece, a Radio Shack telephone device, catalog number 43-228, that normally connects to an audio tape device and turns on the tape recorder automatically every time you pick up the phone. It costs $19.95 (bought mine on sale a year ago for $12.95).

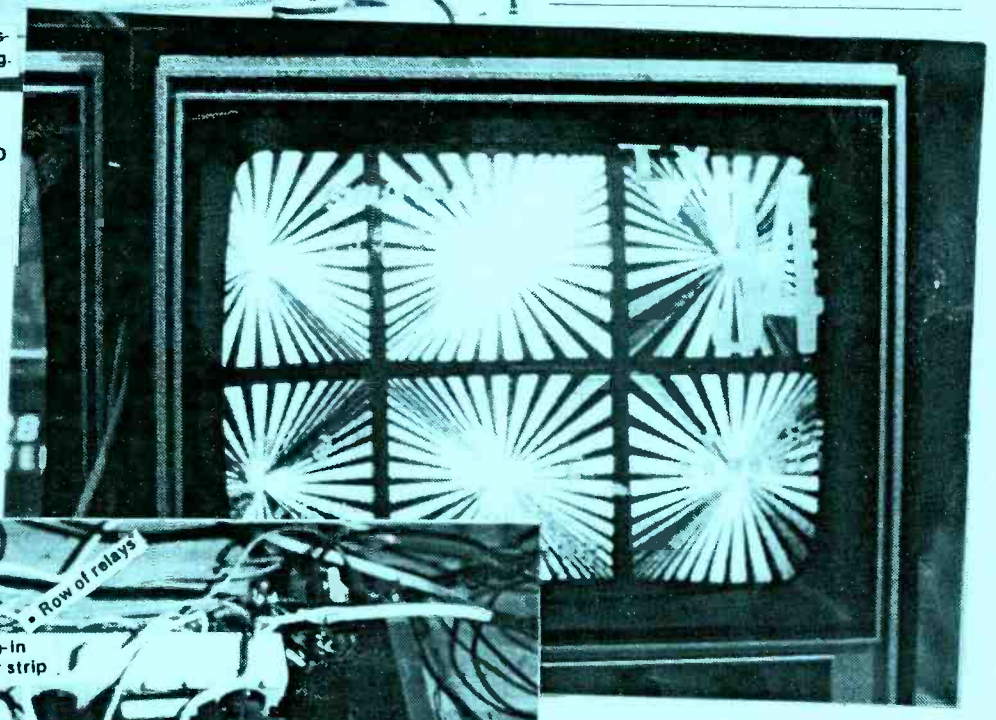
The plug (end of cord) that normally inserts in the "audio in" of the recorder, I run into the "in" of a little box called a "telephone listener"—from Radio Shack, catalog number 43-231, $9.95 (buy an optional AC power supply, catalog number 273-1651, for $8.95 so it doesn't have to run on battery). The loudspeaker is disconnected and the output connected to a small audio transformer (also Radio Shack, about $1.80). The output of that transformer is connected to the relay #3, telephone line section, shown in our repeat of the August diagram. The telephone listener is just used as a little audio amplifier and has a volume control on the side so you can adjust the volume of the audio that comes in on the phone and goes out over the air.

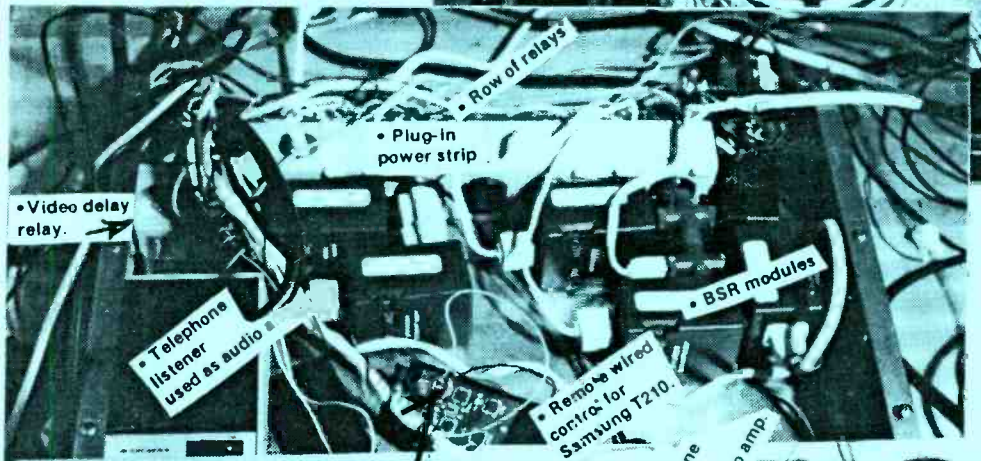
The voice portion here will cost about $42, and you can do it for a lot less probably, but this way is real simple. No soldering except the audio transformer in place of the speaker.

For those of you who didn't see the August issue, this is all controlled over the phone by a BSR device available for $39.95, plus about $15 for each thing to be controlled. These individual BSR "appliance" modules are used to activate relays which cost another $4 or so apiece.



You may have never heard of polarized slides. We have about 80, and they give fascinating motion to your station breaks, etc. The slide shown in the photo here is about five pastel colors and each little box the pattern rotates in motion. We key over that our station break (barely visible here, but it is in bright red and stands still) along with barometric pressure, wind direction, speed, date, time, temperature and whether the barometer is rising or falling. The photo of the camera with a Panasonic slide device attached has a dark circular disc in front of it. When the relay switches in the camera slide video, it turns on the light bulb left and the small motor in the center of the polarized disc, which then rotates and imparts the motion in these polarized slides. We will do an article on polarized material and how you do all of this inexpensively another issue. Incidently, the small box mounted externally on the right end of the Panasonic 3240 is for using it driven by external sync (genlock). With no external sync it runs on its own internal sync chip. There is also a "video out" from that small box so you can use a small TV monitor for a viewer instead of the small eyepiece viewer.





Hit-Formatted Low-Power Clip Station

Houston's TV5 Has 'Community Touch'

NEW YORK Houston Hit Video/TV5 immediately stood out on the dial when it came into being just over a month ago as a 24-hour-a-day, low-power stereo VHF video music station. It also stands out among other video music outlets in that it is fully geared to a local contemporary hit format monitored by a grand total of 25 VJ/air personalities.

This gives the station a "unique community touch," according to TV5 program director Mike Opelka, who notes that all the station's VJs hail from the Houston area except for one, who was imported from Kansas City's CHR station ZZ99. That and another station there and one in Miami are all owned by TV5's owner, the Kansas City-based Wodlinger Broadcasting Co.

Opelka adds that of the 25 VJs, seven also serve as air personalities at seven different Houston radio stations covering the CHR, urban contemporary, AOR, light and classic rock formats. He says that while TV5's programming is basically "mainstream CHR all day," these VJs are given the option to weight their shows' programming according to their "radio station exclusivity."

Opelka further notes that even though the contemporary hit video format is a constant, it still allows room for new music and for catering to local music tastes.

As for competition from MTV, which is available in Houston, Opelka maintains that TV5's "community-mindedness" gives it a big advantage, as does the fact that his station doesn't have to tailor its programming to the rest of the country.

TV5 is targeted to young adults in the 18-34 age bracket. It provides updates on weather, traffic, music and concert information, and other local news during the various daily and weekend shows.

Monday through Friday programming begins with the co-hosted "Breakfast Club" from 6-9 a.m., what Opelka calls the video "shave and shower" slot. Similar to radio's morning drive, the show offers breezy news breaks with an accent on local sports, weather and concert listings.

The following hour's "Video Kaleidoscope" retains standard CHR programming, but the 10-11 a.m. "Video A-Go-Go" is livened up by an in-studio dance party atmosphere. From 11 a.m.-1 p.m., "Rock Cafe" uses the station's remote capability to broadcast from different eateries in town. From 1-2 p.m., VJ Robin Craig plays "standard rock" on "Robin's Rockin' Videos."

The "Video Air Show" from 2-3 p.m. plays the same "lighter" material that air personality Erik Garcia programs at radio station KFMK. "Video Feud," from 3-4 p.m., drums up viewer response for two competing clips, with the winner getting shown at the end.

"Rock Around The Town" fills the next three hours with the standard CHR clips, but is broken at 6:30 p.m. by "What's Happening?," a five-minute general information feature concerning Houston events, volunteer activities, music events and local gossip.

From 7-8 p.m., "Station To Station" features different Houston personalities nightly in longer breaks allowing them to talk about themselves. Monday night programs in this slot are co-hosted by viewers selected through card drawings.

The 8-9 p.m. "Hit City Video" hour is fairly standard, as is the co-hosted "Prime-Time Video" hour that follows, though Opelka reports a "greater influx of heavier programming" from 6 p.m. on.

The 11 p.m.-12 a.m. "London Times Video," hosted by Lisa London, features clips by British artists, while the 12-2 a.m. "Danger Zone" show is TV5 at its heaviest, with the last hour of the Saturday night version being all metal. From 2-6 a.m., TV5 programs video nonstop.

Weekend programming overlaps somewhat with daily, though it is more air personality-hosted and slanted accordingly. Sunday's schedule includes a "Top 10 Countdown" show tabulated from record store reports and requests tallied from four heavily-used request lines.

Noting that all VJ breaks are live, Opelka maintains that TV5 has a "freshness and electricity you don't see on other canned outlets." He adds that "guest artist breaks" have been taped by Air Supply and by Power Station's Michael Des Barres and Tony Thompson.

Opelka hopes soon to have remote capability to highlight music talent from area clubs. He says that Houston talent is already promoted as often as possible during news breaks, and adds that he hopes to start airing local videos as soon as those already submitted are reviewed.

Being "right there in the middle of the dial," TV5 hasn't advertised, but local press support has included front cover features in both the Houston Post and Houston Chronicle tv guides. The station has so far undertaken promotions at the Astro World amusement park and at Cardi's rock club, which held a "TV5 Night" in conjunction with an appearance by Alcatrazz. In addition, TV5 is getting involved in movie promotions.

As for the low-power channel's reach, Opelka concedes that TV5 can't quite cover all of Houston in the 15-mile radius from its downtown antenna. But he says he has heard from viewers who are able to pull it in with their own antennas 50 miles away.

BROADCAST STATION TOTALS FOR SEPTEMBER 1985

AM Radio	4,799
FM Radio	3,839
FM Educational Radio	1,211
UHF Commercial TV	379
VHF Commercial TV	541
UHF Educational TV	1,984
VHF Educational TV	2,985
UHF Low Power TV	130
VHF Low Power TV	224
Total Radio	9,849
Total TV	6,243

Reprinted from **Billboard** magazine,
October 5, 1985.

Winners in the September 27, 1985 lottery are:

CMM, ch. 47, Jonesboro, AR; Marcia Crittenden, ch. 8, Great Falls, MT; Jose Armando Tamez, ch. 10, Brainerd, MN; Hearst, ch. 21, Bad Axe, MI; Mountain TV Network, ch. 24, Ashton, ID; Oregon Public Bcg., ch. 36, Burns, OR; Mountain TV Network, ch. 38, Burns, OR; Christian Enterprises, ch. 69, Fredericksburg, VA; Mountain TV Network, ch. 18, Ely, NV; Nemont Cablevision, ch. 24, Poplar, MT; Jo Ann's Balloon Boutique, ch. 18, Ogallala, NE; Mountain TV Network, ch. 40, Burns, OR; Localvision, ch. 5, Alliance, NE; Mountain TV Network, ch. 45, John Day, OR; Mountain TV Network, ch. 16, Burns, OR; Enid TV, ch. 7, Enid, OK; Mountain TV Network, ch. 24, Buras, LA; Mountain TV Network, ch. 24, Buras, LA; Mountain TV Network, ch. 41, John Day, OR; Lidia Rodriguez, ch. 54, La Grande, OR; Blue Mountain Translator, ch. 52, La Grande, OR; Mountain TV Network, ch. 16, Ely, NV; Mountain TV Network, ch. 21, Eureka, NV; Micaela Pereira, ch. 10, Akron, OH; Nancy Douglas, ch. 34, Buras, LA; Mountain TV Network, ch. 30, Buras, LA; Nancy Douglas, ch. 42, Buras, LA; Owensboro Bcg., ch. 12, Owensboro, KY; Debra Kamp, ch. 42, Jackson, WY; Bob Jacobucci, ch. 33, Idaho Falls, ID; Evarista Romero, ch. 20, Baker, OR

Evarista Romero, ch. 7, Oklahoma City, OK; BT Bcg., ch. 9, Clovis, NM; Communicators of Memphis, ch. 65, Memphis, TN; Community Television, ch. 42, Memphis, TN; Mike Mendoza, ch. 2, Woodward, OK; American Lo-Power TV, ch. 43, Clovis, NM; Cannan Communications, ch. 28, San Jon, NM; Local Power Television, ch. 46, Cookeville, TN; Huachuca Herald, ch. 44, Sierra Vista, AZ; Marcia Painter, ch. 13, Brownwood, TX; Jose Armando Tamez, ch. 23, Dodge City, KS; Wireless Cable Bcg., ch. 50, Gorham, KS; Albany Television, ch. 23, Albany, GA; Susan Easton, ch. 57, Bismark, ND; KOAT Television, ch. 9, Santa Fe, NM; Weather Center International, ch. 5, Madison WI; Juan Ramon Ortiz, ch. 2, Bozeman, MT; Judith Acevedo, ch. 28, Ogallala, NE; Minerva Rodriguez Frias, ch. 44, Ogallala, NE; Hemelinda Rodriguez, ch. 26, Ogallala, NE; Evarista Romero, ch. 20, Ogallala, NE; Koplar Communications, ch. 51, Palermo, CA; Colleen Demery, ch. 6, Watertown, SD; Kay Cee Television, ch. 18, Pierre, SD; Kelly Guglielmi, ch. 31, Ventnor, NJ; Blacks Desiring Media, ch. 49, Klamath Falls, OR; CMM, ch. 29, Alamogordo, NM; John Cook, ch. 36, Buras, LA; Linda Clevenger, ch. 41, Wabash, IN; The Little TV Station, ch. 23, Coos Bay, OR; Cyntation, ch. 16, Idaho Falls, ID; Community Service, ch. 10, Vero Beach, FL; Mountain TV Network, ch. 41, Choteau, MT; Evarista Romero, ch. 55, Manteo, NC; Anthony Easton, ch. 40, Buras, LA; Mountain TV Network, ch. 21, Clayton, NM; Heidi Terrill, ch. 13, Kerrville, TX; Micaela Pereira, ch. 56, Bangor, ME; Omar Villareal, ch. 26, Denison, TX; Tel-Radio Communications, ch. 19, Clayton, NM; Family Television, ch. 26, Redding, CA; Second Local Power Television, ch. 59, Goldsboro, NC; Juan Ramon Ortiz, ch. 21, Sheridan, WY; Judith Acevedo, ch. 16, Ogallala, NE; Group Seven Communications, ch. 36, Hilltop, AZ; Low Power Technology, ch. 52, Ames, IA; Central California Broadcasters, ch. 26, Santa Ana, CA.

