AN NAB PREVIEW
The LPTV Broadcaster's Guide to NAB Exhibits

For the first time since the optimistic days of LPTV's inauguration, NAB exhibitors are truly trying to address the needs and, maybe more important, the pocketbooks of LPTV broadcasters. This year's show is immense, and full of delectable toys as well as essentials. Because we knew many of you will be in Dallas for only one or two days, we thought we'd map out a brief guide to the exhibit floor, pointing out products and companies that have specific applications for LPTV.

We tried to concentrate our efforts on those companies that have expressly addressed the LPTV market with products or pricing. One response we note here — surely a first for television — is the new movement toward manufacturer-sponsored payment plans. Chyron, ITE/3M, and EMCEE, for example, have all instituted financing programs; and Rivierra Broadcast Leasing has a special package just for LPTV people.

If you need a quick getting-around guide, pick up a map to the exhibit floor at the registration booths. (We're sorry...we couldn't make room for the map here.) With that, and our product-by-product summary below, you should have no trouble making your hours at NAB pleasant and productive.

CAMERAS AND ACCESSORIES

Of course, if you're in the market for cameras—and what television broadcaster isn't at NAB?—you've got to hit the "biggies": Hitachi (Booth 3160), Ikegami (Booth 3150), JVC (especially the KY Series, Booth 3180), and Sony—the M3 is the choice of some 20% of LPTV broadcasters (Booth 3100).

While you're at it though, you might take a look at Pro Battery's display (Booth 2761). They make rechargeable nickel/cadmium battery packs for ENC/EFP applications—including the PB-14 onboard camera battery system, the PB-90 VTR/camera battery, and the PB-N-1 for the Sony 6800 series recorders.

In Booth 2710, take a look at Comprompter's Totaprompter, the first fully electronic portable prompter, available in low-cost versions for both Apple and IBM systems. The IBM-based system will be introduced at NAB, so do stop in for a look.

RECORDERS

You'll be looking at recorders, too, so don't miss the JVC CR Series (Booth 3180) or the Sony VO-5800's (Booth 3100). You might also check out the Panasonic NV Series recorders at Booth 3116. Then take a trip over to The ALTA Group's Booth 2502 and review the Pyxis—a digital production system for audio-video effects switching and A/B roll editing. The moderately-priced Pyxis offers 22 different production effects, including cut, wipe, fade, dissolve, posterize, and editor interface. Also at ALTA's booth is Vid Video's

LPTV Report
PO. Box 25510
Milwaukee, Wisconsin 53225-0510

ADDRESS CORRECTION REQUESTED

HOW TO BUILD A NETWORK
An Interview With Woods Communications' Wayne Register

One of the ideas that made immediate sense to early LPTV entrepreneurs was that of LPTV networks. chains of stations sharing programming and administrative costs, yet providing responsive and original local broadcasting to their separate communities. Charles Woods LPTV is one such network.

Charles Woods LPTV is part of Woods Communications, which owns longstanding ABC and CBS affiliates in Alabama, Texas, Missouri, Indiana, and Louisiana, as well as six 100,000-watt FM radio stations around the country.

The Woods LPTV Network presently comprises nine stations: one each in Milwaukee, Chicago, Atlanta, and Evansville, continued on page 6
EMCEE gets your LPTV system off the ground with the newest in high technology.

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In Our View

LPTV is on the threshold of a renaissance. Or, if you consider that too grand a term, a rebirth. We have survived the winter of the past four years and are springing up like new grass all over the country.

License applications are increasing steadily, and the unofficial word is out that we may shortly see months in which 15 to 20 new stations sign on the air. Assignment applications are also up. The people that have called our offices seeking information about CP’s to buy and build number in the dozens. Several parties are actively seeking not one, but multiple, LPTV properties.

There is certainly nothing cold about the passion with which the people at these small stations value their work. And there’s nothing vain or assuming about the way they respond to their viewers.

One common denominator: small TV stations actively and consistently reach out to the people who watch them. In these pages we have profiled stations that have discovered the immense value of regular communication with their viewers. Call-ins, contests, give-aways, active visibility at every possible community event, constant solicitation of their viewers’ opinions and desires. In the same manner, contemporary radio achieves a camaraderie with listeners never seen in the days of the big radio networks. Many viewers—of both commercial and public LPTV stations—genuinely feel that they have a voice in programming decisions—through their responses to informal surveys or through participation in formal programming committees. LPTV is inaugurating a personalized television that we have never seen before.