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL85-21 Released: September 23, 1985

BPTTL-830901LK Wireless Cable Broadcasting Company Woodston, Kansas	Channel 65
BPTTL-830312KR3 Mountain TV Network, Inc. Tyro, Kansas	Channel 66
BPTTL-830322LK Mountain TV Network, Inc. Randall, Arkansas	Channel 54
BPTTL-830311KU Mountain TV Network, Inc. Bogalusa, Louisiana	Channel 14
BPTTL-830311K6 Mountain TV Network, Inc. Grangeville and Rural Idaho County, Idaho	Channel 27
BPTTL-830315LS Mountain TV Network, Inc. Thompson Falls and Rural Sanders County, Montana	Channel 27
BPTTL-830308N7 Mountain TV Network, Inc. Liberal, Kansas	Channel 46
BPTTL-830317LA Mountain TV Network, Inc. Dillon, Montana	Channel 22
BPIVL-820111TH State of Alaska Napaskiak, Alaska	Channel 2
BPTTL-830308J6 Mountain TV Network, Inc. Liberal, Kansas	Channel 52
BPTTL-830317LM Mountain TV Network, Inc. Dillon, Montana	Channel 20
BPTTL-830317LC Mountain TV Network, Inc. Dillon, Montana	Channel 40
BPTTL-830308H7 Mountain TV Network, Inc. Liberal, Kansas	Channel 64
BPTTL-830308G8 Mountain TV Network, Inc. Liberal, Kansas	Channel 58
BPTTL-830308H3 Mountain TV Network, Inc. Liberal, Kansas	Channel 54
BPTTL-830314RT Mountain TV Network, Inc. Augusta, Arkansas	Channel 36
BPTTL-830311KM Mountain TV Network, Inc. Teterville, Kansas	Channel 48
BPTTL-820623A5 Blacks Desiring Media, Inc. Crossett, Arkansas	Channel 46
BPTTL-830325A3 Localvision Scottsbluff, Nebraska	Channel 55
BPTTL-830311QY Mountain TV Network, Inc. Teterville, Kansas	Channel 50
BPTTL-83030904 Mountain TV Network, Inc. Tyro, Kansas	Channel 34
BPTTL-830901JZ Wireless Cable Broadcasting Company Woodston, Kansas	Channel 35

BPTTL-830901LJ
Wireless Cable Broadcasting Company
Woodston, Kansas — Channel 63

BPTTL-830312WW
Mountain TV Network, Inc.
Tyro, Kansas — Channel 40

BPTT-820812TZ
King Broadcasting Company
Corvallis & Albany, Oregon — Channel 26

Low Power/Television Translators: Proposed Construction Permits

Report No.: CL85-22 Released: October 8, 1985

BMPTVL-830513IH
State of Alaska
Circle Hot Springs, Alaska — Channel 3

BPTTL-840116XC
Shaltry Communications
Aberdeen, South Dakota — Channel 45

BPTVL-850614PS
ARCO Communications, Inc.
Kuparuk, Alaska — Channel 2

BPTTV-820209ID
Wrangle Mountain TV Club, Inc.
Gakona, Gulkona Village, Alaska — Channel 3

BPTTL-830309A6
Mountain TV Network, Inc.
Tyro, Kansas — Channel 22

BPTTL-830314V5
Mountain TV Network, Inc.
Cedardale, Oklahoma — Channel 22

BPTTL-830309P7
Mountain TV Network, Inc.
Fallon, Etc., Nevada — Channel 24

BPTT-830401B7
Blue Mountain Translator District
Elgin, Oregon — Channel 40

BPTTL-8303144U
Mountain TV Network, Inc.
Cedardale, Rural Woodward County and Rural Dewey County, Oklahoma — Channel 34

BPTTL-830314UN
Mountain TV Network, Inc.
Cedardale, Rural Woodward County and Rural Dewey County, Oklahoma — Channel 18

BPTTL-821214TT
Local Communications
Bedford, Indiana — Channel 19

BPTTL-830314HB
Mountain TV Network, Inc.
Red Lodge, Montana — Channel 59

BPTTL-820617R2
Rupert E. Phillips
Mountain Home, Arkansas — Channel 60

BPTTL-810112IO
Residential Entertainment, Inc.
Traverse City, Michigan — Channel 56

BPTTL-830224RS
Mountain TV Network, Inc.
Stuttgart, Arkansas — Channel 43

BPTTL-8303144G
Mountain TV Network, Inc.
Heppner, Oregon — Channel 28

BPTTL-830309XQ
Mountain TV Network, Inc.
Seaside, Oregon — Channel 50

BPTVL-830318ID
State of Alaska
Emmonak, Alaska — Channel 5

BPTTV-830210QL
State of Alaska
Sheep Mountain, Alaska — Channel 8

BPTTV-850610ML
State of Alaska
Halibut Cove, Alaska — Channel 8

BPTVL-820401ST
State of Alaska
Central, Alaska — Channel 9

BPTVL-820920TL
State of Alaska
Atkasuk, Alaska — Channel 4

BPTTV-850610LM
State of Alaska
Atmautluak, Alaska — Channel 5

BPTVL-850610MR
State of Alaska
Tuluksak, Alaska — Channel 8

BPTTL-821025RB
Community Television
Sessoms, Georgia — Channel 30

BPTTL-830309PC
Mountain TV Network, Inc.
Forman, North Dakota — Channel 27

BPTTL-830309SS
Mountain TV Network, Inc.
Forman, North Dakota — Channel 33

BPTTL-830312ZV
Mountain TV Network, Inc.
Forman, North Dakota — Channel 29

BPTTV-850610LJ
State of Alaska Division of Telecommunications Operations
Napakiak, Alaska — Channel 13

BPTVL-830217SH
State of Alaska
Sheep Mountain, Alaska — Channel 12

BPTVL-820528TW
State of Alaska
Eek, Alaska — Channel 11

BPTVL-850610LL
State of Alaska
Atmautluak, Alaska — Channel 12

BPTVL-820528TU
State of Alaska
Kwigillingok, Alaska — Channel 11

BPTTL-810116PD
Near North Communications, Inc.
South Bend, Indiana — Channel 69

BPTTL-821025RL
Thelma W. Anglin
Sessoms, Georgia — Channel 40

BPTTV-850617UX
Alaska Public Television, Inc.
Kenai & Soldotna, Alaska — Channel 12

BPTTL-820702TU
Midsouth Broadcasters
Southport/Columbia, Tennessee — Channel 34

BPTTL-820623TU
Tahoe Daily Tribune, Inc.
Elko, Nevada — Channel 20

BPTTL-830314V6
Mountain TV Network, Inc.
Cedardale, Oklahoma — Channel 54

BPTTL-8303144T
Mountain TV Network, Inc.
Cedardale, Oklahoma — Channel 26

BPTTL-830314F5
Mountain TV Network, Inc.
Cedardale, Oklahoma — Channel 56

BPTTL-830314G9
Mountain TV Network, Inc.
Limon and Rural Lincoln County, Colorado — Channel 60

Lo-Power Community TV

1986
November

What's Happening

After four years, the commission is finally bouncing applications for not having a tower site. Apparently they were getting tired of running the same lotteries over and over when there were 10 names, all engineered and filed by the same party with made up, fictitious tower sites. One would win, there would be protests that the tower site did not exist, and eventually they would throw it out, hold the lottery again, and another winner with the same non-existent tower site, more petitions to deny, etc., etc. Now, apparently, they are comparing with the tower data base, and if there is no tower at those coordinates, they are bouncing the application.

This, however, has caused us some problem, since we often filed on a tower four or five years ago and it is no longer where the radio station we got permission from now has their tower, so we have to file petitions for reconsideration.

One of these in the past we filed information that the original radio station had moved, the tower we filed on now had a new owner and the new owner still had room. They threw us out on reconsideration because we did not file an affidavit testifying to that by the old or new owners.

Be forewarned, once they throw you out even though you had a legitimate tower site at time of filing, it is hard to get back in the pile. This contrasts with all the evidence that certain filers had 100% phoney tower sites and they have up until now refused to take any action at all.

Staff action seems to be more whim than by law. If you follow FCC LPTV public notices carefully, you will see a wide disparity of what goes on and what gets okayed and what doesn't, depending on what your name is, politics, etc.

THE LATEST

No window till spring ... $375 application fee to apply.

VARYING VIDEO LEVELS

One of the things you discover when switching automatic or manned from one satellite network to another (we are switching between seven) is that they maintain separate and different video and audio levels. We use a processor that does a little to take out the differences in video level, and we use an audio equalizer in the line for one of the sources that have low audio to raise it up a bit. They also have varying sync levels so it would be nice to have:

1. AGC video that is constant;
2. Audio limiter that keeps audio within certain parameters;
3. TBC (time base corrector) that maintains sync at certain levels, etc.

We are using a CTVN-20 modulator that has a blank space to insert a video AGC (about $200) and have one on order but not installed yet. The audio we are getting by with, and the cost would be $300 up for that auto control. Time base correctors start at $2,000, and we get along and will get along fine without that for another year or two.

ABOUT OUR COVER:

RCA digital VCR used here to insert picture from VHS station break tape into satellite received shopping channel. All full color, not B & W as shown here.

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5; subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost.

 Editor and Publisher: Harlan L. Jacobsen.

Send address changes to 7432 E. Diamond, Scottsdale, AZ 85257; phone (602) 945-6746.

Picture within picture as shown on cover. Another way to identify your station without bothering network picture. K-JAY is trade name, small K34AJ appears in lower right corner along with city in small picture.

DIGITAL EFFECTS UNDER $700

About a year ago we ran a cover and article about the consumer digital items becoming available. We purchased an RCA digital effects VCR. Remember, they are not yet recording (coming soon) video digitally but are merely processing the analog tape output digitally.

So what does this mean to an LPTV station operator? Well, five years ago you could buy similar broadcast effects for about $40,000. Now here it is in a consumer item for under $700.

The first and most used effect is picture within picture. The VHS RCA digital VCR has only one video input, therefore, one of the pictures has to come from the tape. We have taped two hours of station breaks, and you can superimpose a little picture of your call letters, town, etc. right in and over the network picture. You tap one bar and the picture is inserted. Tap it a second time and it becomes the main picture and the other one becomes the little picture inserted. The sound always switches with the big picture. You can place the little picture in any of the four corners and instantly move it by tapping another bar. NEC has a bigger inserted picture which I believe would be better than RCA's smaller insert. Another manufacturer is reported to have an adjustable size insert which would be ideal.

You need a VHS VCR in your station anyway. About $250 for the cheapest HQ VCR, so we are talking here about getting digital effects for an additional $350 to $400, a good investment in my opinion.

The next feature I like about this VCR is "freeze." If you are playing a tape and you are switching to network programming and your tape runs out four seconds before you are clear to switch, you have a problem. With this machine you just punch freeze and it holds a perfect still picture as long as you like (you could use this in sports). The audio on the tape continues, and when you punch it off it goes to wherever the video is at that point.

The next digital effect is mosaic. You have seen this on network shows when they end a scene, they go to mosaic (little squares like looking through bumpy glass) and then change scenes.

The next one is posturization. This you have seen on CNN. One of their lead-ins has posturization of personnel that looks like paint by numbers. It is a professional looking effect.

This machine can only do one of these effects at a time but you need to know about these machines before you buy another VHS VCR. Be sure the unit has HQ circuitry. This RCA puts out a great picture when used as a standard VCR. It plays standard tapes from other machines, does all three speeds, has a timer, etc. Never mind the model number--it is the only digital VCR they make.

KU -- Superb, but ...

We have mentioned in previous issues that there are two different satellite frequencies -- C-band with all the eight- to twelve-foot dishes you see everywhere, and the new KU-band.

C-band is the same frequency the phone company uses to go cross country. KU is much higher in frequency. Bell Telephone sometimes bothers satellite C-band reception, particularly if your LPTV is downtown where most Bell microwave systems are located. In contrast, KU-band is affected by rain and snow. Here is our experience with KU ...

INN (Independent Network News) is available both on C-band and KU. They wanted us to agree to take it off of KU, primarily because, I think, they are trying to discontinue C-band. It is predicted most broadcast services will be moved to KU within the next five years (over 100).

We bought a separate dish permanently directed for $250 (small, four feet). Receiver and the whole thing came to a little over $500 and made it handier for us to automatic switch. The NBC feeds on KU are absolutely astonishing, they are so good.

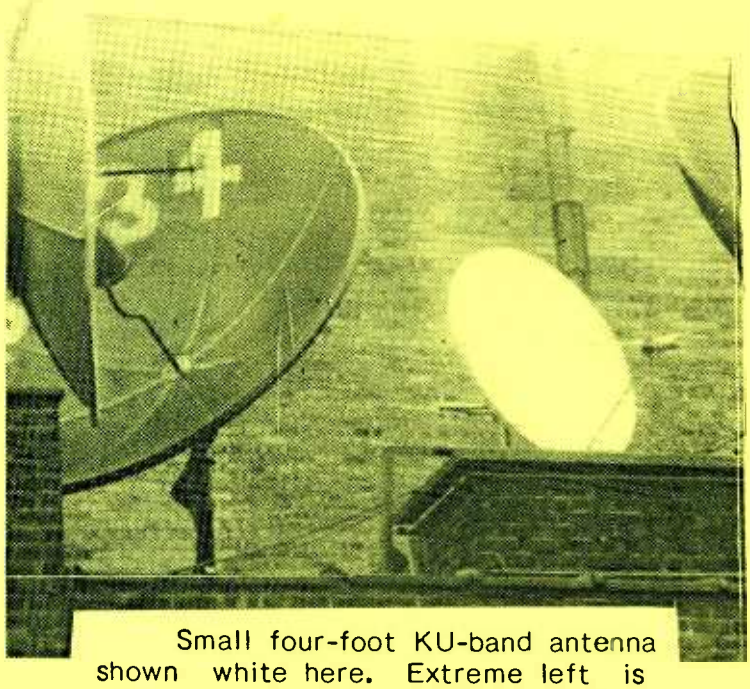
Unfortunately, the transponder for INN is very weak in comparison to NBC feeds and the picture was unusable. We were using a Panasonic receiver but discovered a $50 cheaper General Instrument receiver that cleaned up the picture to make it usable.

We changed all of our advertising saying INN was now 8:30 p.m. (KU-band feed) instead of the former C-band 9 p.m. The first night it rains and reception was terrible. (No reserve for rain effect, we were just making it.)

We have gone back to C-band INN, and we are going to use a dual feed with one of our C-band dishes. A larger (bigger than four feet) dish will solve the problem. You can use the same C-band dish with a dual feed for KU, but then you have to move it for different birds, and you need to be manned to do that. With a separate dish for KU, you could switch automatically daily.

The other consideration in automatic switching is C-band INN is stuck in between another network we have no agreement to carry. KU-band has a longer prefeed lead in and exit so if your timing on the switch (automatic) is not to the second, it doesn't matter. C-band we cannot switch automated precisely enough.

In KU-band they leave you actual holes for local commercials (black screen), whereas with C-band you have to override (switch out) other commercials.



Small four-foot KU-band antenna shown white here. Extreme left is side view of bent-up dish used for STL (UHF ch. 23). Dish in background is 10-foot C-band. Dual feed will be added to it so same dish can be used for KU.

DRIFTING SATELLITE RECEIVERS

Many of us are installing LPTV stations with satellite programming and are operating unmanned. This poses one little problem you need to know about; actually, two problems.

The first is that some satellite receivers (nearly all consumer types) do not lock back up perfectly on the same channel should the power company be off for a while and then come back on. It can be embarrassing if your unmanned station goes off and comes back on with an X-rated satellite channel which may be right next to the one you are nor-

mally carrying. Believe me, it has happened more than once. What you need is a commercial satellite receiver that is made to lock up again on the originally tuned transponder (name for satellite transmitter's channel).

The second thing to be aware of is the fact that satellite dishes all have either an LNA or LNB at the focal point (low noise amplifier or low noise block converter). Both amplify the incoming signal, and the LNA has an externally attached downconverter while the LNB has this built in. What happens is both downconverter systems are out in the cold so to speak and older systems will often downconvert about a half channel different when it gets 30 below zero compared to 100 above. Some of the newer systems are hardly moved by temperature, so when purchasing a satellite receiver for an unmanned station, 'be sure it is a commercial receiver and nearly drift-free with temperature change.

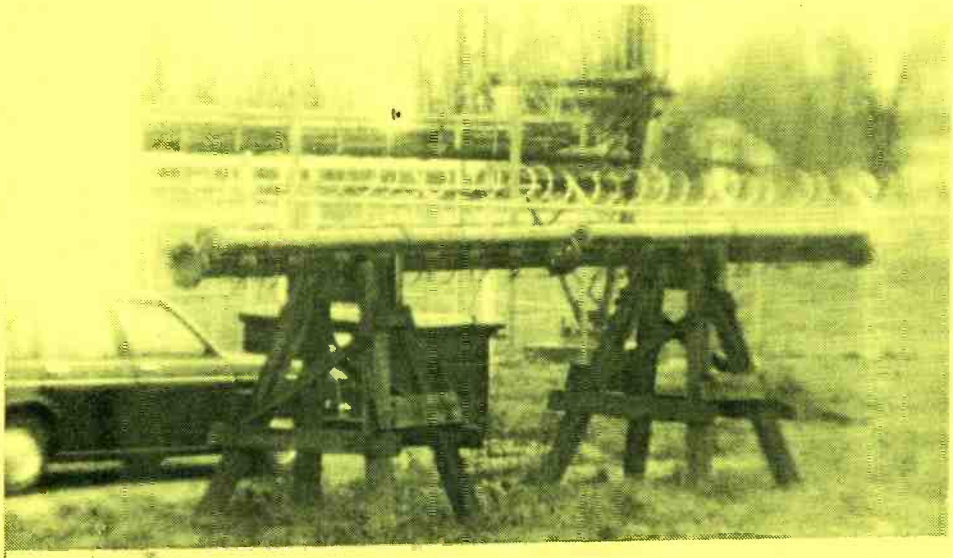
Sorry ... Issues get later and later, but, we wanted to mail instantly any FCC window information that came out (promised for two years to be in 1986, remember?). It is now stated "no window till spring of 1987" when you ask. So we are finally mailing it out--minus any big news on a window.

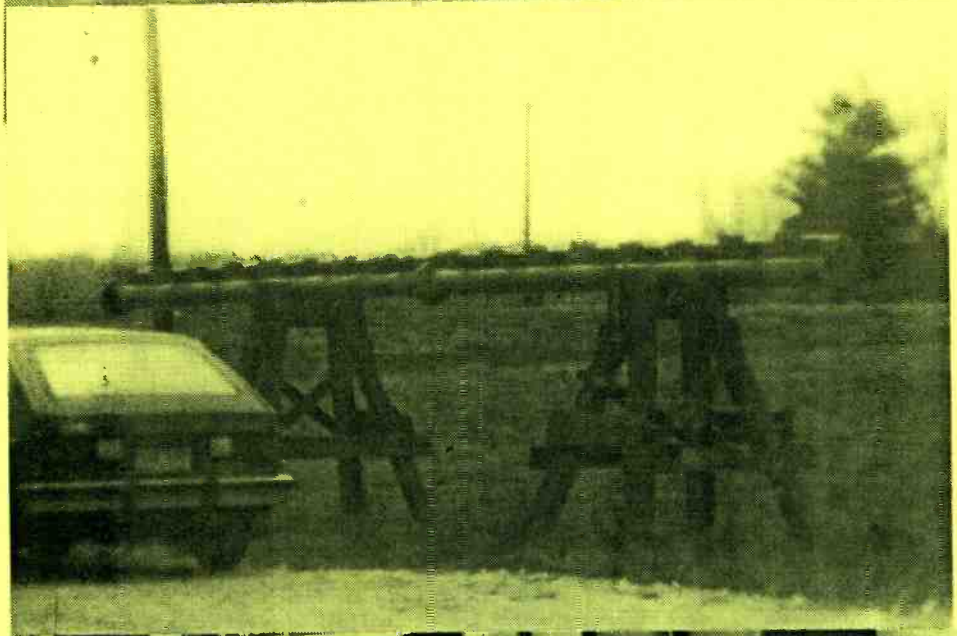
Satellite dish mover control shows what satellite you have tuned in. Memory also changes polorotor to horizontal or vertical automatically when it goes back to that bird.

Older commercial receiver drifts far more than newer model below it by same firm (Drake).

This receiver currently stays on satellite. Hand crank moveable so it sits on same bird all day except in emergencies.

$1,400 enhancer adds sharpness to pictures made with less expensive cameras. Also used with most satellite reception.





Channel 39 Bogner B16U (worth $27,000 new) that we bought used from an educational station in Indiana. Picture is blurry because it was raining. Antenna weighs over 1,000 pounds but can be separated in the middle. We had to build a box to ship it, and lumber cost over $200. Crane to load it cost us $150. Freight to New York around $400. Bogner gets $1,500 to change channel. Have not yet found anyone with tower strong enough to hold that weight.

Theory, wiring and operation of low cost studio starts in December issue.

Also, story and photos on Columbus, Ohio low power operation on ch. 8.

DO SHOPPING CHANNELS PAY OFF?

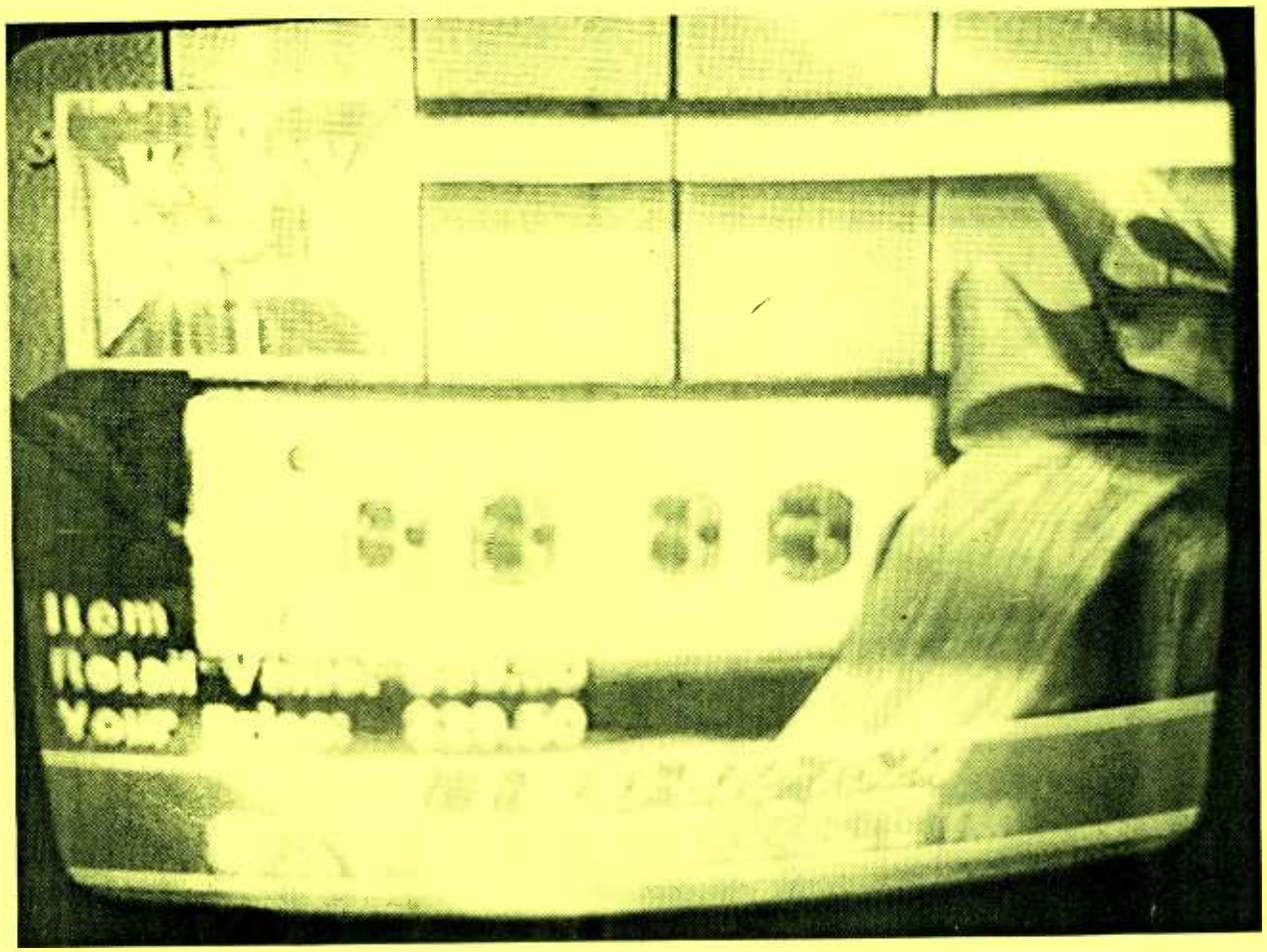
The big question still out, with shopping channels, is how much commission in dollars and do they pay you on time or ever, etc.?

We really do not have concrete figures yet, but it is now to the point where we have some clues and can give you what amounts to, at best, a guesstimate.

My best guess is if you solidly have 15,000 homes who receive well and watch your channel regularly, you will do about $7,500 a year in commissions. In other words, the guess is that the average viewer will order about $6.50 a year and you'll clear about 50 cents per year per viewing set. Run less than 24 hours and with 15,000 sets you'll run 50 cents to $3 an hour commission when run in average rated time. Hardly worth the trouble unless you operate totally unmanned and operate 24 hours. We are currently testing several by switching between four shopping networks paying between 5% and 8%. One of these only pays every three months so it will be a while before the jury is in. Also, since we are just going by November and December, not exactly typical months, it will be a while before we know what you can normally expect as income (we started last week of November).

In contrast, we "guess" that you should average with a good sales force $25 to $50 per set local annual traditional ad sales. But there you have to triple your initial outlay (investment) to include production facilities, all that interest, and pay personnel, ad sales, bookkeeping, etc. The question is, are you money ahead to settle for say 50 cents per year per set with little outgo when you carry shopping channels 24 hours and just collect a commission?

We will give you more concrete figures as we get them. Another question, does it pick up as people get used to it (or hooked on it), or do your sales go down later when the novelty wears off?



NOTICE OF SELECTION BY LOTTERY

MUTUALLY EXCLUSIVE CASES INVOLVING LOW POWER TELEVISION AND TELEVISION TRANSLATOR APPLICATIONS

Report No: TS-35 Released: November 5, 1986

Notice is hereby given of the results of the October 31, 1986, public lotteries to determine the award of construction permits for low power television or television translator stations in the mutually exclusive cases listed below. The application listed with each case is the tentative selectee for the construction permit grant. Petitions to deny the selectee must be on file with the Commission not later than 15 days from the release date of this public notice. Pursuant to Section 73.3584(c) of the Commission's Rules, the selectee may file an opposition within 15 days of the filing of the petition.

Absent the filing of petitions to deny and upon determining that the selectees are otherwise qualified, grant of construction permits to the selectees listed below will be made 30 days from the release date of this public notice.