Also contributing to this new, more personal, broadcast is the local programming emphasis that we have found in every station with production capability. It’s no news to broadcasters that local news draws the largest audiences, and therefore the highest ad dollars, of any programming. It’s no news either that the American people have returned, after the heyday of mass media in the 50’s, to the desire to see their own lives reflected in the media that serve them.

Big TV has rarely welcomed viewers into more than their vestibules. LPTV stations everywhere have opened their offices and their studios, not only to interested observers, but to viewers. Teenagers take on the city fathers in their own magazine shows; veterinarians perform weekly miracles on ailing dogs and cats—to the great relief of worried young owners.

Kudos

To W55AS, MILWAUKEE, WI:

W55AS-TV is doing a very good job in selling mail order records for our client, Suffolk Marketing. In fact, All Time Gospel Favorites, a contemporary black gospel record collection, has sold consistently well for over 6 months.

W55AS-TV does as well as many high-power stations! Keep up the good work! Gary Stillman
Malcolm E. Smith Advertising, Inc.

(If you’ve received kudos you’d like us to print, just send them to The LPTV Report, P.O. Box 25510, Milwaukee, WI 53225-0510.)

Comments Sought in Fairness Doctrine Proceeding

The FCC has issued a Notice of Inquiry in response to a Congressional directive “to consider alternative means of administration and enforcement of the Fairness Doctrine and to report to the Congress by September 30, 1987.”

The Fairness Doctrine requires broadcast licensees to cover controversial issues of public importance and to provide a reasonable opportunity for those with opposing viewpoints to present their side of such issues.

In 1985, the Commission concluded that the Fairness Doctrine no longer served the public interest, because it no longer effectively protected the public’s right of access to diverse viewpoints on controversial matters. In fact, the Commission found that, in actual operation, the Fairness Doctrine “chills” or inhibits the presentation of those issues.

Cited as one example of such “chilling” was the corollary Callman doctrine, which states that when controversial issues of public importance are presented during a sponsored program, and the broadcaster is unable to obtain paid sponsorship for the presentation of opposing viewpoints, he or she must either provide free time for that purpose or present the opposing viewpoints in the station’s own programming.

While the Commission did not set forth specific proposals, it did invite comments on the following: 1) abandoning the existing case-by-case enforcement of Fairness Doctrine complaints in favor of a process under which a station’s compliance with the Doctrine would be examined solely at license renewal time; 2) placing an experimental moratorium on enforcement; 3) using a market-wide approach to enforcement; and 4) replacing the Doctrine with an “access-time” requirement. The access concept would require broadcasters to set aside a discrete period of time for regular discussion of controversial issues by interested parties.

Comments are invited on these proposals or any others that commenters believe should be addressed. As long as they further the underlying goal of the Fairness Doctrine.

Comments are due April 13, 1987: reply comments are due May 13. For further information, contact Barbara Kreisman at (202) 632-7792.
LPTV and the LAW
What the New Application and Displacement Rules Mean for You

—by Peter Tannenwald

On February 27, 1987, the Commission released its Report and Order in MM Docket No. 86-286, announcing new filing procedures for LPTV applications, and new measures for the relief of displaced LPTV stations. The rules, which are effective April 13 of this year, authorize filing "windows" for LPTV applications. The date of the first window has not yet been announced.

The new rules also provide limited relief for LPTV and translator stations displaced by full power television or land mobile radio allocations, and interference to cable TV headends and ITFS/MDS converters.

The Commission’s main purpose in adopting new rules was to avoid another avalanche of paper like the one that literally flooded its halls when over 25,000 LPTV applications were filed in 1983. Two approaches to limiting the number of filings were considered: 1) authorizing windows one at a time for narrow geographic areas, and 2) imposing a cap on the number of applications that any one party could file during a single window. The FCC chose the latter approach, because it found that the main cause of the 1983 logjam was multiple filings by single applicants: some 75% of all the applications were filed by only 10% of the applicants.

Thus, future filing windows will continue to be nationwide (although Alaska is treated separately), but a ceiling of five will be placed on the number of applications in which a single applicant may participate.

Ownership Limits Are Stringent

"Participation" by a single applicant means being involved in any way: applying as an individual; being a general or a limited partner in a partnership applicant; or serving as an officer or director, or holding 1% or more of the stock, of a corporate applicant. Full ownership information—including names, addresses, and telephone numbers for all parties—will be required in the application. (These standards for what constitutes "participation" are much more stringent than the standards applied to applicants for full power broadcast stations, where non-participating limited partners and owners of small stock interests are sometimes disregarded.)