FILE NO.	APPLICANT NAME/CITY OF LICENSE	
L86-815 BPTTL-HK0308SW	Howard Wapner/Plattsburg, NY Channel 14	41 CONSHOHOCKEN STATE RD BALA-CYNWYD PA 19004 REQ:CHAN. 14; ERP 19.3KW
L86-863 BPTVL-830531IG	Jeffco Broadcasting/Alliance, Hemingford, NE/Channel 07	5442 S. 48TH ST. TEMPE AZ 85040 REQ:CHAN. 07; ERP .206KW
L86-947 BPTTL-GF0308QS	Constance David/Carson City, NV Channel 39	4500 46TH STREET, N. W. WASHINGTON DC 20016 REQ:CHAN. 39; ERP 44.5KW
L86-1078 BPTTL-GS0308RX	Susan Klaus/Beachwood, OH Channel 31	2650 N. LAKEVIEW # 302 CHICAGO IL 60614 REQ:CHAN. 31; ERP 0.55KW
L86-1124 BPTTL-GZ0308NC	Carter Broadcasting Corporation/ San Diego, CA/Channel 19	312 STUART STREET BOSTON MA 02116 REQ:CHAN. 19; ERP .761KW
L86-1202 BPTTL-EJ0307MY	Stacy L. Davis/Austin, TX Channel 30	4505 LAKE STREET LAKE CHARLES LA 70605 REQ:CHAN. 30; ERP 24.9KW
L86-1240 BPTTV-810217IT	Cozzin Communications Corporation/ San Diego, CA/Channel 03	29425 CHAGRIN BLVD. PEPPER PIKE OH 44122 REQ:CHAN. 03; ERP 6.39KW
L86-1242 BPTTL-HK0308RP	Kim Mooney/Fargo, ND Channel 56	2735 1/2 PINE STREET BOULDER CO 80302 REQ:CHAN. 56; ERP 21.0KW
L86-1253 BPTTL-810112IY	Residential Entertainment, Inc./ Cedar Rapids, IA/Channel 60	P.O. BOX 9090 TYLER TX 75711 REQ:CHAN. 60; ERP 9.84KW
L86-1260 BPTTL-AG0305TF	Shaltry Communications/Fond Du Lac, WI Channel 65	53 WEST VIRGINIA PHOENIX AZ 85006 REQ:CHAN. 65; ERP 10.5KW
L86-1270 BPTTL-HJ0308XH	Juan Ramon Ortiz/Vandalia, IL Channel 63	3124 VANDENBURG DRIVE WICHITA KS 67210 REQ:CHAN. 63; ERP .963KW

L86-1282 BPTTL-820318TT	Transamerica Broadcasting Co., Inc./Marathon, FL/Channel 19	P.O. BOX 1 HILTON HEAD SC 29928 REQ:CHAN. 19; ERP 36.2KW
L86-1296 BPTTL-HJ0308LN	Sonny Persad/Auburn, NY Channel 48	BOX 339 AUBURN NY 13021 REQ:CHAN. 48; ERP 1.15KW
L86-1306 BPTVL-840223MV	Community Communications Incorporate/ St. Cloud, MN/Channel 13	1310 29TH AVENUE SOUTH WISCONSIN RAPIDS WI 54494 REQ:CHAN. 13; ERP .70 KW
L86-1343 BPTTL-GM0308XM	Jose Castellanos/Fort Dodge, IA Channel 46	3417 E.YALE PHOENIX AZ 85008 REQ:CHAN. 46; ERP 1.31KW
L86-1344 BPTTL-GE0308SC	Gregory A. Petersen/Pittsburg, PA Channel 59	2292 KINCAID STREET EUGENE OR 97405 REQ:CHAN. 59; ERP 2.08KW
L86-1348 BPTTL-GZ0308WM	Gerald D. Kamp/LA Grande, OR Channel 33	1204 WEST 4TH STREET EUGENE OR 97402 REQ:CHAN. 33; ERP 4.2 KW
L86-1349 BPTTL-HK0308PW	Lawrence P. O'Shaughnessy/Lewiston, ID Channel 18	P.O. BOX 1157 WHITEFISH MT 59937 REQ:CHAN. 18; ERP 2.57KW
L86-1350 BPTTL-HC0308SO	Deanna Hinojosa/Montgomery, AL Channel 55	P.O. BOX 355 MERCEDES TX 78570 REQ:CHAN. 55; ERP 1.43KW
L86-1355 BPTTL-821027TS	Okla Publishers Elec. Communications/ Sickles, OK/Channel 32	117-119 E, BROADWAY ANADARKO OK 73005 REQ:CHAN. 32; ERP 40.5KW
L86-1370 BPTTL-810217TY	Sur Este Broadcasting Corporation/ Shreveport, LA/Channel 55	14112 FARMINGTON BLVD. TAMPA FL 33625 REQ:CHAN. 55; ERP .918KW
L86-1371 BPTTL-810217T9	Sara Diaz Warren/El Paso, TX Channel 69	6200 VALERIA EL PASO TX 79912 HAS:CHAN. 04; ERP W REQ:CHAN. 69; ERP 13.6KW
L86-1372 BPTTL-840305SV	Spectrum Media/Amarillo, TX Channel 56	704 ESPLANADE ST. LAKE CHARLES LA 70605 REQ:CHAN. 56; ERP 16.7KW
L86-1373 BPTTL-830309VB	Mountain TV Newrork, Inc./Quanah, TX Channel 54	BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 54; ERP .599KW
L86-1374 BPTTL-GD0308UX	Juan Ramon Ortiz/Corsicana, TX Channel 64	3124 VANDENBURG DRIVE WICHITA KS 67210 REQ:CHAN. 64; ERP. .481KW
L86-1375 BPTTL-EL0307QG	Kim Mooney/Baltimore, MD Channel 30	798 FOX HILL COURT BOULDER CO 80303 REQ:CHAN. 30; ERP 1.32KW
L86-1384 BPTTL-GT0308PY	Alegria Broadcasting Corp./ Eureka, CA/Channel 56	385 EIGHTH ST.,2ND FLOOR SAN FRANCISCO ND CA 94103 REQ:CHAN. 56; ERP 51.3KW
L86-1396 BPTVL-GO0308ME	Evangelina Garcia Garza/Jennings, LA Channel 13	BOX 3206 LA FERIA TX 78559 REQ:CHAN. 13; ERP .066KW
L86-1397 BPTTL-810116OW	Ventures In Communications, Inc./ Fort Worth, TX/Channel 69	639 MARTHA STREET MONTGOMERY AL 36108 REQ:CHAN. 69; ERP 21.0KW
L86-1398 BPTTL-G0308NJ	Deanna Hinojosa/Palestine, TX Channel 17	P.O. BOX 355 MERCEDES TX 78570 REQ:CHAN. 17; ERP 1.56KW
L86-1399 BPTTL-830302YF	Statesman-Examiner, Inc./Coleville, WA Channel 20	220 SOUTH MAIN STREET COLVILLE WA 99114 REQ:CHAN. 20; ERP .800KW

L86-1400 BPTVL-840301MT	Brooks Broadcasting, Inc./Glens Falls, NY Channel 08	507 TRINITY AUSTIN TX 78701 REQ:CHAN. 08; ERP 0.07KW
L86-1401 BPTTL-GY0308VY	Midamerica LPTV Associates, Inc./ Hutchinson, MN/Channel 35	1957 BLAIRS FERRY RD.N.E CEDAR RAPIDS IA 52402 REQ:CHAN. 35; ERP 40.8KW
L86-1402 BPTTL-HO0308LU	Evarista Romero/Douglas, AZ Channel 22	152 WOODFORD SAN BENITO TX 78586 REQ:CHAN. 22; ERP .108KW
L86-1403 BPTTL-EC0308RX	The Hunter Partnership/Billings, MT Channel 55	632 CORTLAND STREET SAN FRANCISCO CA 94110 REQ:CHAN. 55; ERP 2.73KW
L86-1404 BPTTL-840116LZ	Gerald Goodman/Wichita, TX Channel 35	6303 E. INDIAN SCHOOL NE ALBUQUERQUE NM 87110 REQ:CHAN. 35; ERP .136KW
L86-1405 BPTTL-HH0308NB	Evangelina Garcia Garza/Manteo, NC Channel 26	BOX 3206 LA FERIA TX 78559 REQ:CHAN. 26; ERP 3.17KW
L86-1406 BPTTL-8303142Q	Mountain TV Network, Inc./Paden, OK Channel 54	P.O. BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 54; ERP .599KW
L86-1407 BPTTL-840302RQ	Barbara Dilley/Athens, GA Channel 42	2910 - 17TH STREET BOULDER CO 80302 REQ:CHAN. 42; ERP 22.9KW
L86-1408 BPTTL-GQ0308TC	Evarista Romero/Alamogordo, NM Channel 24	152 WOODFORD SAN BENITO TX 78586 REQ:CHAN. 24; ERP .961KW
L86-1410 BPTTL-830621L6	Localvision/Dodge City, KS Channel 23	7432 EAST DIAMOND SCOTTSDALE AZ 85257 REQ:CHAN. 23; ERP .619KW
L86-1416 BPTTL-HS0308NA	Paul M. Moore/Toledo, OH Channel 48	2115 SCOTTWOOD AVENUE TOLEDO OH 43620 REQ:CHAN. 48; ERP 1.12KW
L86-1417 BPTTL-810331N8	New Orleans TV, Inc./Baton Rogue, LA Channel 69	5710 SO. KIMBARK CHICAGO IL 60637 REQ:CHAN. 69; ERP .224KW
L86-1418 BPTVL-GL0308ZF	CBC TV/Worthingon, MN Channel 07	4004-N. 55TH DRIVE PHOENIX AZ 85031 REQ:CHAN. 07; ERP .137KW
L86-1420 BPTTL-810108IB	Entertainment Systems, Inc./Savannah, GA Channel 67	2076 EAST MARLTON PIKE CHERRYHILL NJ 08003 REQ:CHAN. 67; ERP 15.1KW
L86-1421 BPTTL-810327JA	TV Tower Venture/Las Vegas, NV Channel 31	3600 S YOSEMITE ST #900 DENVER CO 80237 REQ:CHAN. 31; ERP 70.5KW
L86-1422 BPTTL-EA0307PG	MT Broadcasting/Hayward, WI Channel 46	1310 29TH AVENUE SOUTH WISCONSIN RAPIDS WI 54494 REQ:CHAN. 46; ERP 2.46KW
L86-1423 BPTTL-820924TL	Owen Broadcasting Enterprises/Arecibo, PR Channel 27	P.O.BOX 742 KNOXVILLE TN 37901 REQ:CHAN. 27; ERP 4.59KW
L86-1425 BPTTL-EA0307LV	Lidia Rodriguez/Port Angeles, WA Channel 34	501 MADRID COURT SAN BENITO TX 78586 REQ:CHAN. 34; ERP 1.05KW
L86-1427 BPTTL-850617SI	Jose Castellanos/Anchorage, AK Channel 69	3417 E. YALE PHOENIX AZ 85008 REQ:CHAN. 69; ERP 2.2 KW
L86-1428 BPTTL-850617SJ	Jose Castellanos/Anchorage, AK Channel 57	3417 E. YALE PHOENIX AZ 85008 REQ:CHAN. 57; ERP 30.4KW

L86-1429 BPTTL-820617TV	Blacks Desiring Media, Inc./ Russellville, AR/Channel 59	P.O. BOX 520 LIVINGSTON TN 38570 REQ:CHAN. 59; ERP .642KW
L86-1430 BPTTL-EM0307PI	Brooks Broadcasting, Inc./Charleston, SC Channel 36	507 TRINITY STREET AUSTIN TX 78701 REQ:CHAN. 36; ERP 25.6KW
L86-1431 BPTTL-HJ0308QF	Minerva Rodriguez Frias/Manteo, NC Channel 47	RT. 1, BOX 130-A PRIMERA TX 78550 REQ:CHAN. 47; ERP 2.98KW
L86-1432 BPTTL-HG0308MQ	Juan Ramon Ortiz/Manteo, NC Channel 31	P.O. BOX 1975 SAN BENITO TX 78586 REQ:CHAN. 31; ERP 3.1 KW
L86-1433 BPTTL-HQ0308SI	Evarista Romero/Roanoke, VA Channel 54	152 WOODFORD SAN BENITO TX 78586 REQ:CHAN. 54; ERP 29.6KW
L86-1434 BPTTL-830214ZA	Owen Broadcasting Enterprises/Jackson, TN Channel 50	P.O. BOX 742 KNOXVILLE TN 37901 REQ:CHAN. 50; ERP 9.3 KW
L86-1435 BPTTL-810312M9	Microband Corporation of America/ Green Bay, WI/Channel 68	655 THIRD AVENUE NEW YORK NY 10017 REQ:CHAN. 68; ERP 33.8KW
L86-1436 BPTT-800916IB	Community Television Network, Inc./ Milwaukee, WI/Channel 67	1919 PENN. AVE.,NW #300 WASHINGTON DC 20006 REQ:CHAN. 67; ERP 1.41KW
L86-1437 BPTTL-810331N9	New Orleans Television, Inc./ New Orleans, LA/Channel 59	5710 SOUTH KIMBARK CHICAGO IL 60637 REQ:CHAN. 59; ERP 24.9KW
L86-1438 BPTTL-831212MG	Hector Leal/Laramie, WY Channel 30	178 WEST ROBERTSON ST. SAN BENITO TX 78586 REQ:CHAN. 30; ERP 1.33KW
L86-1444 BPTTL-821109RA	Low Power Technology, Inc./Sedgwick, KS Channel 44	1245 PEARL STREET #200 BOULDER CO 80302 REQ:CHAN. 44; ERP 12.4KW
L86-1445 BPTTL-EL0307RS	Barbara Dilley/Durham, NC Channel 69	2910-17TH STREET BOULDER CO 80302 REQ:CHAN. 69; ERP 28.2KW
L86-1446 BPTTL-8303144D	Mountain TV Network, Inc./Tillamook, OR Channel 26	P.O. BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 26; ERP .907KW
L86-1448 BPTTL-EC0307XL	Manna Media, Inc./Casper, WY Channel 32	BOX 2595 CASPER WY 82602 REQ:CHAN. 32; ERP .332KW
L86-1453 BPTTL-830224TI	Mountain TV Network, Inc./Moab, UT Channel 57	BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 57; ERP .63 KW
L86-1454 BPTTL-GO0308NB	Jo Ann's Balloon Boutique, Inc./ International Falls, MN/Channel 36	3804 SEMINARY RIDGE AUSTIN TX 78745 REQ:CHAN. 36; ERP .123KW
L86-1455 BPTTL-GF0308XO	Brunhilda Salgado/Poplar Bluff, MO Channel 26	2374 ATLANTIC BLVD. WANTAGH NY 11793 REQ:CHAN. 26; ERP 3.17KW

PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
1919 M STREET N.W.
WASHINGTON, D.C. 20554

981

News media information 202/254-7674. Recorded listing of releases and texts 202/632-0002.

Low Power/Television Translators: Proposed Construction Permits

Report No.: GL86-8 Released: December 8, 1986

Notice is hereby given that the television translator and low power television application(s) listed below have been accepted for filing. These applications, which are not mutually exclusive with other LPTV and TV translator applications have been fully reviewed and in the absence of petitions to deny, the applications appear to be grantable. Petitions to deny the application(s) may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application listed below.