While the Commission does not deal explicitly with the subject in the Report and Order, past precedent in other broadcast services indicates that family relationships are likely to be examined closely. In general, a husband and wife are considered to be a single party, as are minor children and a parent. Adult children are generally presumed to be independent of their parents and of other adult siblings, but questions may be raised where a parent or sibling provides financial assistance to an applicant. As you prepare your application, be sure to consider these problem areas.

Translator applications will continue to be treated the same way LPTV applications are. Despite continued attempts by translator interests to obtain preferred processing, particularly in the case of state networks of public television stations.

New Displacement Rules

The second point addressed in the Report and Order is the "bumpability" issue, wherein authorized LPTV or translator stations—because of their secondary status—can be displaced by full power TV or land mobile allocations. In the past, any request to change an LPTV channel for any reason has been treated as a "major change" application, requiring the applicant to wait for a filing window and then face competing applications and, usually, a lottery. Because the risk of losing the lottery is substantial, the survival of the LPTV station is threatened.

Under the new rules, a displaced LPTV station may apply for another channel without facing competing applications, but only if the new channel is completely vacant, and only if operation on that channel would not cause interference to any existing station or pending application.

Unfortunately, this inability to prevail automatically over pending applications represents a serious setback for LPTV stations threatened with displacement. But the Commission was evidently not willing to tackle the legal issues that might be raised were it to dismiss legitimately filed applications in favor of an incumbent licensee.

"Displacement" Strictly Defined

Assuming that a truly vacant channel can be found, the "displacement" that entities an LPTV station seeking a channel change to file outside of a window will generally be deemed to occur only after the service receiving interference has al-
whether or not interference to land a
nel is permitted to apply to an or
ready been authorized. The announcement of
a full power channel allotment in a rule
making, or the filing of a TV application,
will not be sufficient.

However, all LPTV's and translators op-
erating on Channels 70-83 automatically
qualify as displaced, regardless of
whether or not interference to land
mobile operations occurs in practice. Also,
in response to one of the Comments filed,
the FCC extended displacement relief to
those LPTV stations or translators experi-
encing interference problems with cable
TV headends and ITFS and MDS
converters.

Once displacement occurs, an LPTV sta-
tion may apply to change channels with-
out waiting for a filing window. Moreover,
some leeway will be afforded in the
present rule, which forbids LPTV's from
filing for any modifications that would in-
volve an extension of their service area.
Thus, displaced LPTV's, while changing
channels, may also modify their transmis-
sion facilities, as long as they do not move
their transmitter sites more than 10 miles.
Switches between VHF and UHF bands
will be permitted.

This relief does not apply, however, to
LPTV's that are not displaced but seek to
modify their facilities because of inade-
quate coverage, loss of transmitter site, or
other reasons. Unless they file during a
window and take their chances in a lottery,
they may not change channels, move their
transmitter by more than 200 meters, in-
crease power, or extend their signal cover-
age area.

Note that an application by a displaced
station that is filed during a window will
not automatically prevail over any other
application filed during that window. Thus
to be sure of being free from competition,
displaced stations must file as soon as
they can, and before the opening of the
next window, after they become eligible
for displaced treatment.

Two Applicants, One Channel

There may be situations where two or
more displaced LPTV's seek to move to
the same vacant channel. In that case, a
first-come-first-served rule will apply, and
the earlier filed application will be
granted. There will be no relief from the
"letter-perfect" standard for applications
by displaced stations, so in order to be
sure of obtaining a new channel, an appli-
cation will have to be both first and
perfect.

If a displaced station is unable to find a
vacant channel for which to apply, it can
obtain special temporary authority (STA)
to operate on a currently unused channel,
despite the fact that applications may be
pending for that channel. Many stations
that have already been displaced are op-
erating under STAs. However, in cases
where other applications are pending for
the STA channel, the new rules offer no
permanent relief. The displaced station
must compete against other applicants
in a lottery and will be given no preferred
status.

Preparing for the Window

As you get ready for the next filing win-
dow, remember the five-application limit,
and choose your markets carefully. Also,
remember that there will be a $375 filing fee
per application.

Lastly, the FCC's order adopting filing
fees announced that all "window" filings
will be made at a special location in Pitts-
burgh, and not in Washington. We are
awaiting a final announcement as to
whether only non-broadcast window fil-
ings will be handled in Pittsburgh or
whether LPTV applications will also have
to be sent there. So before you file, be
sure to find out the correct location to
deliver your application.