BPTTL-830311C9
Mountain TV Network, Inc.
Vernon, AZ Channel 20

BPTTL-GS0308XZ
American Lo-Power TV Network, Inc.
Moab, UT Channel 41

BPTTL-830312WA
Harlan L. Jacobsen TR/AS Localvision
Bullhead City, AZ Channel 24

BPTTL-830315LT
Mountain TV Network, Inc.
Thompson Falls, MT Channel 15

BPTTL-820629TZ
Midsouth Broadcasters
Helena, AR Channel 21

BPTTL-820617Y3
Kaercher Publications, Inc.
Redfield, SD Channel 18

BPTTL-830218TD
Mountain TV Network, Inc.
Rock Springs, WY Channel 56

BPTTL-840308T4
Ambassador Media Corporation
Kemmerer, WY Channel 28

BPTTL-GB0308MG
Ambassador Media Corporation
Rigby, ID Channel 22

BPTTL-820413SI
Sangre De Cristo Communications
Colorado Springs, CO Channel 15

BPTT-820617IF
Full Gospel Business Men's Fellowship
Lake Charles, LA Channel 63

BPTTL-830308ZP
Mountain TV Network, Inc.
Medicine Lodge, KS Channel 62

BPTTL-830309L7
Mountain TV Network, Inc.
Tyros, KS Channel 62

BPTTL-830727PT
Effingham Broadcasting Company
Effingham, IL Channel 33

BPTVL-810116IP
National Black Media Coalition
New Haven, CT Channel 10

BPTTL-840116I6
Low Power Technology, Inc.
Charlottesville, VA Channel 58

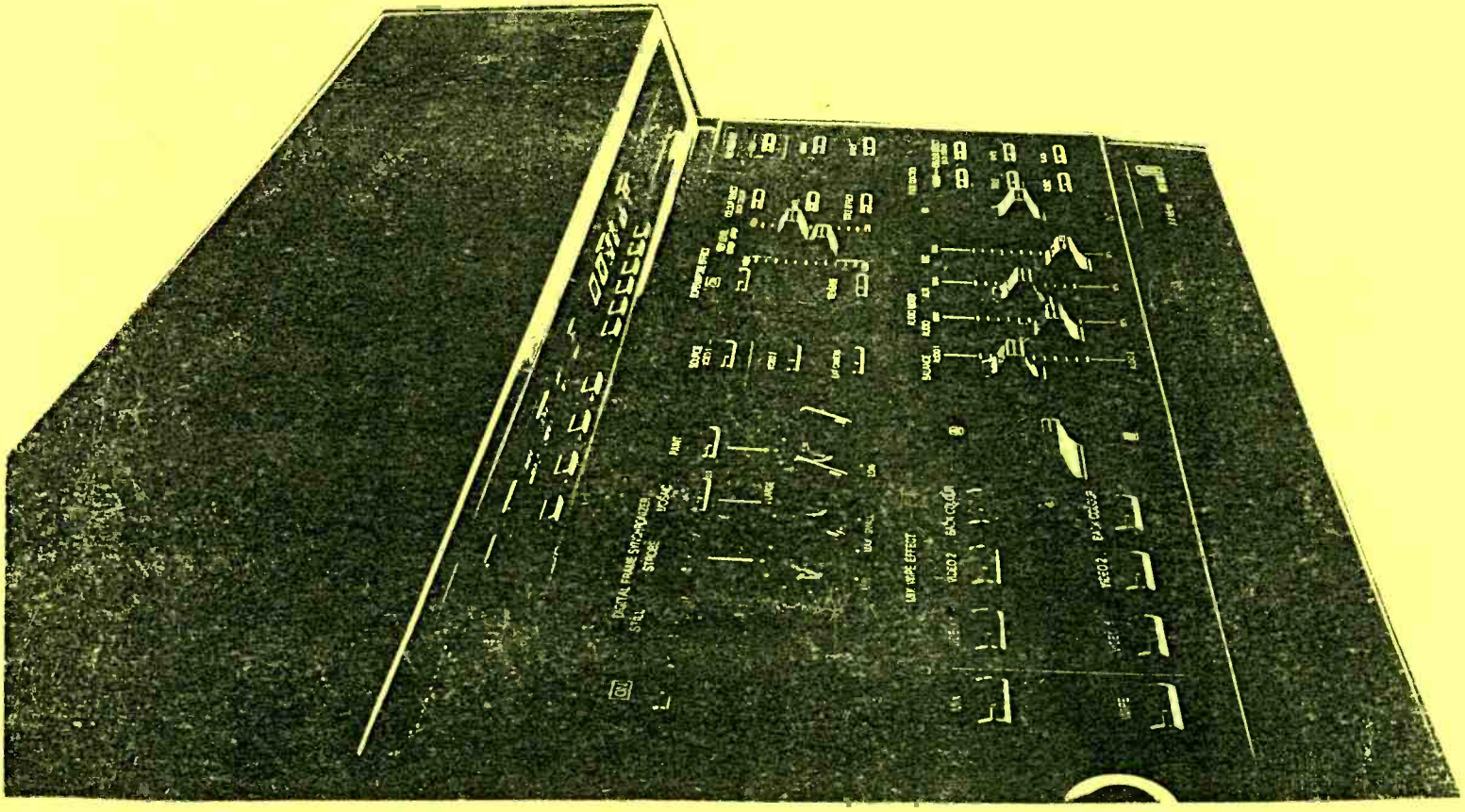
BPTTL-830607IA
Mrs. Marilyn Cameron
Fort Leonard Wood, MO Channel 18

BPTTL-830804JP
Generic Television
Nacogdoches, TX Channel 63

BPTTL-GE0308TZ
Impact Television Group, Inc.
Chillicothe, OH Channel 40

-FCC-

NOVEMBER



Lo - Power Community TV

DECEMBER

1988

NOTICE OF SELECTION BY LOTTERY

Report No: TS-55 Released: November 14, 1988

FILE NO.	APPLICANT NAME/CITY OF LICENSE	
L88-2084 BPTT-870622MX	Satellite Video Broadcasting Company Mechanicsville, MD/Channel 61	557 RICHNECK ROAD MECHANICSVILLE MD 20659 REQ:CHAN. 61; ERP 0.82KW
L88-2125 BPTVL-820423RM	Russell Communications/Vero Beach, FL Channel 07	137 W. CHAPMAN AVE.,#2 FULLERTON CA 91302 REQ:CHAN. 07; ERP .619KW
L88-2126 BPTTL-820623TR	Carlsbad Publishing Co/Carlsbad, NM Channel 19	529 WARREN AVENUE NORTH SEATTLE WA 98109 REQ:CHAN. 19; ERP 5.67KW
L88-2127 BPTTL-830311RW	Mountain TV Network, Inc./Hobbs, NM Channel 35	P.O. BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 35; ERP .705KW
L88-2130 BPTTL-830322LZ	Mountain TV Network, Inc./Randall,AR Channel 48	P.O. BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 48; ERP .74 KW
L88-2131 BPTTL-GK0308PX	American Lo-Power TV Network, Inc. Brownwood, TX/Channel 28	P.O. BOX 352 WESTFORD MA 01886 REQ:CHAN. 28; ERP 2.4 KW
L88-2132 BPTTL-EH0307ZY	Stacy L. Davis/lafayette, LA Channel 62	1706 SECOND STREET LAKE CHARLES LA 70605 REQ:CHAN. 62; ERP 38.5KW
L88-2133 BPTTL-810217CL	Neighborhood TV Network, Inc./Tulsa, OK Channel 60	4300 VETERANS HWY.,#202 METAIRIE LA 70002 REQ:CHAN. 60; ERP 10.2KW
L88-2134 BPTT-840214IB	Honey Lake Comm. TV Corp. Susanville, CA/Channel 69	P. O. BOX 963 SUSANVILLE CA 96130 REQ:CHAN. 69; ERP 1.32KW
L88-2135 BPTTL-8403074A	Gerald D. Kamp/Las Vegas, NV Channel 63	1204 WEST 4TH STREET EUGENE OR 97402 REQ:CHAN. 63; ERP 10.4KW
L88-2136 BPTTL-840307XH	Gerald D. Kamp/Eugene, OR Channel 43	1204 WEST 4TH STREET EUGENE OR 97402 REQ:CHAN. 43; ERP 12.6KW
L88-2138 BPTTL-JA0702V2	Albert Morrison Jr./Highland Park, IL Channel 29	12605 SW 64TH AVE. MIAMI FL 33156 REQ:CHAN. 29; ERP 119.KW
L88-2139 BPTT-870629PN	Navajo Nation/Coyote, NM Channel 47	PO BOX DRAWER E WINDOW ROCK AZ 86515 REQ:CHAN. 47; ERP 1.12KW
L88-2140 BPTTL-810109IT	Residential Entertainment, Inc. Burlington, VT/Channel 44	P.O. BOX 9090 TYLER TX 75711 REQ:CHAN. 44; ERP 1.0 KW
L88-2141 BPTT-870622MC	Walker River Paiute Tribe/Schurz, NV Channel 32	WALKER RIVER RESERVATION SCHURZ NV 89427 REQ:CHAN. 32; ERP 0.15KW
L88-2142 BPTTL-831109TB	Garcia Broadcasting Associates, Inc. EL Cajon, CA/Channel 33	44-551 PORTOLA PALM DESERT CA 92260 REQ:CHAN. 33; ERP 6.2 KW
L88-2143 BPTTL-830312UX	American Translator Development, Inc. Vail, CO/Channel 42	P.O. BOX 4179 BOULDER CO 80306 REQ:CHAN. 42; ERP 0.18KW
L88-2144 BPTTL-810217CY	Minority Enterpreneurs, Inc. Columbus, IN/Channel 50	1898 MULBERRY STREET MONTGOMERY AL 36106 REQ:CHAN. 50; ERP 1.83KW
L88-2145 BPTTL-840116SH	Colleen B. McDonald, & Associates Lewiston, ID/Channel 38	P.O. BOX 81 POST FALLS ID 83854 REQ:CHAN. 38; ERP 13.2KW

--- CONTINUED ON BACK COVER ---

PUBLIC NOTICE

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News media information 202/632-5050 Recorded listing of releases and texts 202 632-0021

Low Power Television Translators; Proposed Construction Permits

Report No.: GL88-7 Released: December 7, 1988

Notice is hereby given that the television translator and low power television applications on the attached list have been accepted for filing. These applications are not mutually exclusive with other LPTV and TV translator applications, and, in the absence of petitions to deny, appear to be grantable. Petitions to deny the applications may be filed with the Commission within 30 days of the date of this notice. Such petitions should clearly bear the caption of the applicable application.

BPTTL-810106IF NEW-T BROADCAST DATA CORP	Channel 50	WILKES-BARRE	PA
BPTTL-810217OQ NEW-T CAPITAL COMMUNITY TV	Channel 52	BATON ROUGE	LA
BPTT-810326JI NEW-T WCCB-TV, INC.	Channel 47	FORT WALTON BEACH	FL
BPTT-810331MS NEW-T FAMILY TELEVISION, INC.	Channel 52	SALEM	OR
BPTTV-810608IG NEW-T KOYUKUK VILLAGE COUNCIL	Channel 9	KOYUKUK	AK
BPTTL-820623SM NEW-T PAYVISION COMMUNICATIONS	Channel 39	SANTA FE	NM
BPTTL-820920TU NEW-T EASTERN BROADCASTING CORPORATION	Channel 50	BELLEFONTE	PA
BPTTL-821006TX NEW-T HARRIS ENTERPRISES, INC.	Channel 31	HAYS	KS
BPTTL-821022TR NEW-T COMMUNITY TELEVISION	Channel 52	SERRANO	CA
BPTTL-821214SG NEW-T LOCAL COMMUNICATIONS	Channel 56	SALINA	KS
BPTT-830207IE NEW-T SMOKY HILLS PUBLIC TELEVISION	Channel 57	STUDLEY-TASCO	KS
BPTTL-830218RW NEW-T CHANNEL AMERICA, INC.	Channel 30	LUFKIN	TX
BPTTL-830228II K55DD STATE OF ALASKA	Channel 55	SEWARD	AK
BPTTL-830228QT NEW-T MOUNTAIN TV NETWORK, INC.	Channel 58	JASPER	TX
BPTTL-830309B7 NEW-T MOUNTAIN TV NETWORK, INC.	Channel 52	COLVILLE	WA
BPTTL-830309VJ NEW-T RETHERFORD PUBLICATIONS, INC.	Channel 22	MCALESTER	OK
BPTTL-830309WB NEW-T MOUNTAIN TV NETWORK, INC.	Channel 66	STILLWATER, ETC.	OK
BPTTL-830309YI NEW-T MOUNTAIN TV NETWORK, INC.	Channel 52	HAWTHORNE, ETC.	NV
BPTTL-830310IT NEW-T MOUNTAIN TV NETWORK, INC.	Channel 45	TAOS, ETC.	NM
BPTTL-830310JD NEW-T MOUNTAIN TV NETWORK, INC.	Channel 48	TUCUMCARI	NM
BPTTL-830311J6 NEW-T MOUNTAIN TV NETWORK, INC.	Channel 59	STEELE CITY	NE
BPTTL-830311L1 NEW-T MOUNTAIN TV NETWORK, INC.	Channel 27	LIHUE	HI
BPTTL-830311MG NEW-T MOUNTAIN TV NETWORK, INC.	Channel 40	BOGALUSA	LA
BPTTL-8303145N NEW-T MOUNTAIN TV NETWORK, INC.	Channel 22	BUENA VISTA	CO
BPTTL-8303145S NEW-T MOUNTAIN TV NETWORK, INC.	Channel 45	HYANNIS	NE
BPTTL-830314L7 NEW-T MOUNTAIN TV NETWORK, INC.	Channel 52	OSBORN	ID
BPTTL-830323E4 NEW-T MOUNTAIN TV NETWORK, INC.	Channel 39	RUSSELLVILLE	AR
BPTTL-830509A5 NEW-T C L & O TRANSLATOR SYSTEM, INC.	Channel 31	CANADIAN, ETC.	TX
BPTT-840302NI NEW-T KENTUCKY AUTHORITY FOR EDUC'L. TV	Channel 24	LONDON	KY
BPTTL-840305TF NEW-T SPECTRUM MEDIA	Channel 57	LAKE CHARLES	LA
BPTT-840308TV NEW-T FRED CASSARD MILLER, JR.	Channel 23	JEFFERSON	NC
BPTT-850528IC K79BE BONNEVILLE HOLDING COMPANY	Channel 69	PUYALLUP	WA
BPTTV-851213IC K12GD MAMMOTH COMMUNITY TV & FM ASSN.	Channel 13	MAMMOTH, ETC.	WY
BPTT-860725MA NEW-T OREGON BROADCASTING COMPANY	Channel 36	MERLIN	OR
BPTT-870519IJ K72AX UHF TV ASSOCIATION	Channel 46	TUCUMCARI	NM
BPTT-870623NO NEW-T BEAR LAKE COUNTY T.V. DISTRICT	Channel 27	MONTPELIER	ID
BPTT-870623NQ NEW-T BEAVER CITY	Channel 30	BEAVER	UT
BPTT-870629F4 NEW-T MOHAVE COUNTY BOARD OF SUPERVISORS	Channel 67	ST. GEORGE	UT
BMPTVL-870629MB W10BC HARVARD BROADCASTING, INC.	Channel 11	SPRINGFIELD	MA
BPTT-870629MV NEW-T COMMUNICATIONS ENGINEERING, INC.	Channel 41	MERCURY	NV
BPTTL-870629NF NEW-T ZANTECH, INC.	Channel 25	TRENTON	NJ
BPTVL-870629NQ NEW-T SHORELINE BROADCASTING	Channel 12	COCOA	FL
BPTTL-870629NX NEW-T DAVID J. STEIN	Channel 46	KEY LARGO	FL
BPTTL-870629QZ NEW-T EDWARD R. TINARI	Channel 52	KEY LARGO	FL
BPTT-870629RH NEW-T SOUTHERN GREENLEE COUNTY TV INC.	Channel 53	DUNCAN	AZ
BPTT-870629RM NEW-T SOUTHERN GREENLEE COUNTY TV INC.	Channel 51	DUNCAN	AZ
BMPTTL-870702NZ W14AC LAKELAND TRANSLATORS, INC.	Channel 14	LAKELAND	FL
BPTTL-870702PS NEW-T THE CHURCH OF THE CROSSES, INC.	Channel 53	SILVER CITY, E	NM
BPTT-870702XG NEW-T COUNCIL FOR PUBLIC TV, CHANNEL 6, INC	Channel 44	BOULDER	CO
BPTTL-870702XY NEW-T SUDBRINK BROADCASTING OF GEORGIA	Channel 41	GAINESVILLE	GA
BPTVL-870702YM NEW-T MONICA KIMBLE	Channel 10	ENDWELL, ETC.	NY
BPTT-870702ZH NEW-T UNIVERSITY OF NORTH CAROLINA	Channel 42	BAKERSVILLE	NC
BPVB-880518NC KNPB1 CHANNEL 5 PUBLIC BROADCASTING, INC.	Channel 5	SILVER SPRINGS	NV
BPTTV-880519IE K11EW KOAT TELEVISION, INC.	Channel 8	TAOS	NM

BPUB-880609NC KUBD1 Channel 59 EVERGREEN CO
THE DENVER CH. 59 PARTNERSHIP, LTD.

BPUB-880614ND WNJT1 Channel 52 CLINTON NJ
NEW JERSEY PUBLIC BROADCASTING AUTH.

BPTTL-880616NH NEW-T Channel 44 LEONARDTOWN MD
SATELLITE VIDEO BROADCASTING

BMPTT-880617NQ K55CP Channel 55 VICTORIA TX
COMMUNITY TELEVISION OF VICTORIA

BPTT-880617NT NEW-T Channel 31 MONTPELIER ID
BEAR LAKE COUNTY T.V. DISTRICT

BPTT-880620PH NEW-T Channel 33 JULIAETTA ID
JULIAETTA TELEVISION ASSOCIATION

BPTT-880622PY NEW-T Channel 20 DURHAM CA
CALIFORNIA-OREGON BROADCASTING, INC.

BPTTL-880623NI NEW-T Channel 22 GRENADA MS
WILLIAM E. MORGAN

BPTTL-880623SN NEW-T Channel 20 FORTUNA/RIO DELL CA
CALIFORNIA-OREGON BROADCASTING, INC.

BPTTL-880623SQ NEW-T Channel 43 SAN JUAN PR
ARZUAGA AND MARTINEZ ASSOCIATION

BPTTL-880623TR NEW-T Channel 56 YAKIMA, ETC. WA
RONALD ALAN THEODORE BEVINS

BPTT-880624B9 NEW-T Channel 15 VERDI NV
CHANNEL 5 PUBLIC BROADCASTING, INC.

BPTT-880624G3 NEW-T Channel 23 DUNCAN AZ
ARIZONA BOARD OF REGENTS

BPTT-880624M6 NEW-T Channel 14 WALLA WALLA WA
APPLE VALLEY BROADCASTING, INC.

BPTVL-880624PC NEW-T Channel 4 INDIO CA
LEO KESSELMAN

BPTVL-880624QU NEW-T Channel 5 DOUGLAS GA
MANUEL A. CANTU

BPTTL-880624RN NEW-T Channel 19 LAKELAND FL
FRANK CARLOW

BPTTL-880624U5 NEW-T Channel 46 COLUMBUS GA
DR. STEPHEN HOLLIS

BPTTL-880624W5 NEW-T Channel 21 OGDENSBURG NY
DAVID JAMES ALTERI

BPTTL-880624YY NEW-T Channel 31 GAINESVILLE FL
JAMES VINCENT FITZPATRICK

BMPTT-880927IA K11PJ Channel 21 RAWLINS WY
KTWO CORPORATION

BMPTTL-881003IG K48CB Channel 39 POPLAR BLUFF MO
TCCSA/DBA TRINITY B/CASTING NETWORK

BPTT-881012IA K77BL Channel 67 SNYDER TX
RAMAR COMMUNICATIONS, INC.

BPTT-881012IB K79BB Channel 69 SNYDER TX
RAMAR COMMUNICATIONS, INC.

BPTT-881028II W61AP Channel 19 OKEECHOBEE FL
WTOG-TV, INC.

BPTT-881114IC K76BZ Channel 27 OTTUMWA IA
OTTUMWA AREA TRANSLATOR SYSTEM, INC.

BPTT-881114ID K74CO Channel 23 OTTUMWA IA
OTTUMWA AREA TRANSLATOR SYSTEM, INC.

BPTT-881115IO K80BR Channel 50 NORTH SHORE LAKE TAHO NV
CIRCLE L, INC.

BPTTL-G00308TU NEW-T Channel 41 MOSCOW ID
AMERICAN TELEVISION NETWORK, INC.

BPTT-HA0308QE NEW-T Channel 68 PEMBINA ND
WDAY, INC.

BPTTL-HC0308XJ NEW-T Channel 25 KAILUA HI
ALEGRIA BROADCASTING CORP.

BPTT-JA0702G3 NEW-T Channel 53 LAUGHLIN
CLARK COUNTY SCHOOL DISTRICT NV

BPTTL-JA0702Q6 NEW-T Channel 52 NEWPORT
PERRY COMMUNICATIONS, INC. RI

BPTTL-JB0702NS NEW-T Channel 69 TOWANDA
THE NEW YORK TIMES COMPANY PA

BPTVL-JB0702SH NEW-T Channel 12 ALTAMONTE SPRINGS
NEWSOUTH MEDIA CORPORATION FL

BPTT-JC0624ND K21AX Channel 21 FARMINGTON
SAN JUAN NON-PROFIT T.V. ASSN. NM

BMPTTL-JC0624NJ W62BM Channel 62 LOUISVILLE
HIGHLIGHT BROADCASTING COMPANY KY

BMPTVL-JC0624NT K05HR Channel 5 LIVINGSTON
POLK COUNTY BROADCASTING CO. TX

BPTT-JC0624QU NEW-T Channel 34 DODGE CITY
CHANNEL 24, LTD. KS

BPTTV-JC0624TG NEW-T Channel 6 ANCHORAGE
FIREWEED TELEVISION AK

We held up this issue hoping we could have some notice of a window announced in advance for December or perhaps in January, but no such luck.

Also, we were waiting for our Panasonic Switcher to come in but no luck there either. Your subscription is by the number of issues, not months, so you still get 12 issues. This is ''one issue'' for November and December.

Look for a window in March as a best guess. Whenever we hear of it we will send out the next issue.

Lo-Power Community Television magazine is published 12 times per year. Sample copies are $5, subscriptions $50 per year. Intended to supply needed information on low power television at reasonable cost.

 Editor and Publisher: Harlan L. Jacobsen.

Send address changes to 7432 E. Diamond. Scottsdale. AZ 85257: phone (602) 945-6746.

Panasonic Mixes Sight & Sound

Panasonic's WJ-MX10 is an easy to use digital AV mixer for pros and buffs alike – delivering enough effects on a digital platter to improve any home video production. Its availability to consumers is indicative of the emergence of a "pro-sumer" marketplace for high-end video equipment.

The streamlined console features a built-in digital frame synchronizer that lets it edit video from two source VCRs or cameras without an add-on time base corrector. For effects, it includes wipe, superimpose, and digital freeze, strobe, mosaic and paint.

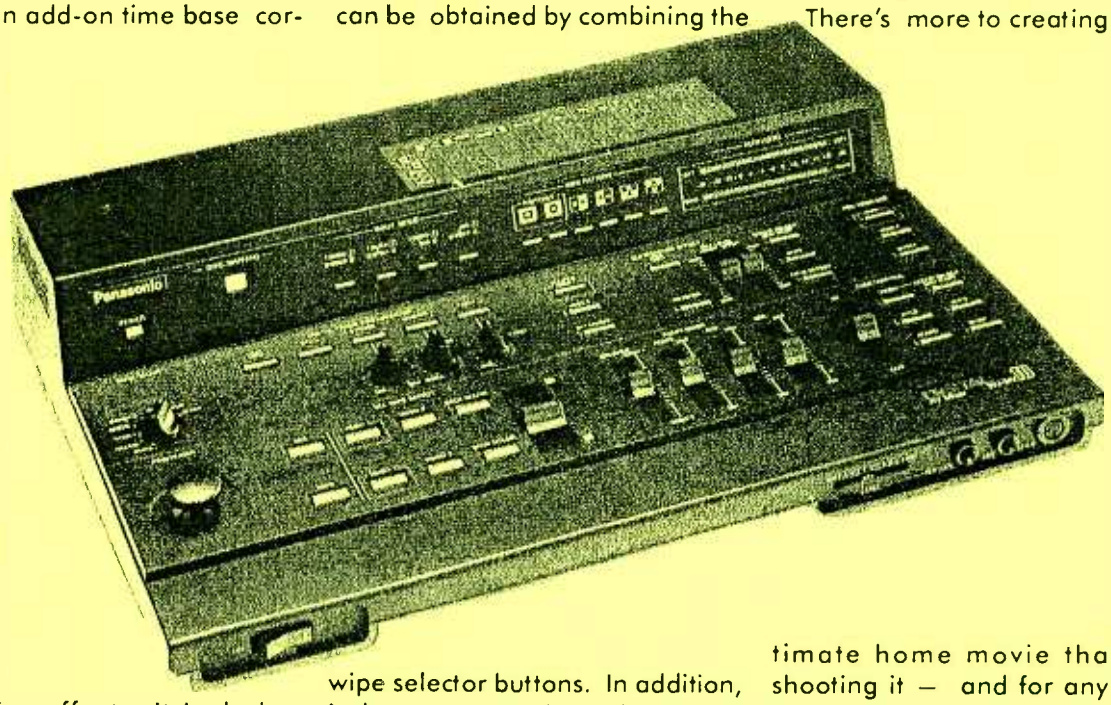
Put on your lab coat and head to the studio. The WJ-MX10 has a built-in frame memory that makes it easy to use a variety of special effects for video production. Besides freezing the picture, it lets you add a digital stroboscopic effect with an adjustable delay interval from 0.2 to 2 full seconds. Its mosaic comes in five selectable levels, and the paint feature offers seven different varieties.

Seventeen wipe effect patterns can be obtained by combining the wipe selector buttons. In addition, it lets you use a joystick to move square or round wipe screens to any position on the TV screen.

Its fade-in and fade-out function can be used with video, audio, titles or characters – alone or in any combination.

Of course, audio mixing is also a primary concern to any true videophile. The unit touts a built-in audio mixer for mixing four audio inputs, including a microphone. The easy-to- read audio level meter and its headphone output enables instant checking and monitoring of the audio level.

There's more to creating the ultimate home movie than just shooting it – and for any home director who wants to add those finishing touches that make a production great, this is the tool.



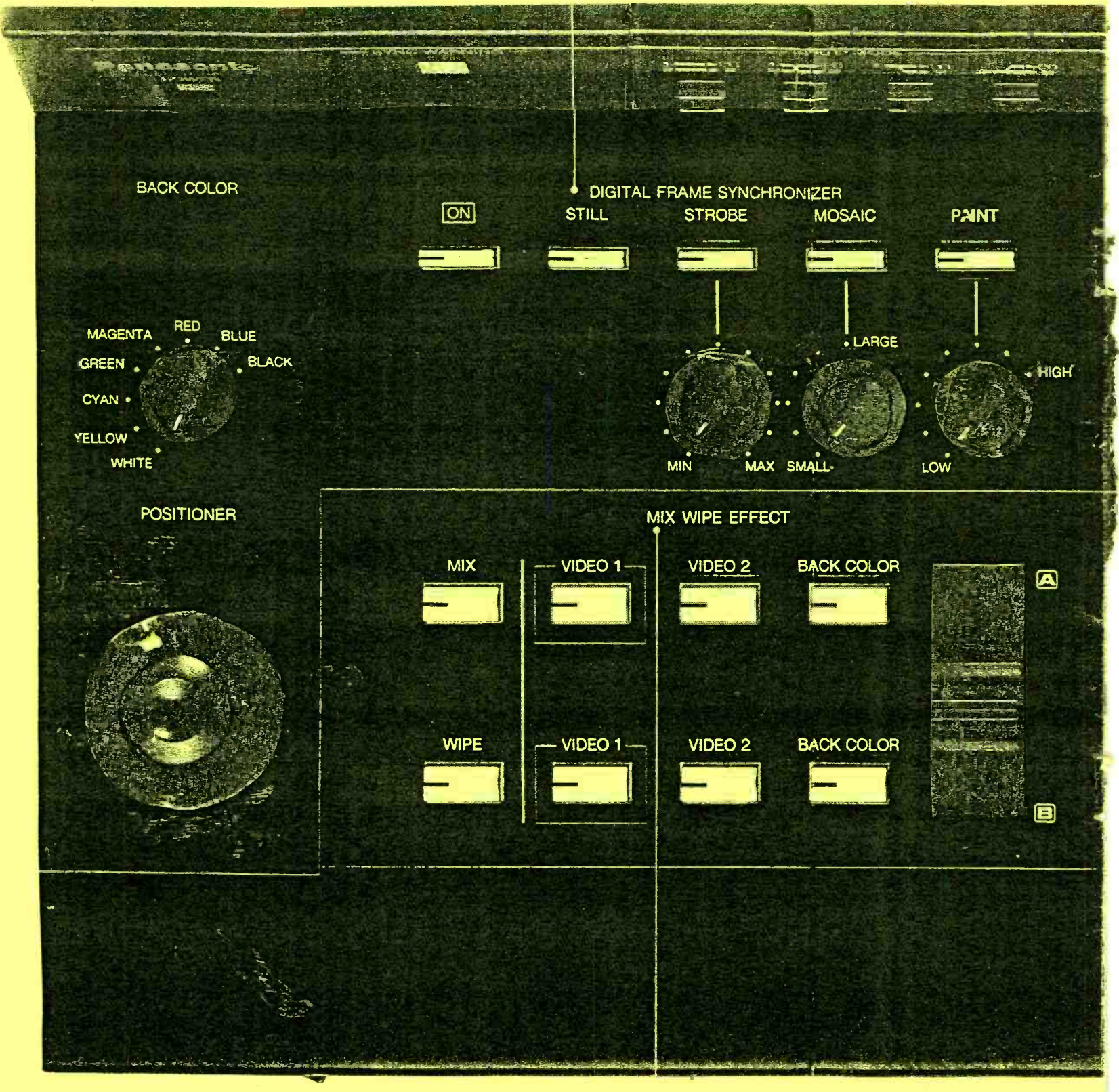
The new Panasonic switcher operates very much like the NuMark digital we have written about several times before.

There are some differences you should be aware of. One is price. The NuMark lists for $5,000 and is available just under $4,000. The Panasonic lists for nearly $3,900 and is available for $2,100. The Panasonic has a character generator available for under $200 that does a useable job along with the switchers circuitry. The Panasonic will put a circle inside the main picture from a second sorce. The Panasonic also has many more wipe styles than there is on the NuMark that has a key camera set up (another whole article to explain how you use a key camera) that the Numark does not.

The NuMark has freeze, paint strobe etc. just like the Panasonic and it will switch betweem three unsynced sources. With the Panasonic you can however, switch between three with another little trick that requires you pay attention to what you are doing.

Anyway, we had hoped to have a sample of this thing by now, but have not received it yet. Some clients have received one so they are available but they paid more then the $2,100 price.

You can digest this set up here from the information supplied by Panasonic and maybe we will have ours by the January issue so we can show you how we use it, and how we connect it up for Low Power use. You can use this to replace a lot of stuff including doing away with a fancy editing set up and use it as a real time editor.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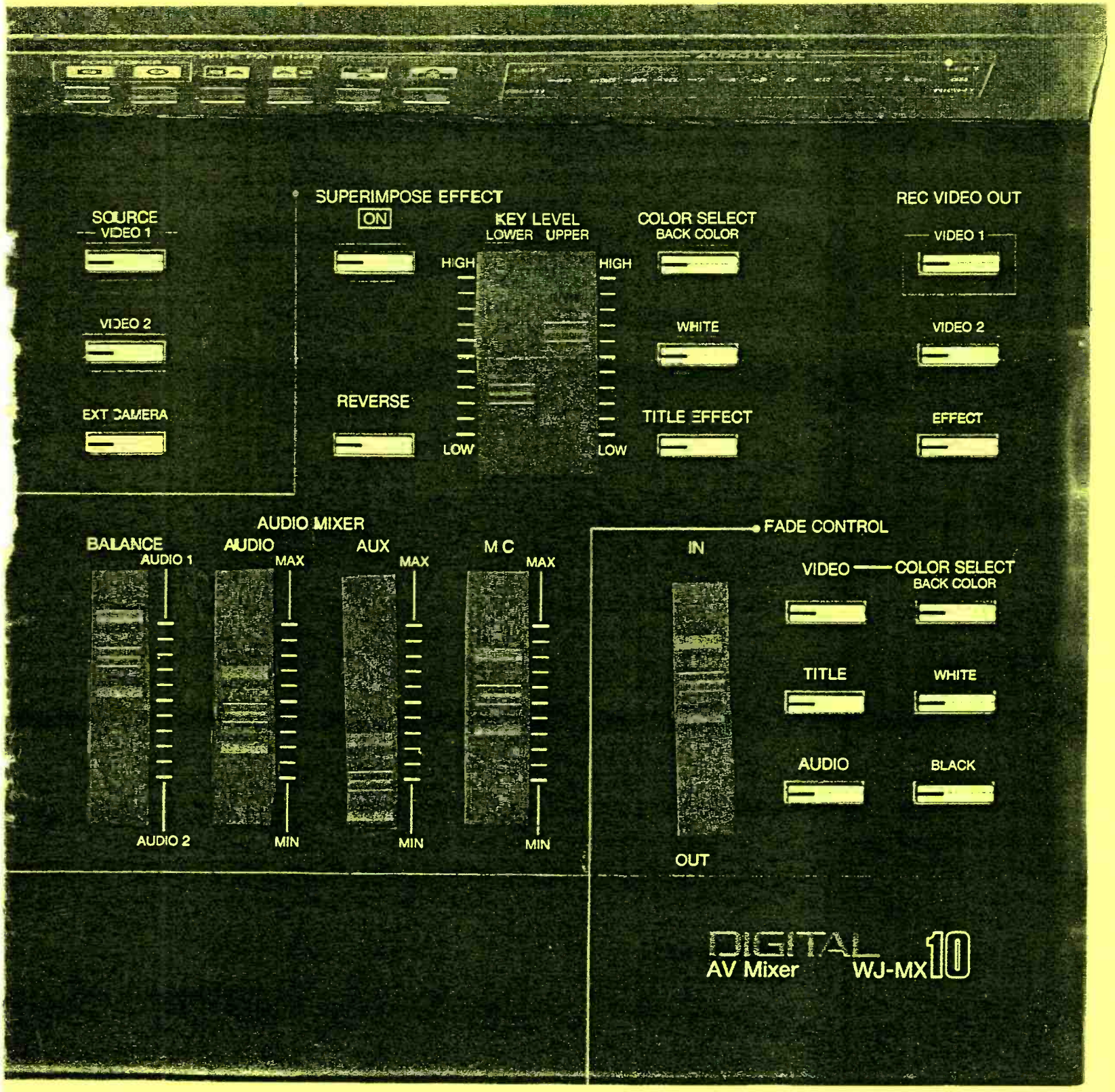
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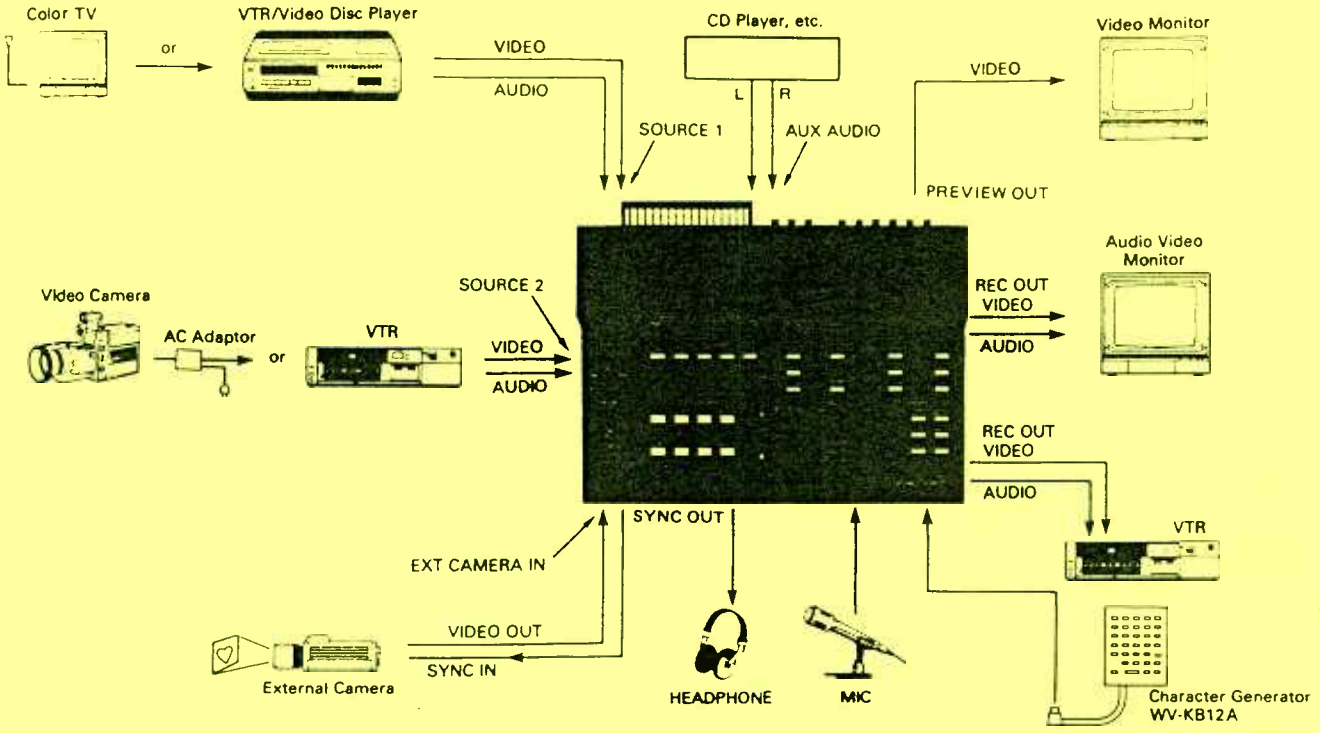
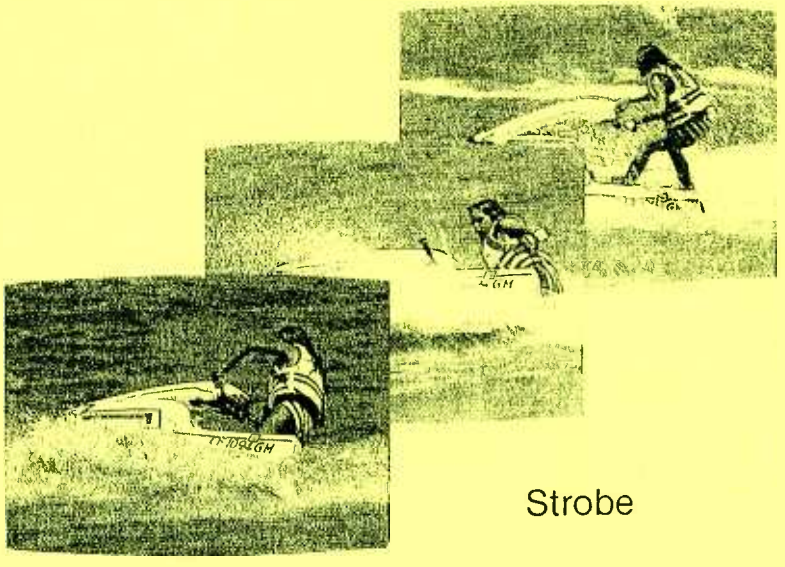
AV Mixer
WJ-MX10



Mosaic



Strobe

Paint

All you hear about when you file for LPTV is ''interference'': you may interfere with this or that. Well, you also get interfered with, in fact you get interfered with by 5 million watt stations a long way away. If you are a VHF station, particularly channel 2 to 6, you will have some frustrating days, particularly in the summer and particularly if you are near the Gulf Coast (it is worse there). Channels 7 to 13 also get chewed up, but not as often and not as bad. Channel 2 is the absolute worst. UHF really surprises me how many days we get chewed up in the mornings.

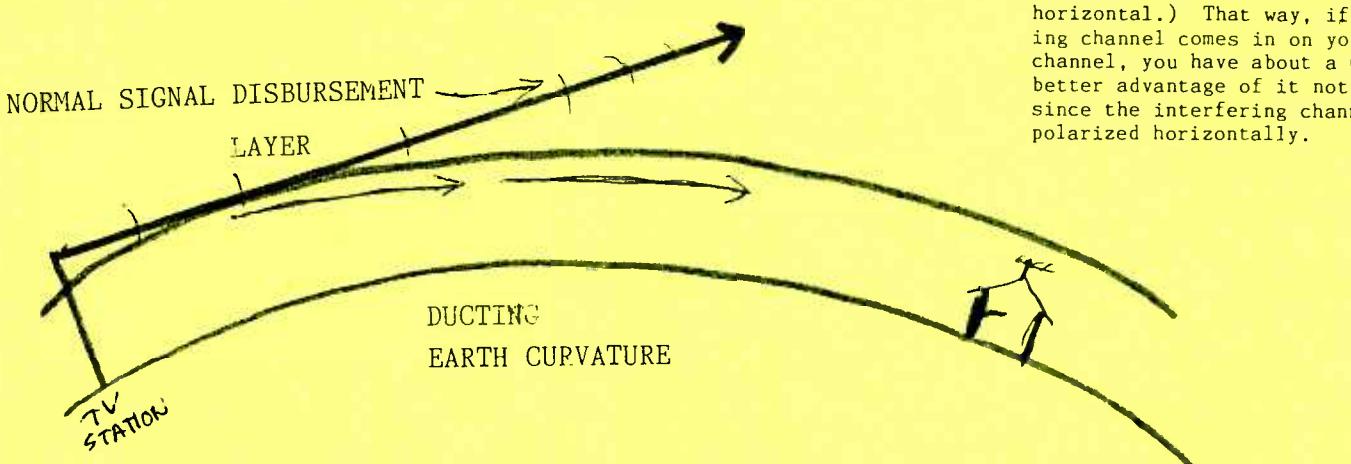
Two things happen to cause interference. One is ducting, which seems to happen primarily in the mornings. This is caused by two layers of air of different temperatures a short distance above the ground. The layer follows the curvature of the earth and the interfering signal follows along under this layer effect.

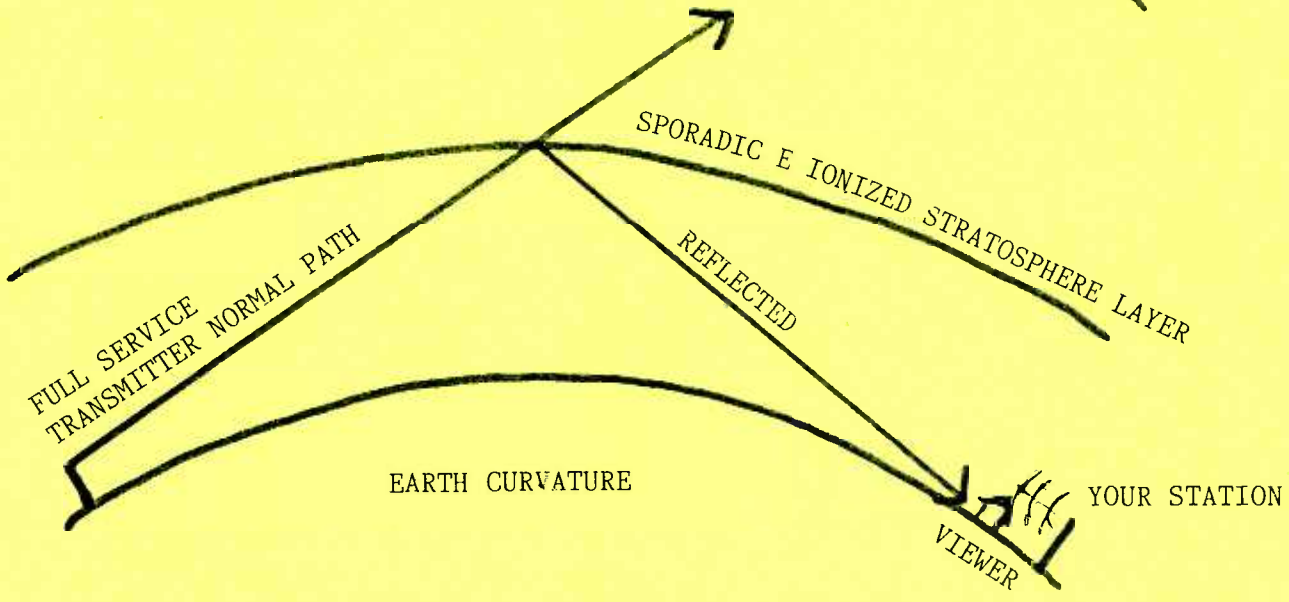
As the sun warms up the air in the morning, the layers disappear and so does the interference. UHF interference seems to be primarily this ''ducting'' effect. Our Sioux Falls station gets chewed up to unuseable for 3 or 4 hours or more about 20 days a year. Most of the interference apparently comes from a Channel 42 in Lincoln, Nebraska, about 190 miles away and 5 million watts.

The interference from the same channel gives you Venetian blind effects, ripples through your picture that looks like about 10 bars horizontally which move around and sometimes takes your picture clear out for people more than 1 mile from your transmitter.

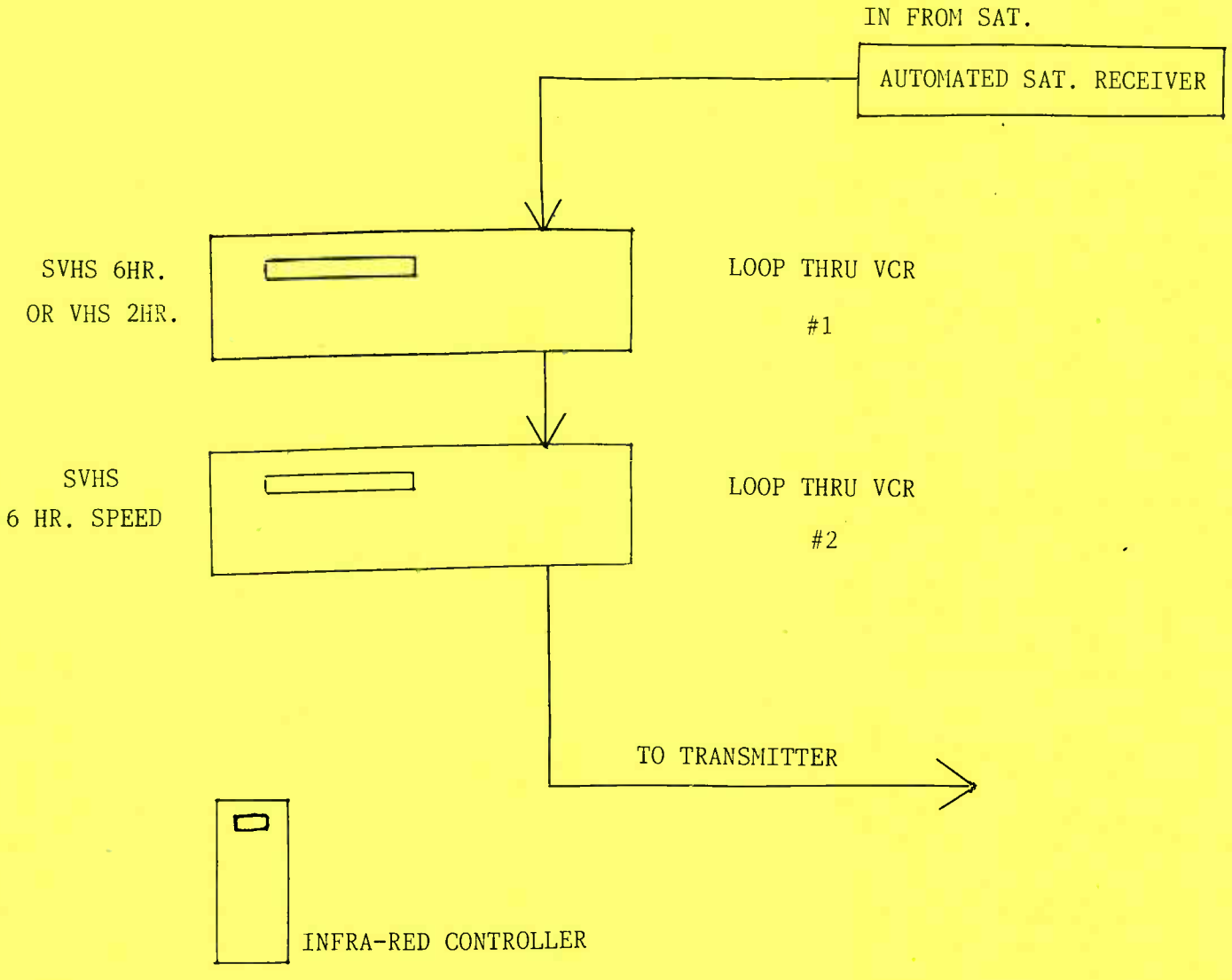
VHF is affected primarily (ducting also) by sporadic E skip. This is in addition to far more ducting then you get on UHF. Sporadic E. is when sunspots or whatever are just right (primarily in summer) and a layer many miles above earth is affected by something and reflects a portion of TV signal back to earth. Stations from as far away as 2,000 miles will come in, and if you shut your VHF transmitter off, you will find the picture is coming in clear as a bell like a local station. This will sometimes last as long as 2 or 3 hours. Other times it lasts only a few minutes, but it keeps changing where they are coming from, and at times you will have several coming in at the same time on your channel or an adjacent channel-- What can you do about it? Absolutely nothing. The more directive and more high gain the antenna that people are using to get your signal the better, the more gain your direction and the more rejection they have from signals from any other direction. Encouraging your viewers to invest in good receiving antennas helps not only get a better picture, it also helps a lot in keeping your channel from being chewed up by interference when these conditons prevail.

If you're using a UHF STL, always change from horizontal polarization to vertical. (Up and down instead of horizontal.) That way, if an interfering channel comes in on your UHF STL channel, you have about a 6 times or better advantage of it not interfering, since the interfering channel will be polarized horizontally.





24 HR. AUTOMATED REPEATING STATION



The above is a simple fully automated station requiring either no attendance, or installation of new tapes or tape in once daily.

To operate fully automated, let us say we start with VCR 2 rewound and 1 rewound at 11:30 PM. Satellite receiver switches to W4 TR 11 for ITN and Infra-red controller tells VCR 2 to ''record''. At the same time ITN is passing through to the transmitter. When the tape is full, it will automatically rewind and be in STOP. ITN continues to feed until 7:30 AM. The last hour, 6:30 AM, the automated INFRA-RED Controller ($100.00 at Radio Shack or $189.00 Core) turns on VCR 1.

With a 1 hour tape, it will record and shut off and rewind automatically.At 7:30 AM the Infrared tells VCR 2 to play (That's only 3 commands so far and this has taken you from 11:30 PM to 1:30.

At 1:30, the Infra-red tells VCR 1 to play -- VCR 2 rewinds automatically and then pauses Video when it comes to the end of the 6 hour tape. This is the 4th command. At 2:30, Infra-red tells VCR 2 to play. This will take you up to 7:30 PM. At 7:30, the Infra-red replays VCR 1 -- again for 1 hour -- VCR 2 automatically rewinds. This is the 5th Command. At 8:30, VCR 2 is told to play again, the 6th Command --. At 9:00, the Satellite Receiver goes to

F3-02 automatically and Infra-red shuts off VCR 2 -- Now the INN News passes through both machines and is on for 30 minutes. At the end, VCR 2 is told to play again.

Well, anyway, you get the idea. Now suppose you want to play Per Inquiry commercials on Machine 1, and pass several Satellite shows and play some local programs on VCR 2.

VCR 2 comes on, to the second, whenever told to play, and goes off automatically at the end. The Machine stops automatically when you use a tape the same length as the commercial, or you can cut it off simply by having Machine 2 come on. Keep in mind Machine 2 takes a few seconds to get up to speed and switch internally, so it needs to start a few seconds before you need the cut.
If you use several different commercials at different times. You will need a Multi-vision switcher between the two machines, nothing else. More on that later.

Loop-through means video & audio in goes straight through the VCR and exits through video & audio out (transparent).

WARNING: Some makes of VCRs switch internally too slowly when the tape is up to speed and are unusable for this type of switching. Also, some makes of machines have a high loop-through video and/or audio loss.

LATEST INFORMATION IS THAT THE NEXT FILING WINDOW WILL BE MARCH 3.

SHOPPING CHANNELS BIG JOKE?

Regarding Shopping Channels, we have had lots of experience, all bad. Shopping Channels held out hope of paying enough, by simply putting them on from a Satellite, to cover your tower rent and light bill. We didn't know which was the best one, so one year we rotated the 24 hours between 3 of them. We had people order merchandise from all of them, but only one paid. Crazy Eddie paid us promptly and half way decent for the hours per day we carried them. They then went out of the business. The others gave us lots of promises and never paid us a dime, even on the $500.00 worth of merchandise we personally ordered so we could trace whether they were paying you for everything or not.

Then this November, a California operator told me he was carrying AVN overnight and they were paying a couple hundred commission per month so I gave them a try in 3 towns (10% commission). Supposedly they can tell you at any time how much you are selling. It took them 2 weeks to get around to returning my calls. Finally they said we had made $39.00 total on 3 stations in 2 weeks (covering over 250,000 people, 24 hours) so we have dropped AVN. Their presentation isn't all that hot and though 6 weeks have gone by, we have yet to see a dime or any printout supposedly of what was sold in our Zip Codes. Now the California operator tells us they are behind on paying him, too.

They sell mostly stuff that a small town drugstore may carry in the line of hard goods like porcelain, gold necklaces, stuff you really can't tell what it should cost.

Now, J.C. Penney has had a new Shopping Channel on for some time and they sell great merchandise with a class act presentation. J.C. Penney's office claims they don't know whether they want to affiliate with LPTV or not, but they are doing a 120 day test with an LPTV I program in a market of 50,000.

To take a look at their production and products, tune in F3 Transponder 05. They pay 5%, and don't bug them about affiliating until we give you a report on how the 120 day test goes. It will end April 1.

L88-2146 BPTTL-840116NH	Robert H. Hanson/Topeka, KS Channel 67	P.O. BOX 26327 TEMPE AZ 85282 REQ:CHAN. 67; ERP 127.KW
L88-2147 BPTT-801114IT	Mintelco, Inc./New Orleans, LA Channel 67	P.O. BOX 386 FEEDING HILLS MA 01030 REQ:CHAN. 67; ERP 1.8 KW
L88-2148 BPTTL-8303147I	Mountain TV Network, Inc./Spearman, TX Channel 48	BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 48; ERP .74 KW
L88-2149 BPTTL-GJ0308UR	American Television Network, Inc. Madison, WI/Channel 63	1575 I STREET, NW #500 WASHINGTON DC 20005 REQ:CHAN. 63; ERP 47.7KW
L88-2150 BPTTL-831214TA	Women's LPTV Network/Twin Falls, ID Channel 15	7860 N. HAYDEN RD.APTJ10 SCOTTSDALE AZ 85258 REQ:CHAN. 15; ERP 1.21KW
L88-2151 BPTTL-820611TJ	Residential Entertainment, Inc. Jacksonville, TX/Channel 43	P.O. BOX 9090 TYLER TX 75711 REQ:CHAN. 43; ERP 10.1KW
L88-2152 BPTTL-810326IF	Frontier Community Communications MCAlester/Channel 16	P.O. BOX 579 BETHANY OK 73008 REQ:CHAN. 16; ERP 1.33KW
L88-2153 BPTTL-810113IU	Tribune Publishing Company/Tacoma, WA Channel 39	P. O. BOX 11000 TACOMA WA 98411 REQ:CHAN. 39; ERP 236 KW
L88-2154 BPTTL 830310IA	Mountain TV Network, Inc./Taos, NM Channel 27	BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 27; ERP .905KW
L88-2155 BPTTL-EC0307WY	Millard V. Oakley/Dayton, OH Channel 32	P.O. BOX 520 LIVINGSTON TN 38570 REQ:CHAN. 32; ERP .672KW
L88-2156 BPTTL 810409XD	Westchester Broadcasting, Inc. White Plains, NY/Channel 23	147 MIDLAND AVE. BRONXVILLE NY 10708 REQ:CHAN. 23; ERP 1.02KW
L88-2157 BPTTL-830314A2	Mountain TV Network, Inc. Storm Lake, IA/Channel 66	P.O. BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 66; ERP .535KW
L88-2158 BPTTL HB0308NP	Baby Boom Broadcasting Company Minneapolis, MN/Channel 66	23642 CALABASAS RD.,#104 CALABASAS CA 91302 REQ:CHAN. 66; ERP 1.8 KW
L88-2159 BPTTL-810325IO	Mid-South Media, Inc./Pearl, MS Channel 46	P.O. BOX 54365 PEARL MS 39208 REQ:CHAN. 46; ERP 8.79KW
L88-2160 BPTTL-830311LS	Mountain TV Network, INC./Lihue,HI Channel 33	BOX 31 BERRYVILLE AR 72616 REQ:CHAN. 33; ERP .918KW
L88-2162 BPTTL-820617P4	Blacks Desiring Media, Inc. Centralia, IL/Channel 50	P.O. BOX 520 LIVINGSTON TN 38570 REQ:CHAN. 50; ERP 5.95KW
L88-2163 BPTTL-EC0307QD	Kurt J. Petersen/St. Louis, MO Channel 58	P.O. BOX 1229 EUGENE OR 97440 REQ:CHAN. 58; ERP 22.6KW
L88-2164 BPTT-820617X8	WTSP-TV, Inc./Inverness, FL Channel 34	11450 GANDY BOULEVARD SAINT PETERSBURG FL 33733 REQ:CHAN. 34; ERP 1.39KW
L88-2165 BPTTL-840116MU	Robert H. Hanson/Dubuque, IA Channel 51	P.O. BOX 26327 TEMPE AZ 85282 REQ:CHAN. 51; ERP 10.5KW
L88-2166 BPTTL-AA0305QT	Cherokee Network/Sioux City, IA Channel 44	P.O. BOX 9742 BREA CA 92622 REQ:CHAN. 44; ERP .893KW

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