Peter Tannenwald is a partner in the Wash-
ington, DC law firm of Arent, Fox, Kintner,
Plotkin & Kahn. He is general counsel to
the Community Broadcasters Association.
Interview
continued from front page

IN: and five in Florida—Orlando, Ocala, Lake City, Gainesville, and Naples. Headquarters station W08BY is located in the Marc Plaza, a grand old Milwaukee hotel whose upper floors have been converted into elegant, upscale office suites. It was here that we visited Wayne Register, general manager of Woods Communications’ LPTV Division, to find out more about his plans for this new kind of broadcasting.

Register is a soft-spoken Southerner with a quick business canniness and an obvious and unaffected decency. He is bullish about LPTV, especially about the opportunities it offers to small advertisers left out by pricey big stations, and to the hundreds of segments of American society whose special concerns and tastes cannot economically claim a place in the programming plans of the major networks. Here is what he told us.

LPTV Report: Although he was not among the original applicants for LPTV stations, lately Charles Woods has been aggressively buying LPTV construction permits. Wayne, would you describe the markets that you’re targeting, and why you’re targeting them?

Register: Well, for this first series of stations, we’re targeting the largest markets—the larger towns, the larger cities. They’re more attractive to our advertisers. Our Channel 13 in Chicago, for example, reaches two million people. Atlanta is also a big market.

Our construction plan starts here with our base station in Milwaukee. Chicago will be staffed next. Then Atlanta, then Orlando, Naples, and Ft. Myers.

One of our strategies is to work stations in pairs. Milwaukee and Chicago are close together geographically, so we can do a lot of things out of Milwaukee for Chicago, and vice versa. The same is true for Orlando; it’s only about 40 miles away from Ocala. So they work together, even though Ocala is a lot smaller than Orlando is.

Ocala is a good market in its own right though. It’s one of the fastest growing cities in America. It’s a resort city, a retirement city. Its leadership is some of the best in the nation—very progressive, looking to the future, not just making plans for today.

LPTV Report: Wayne, you’re programming here in Milwaukee centers around music videos. Is this true for all of your stations?

Register: Videos are, in my opinion, a good way to start. They may not be the complete answer though. We don’t know the future of music videos. We hope they will be around for a long time but you can never rest assured that any programming will continue to be popular forever.

LPTV Report: How is your music video format different from HWT Video USA, MTV, or some of the other music video satellite services?

Register: Well, basically, ours is different because we localize it. We play Milwaukee music—what Milwaukee wants to hear. We’re making announcements about Milwaukee. We’re doing Milwaukee concerts. We’re doing profiles of Milwaukee musicians. And we do a variety of programming. We do rhythm & blues, we do rock, we do heavy metal in the afternoons for the kids, we do pop.

We feel like we offer something for everybody, and we know from the phone calls we get that it’s not just the kids who are watching. Housewives watch during the daytime. The after-school hours are controlled by the kids. Then we have the adult audience until 10 or 11 p.m. In Milwaukee we serve two major universities as well as several smaller colleges, so we have a strong young adult audience.

We also get involved locally in other ways. A couple of the local radio stations—WMIL, a country station and WAWA, which is basically soul—come over here every week to host their own programs. The viewers love it.

We’re planning to diversify our programming to give the community something different, and we’ll be announcing those plans soon. We’re in negotiations right now with several programmers. But we won’t get too far away from our music.

We have meetings every day of the week to discuss how we can do something better or different, or how we can do new local programming.

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Actually, they're getting pretty famous! They get marriage proposals daily when they're on the air.

LPTV Report: What do you look for when you hire a VJ?

Register: We try to use good judgment. We look at their background: is this the kind of person that we want in our organization? We don't necessarily look for experience. Some of the best VJs we've had have never been in radio or TV before. On the other hand, some of the best ones we've had have had that background. It depends on the person.

LPTV Report: Milwaukee is cable by Warner which has traditionally been reluctant to carry LPTV. Can you tell us how you negotiated cable carriage with them?

Register: First, you have to have a positive attitude. Hostility doesn't get anybody anywhere. Business is business, and negotiation is the only way to do business. You may not get what you want, but at least you can leave friends.

We tried to go in with a good attitude and show Warner that we were going to do something positive for them. We believe that since Warner has been carrying us, they've gained subscribers—people who have subscribed just because we're being carried.

LPTV Report: How long did it take to conclude negotiations with Warner?

Register: We've been talking to them the entire time we've been on the air. But I started negotiating in earnest about two or three months before we made a deal.

LPTV Report: What about the suburban cable systems?

Equipment System: W08BY, Milwaukee, Wisconsin

- Acrodyne T-210 transmitter
- Scala HDCA-5EB antenna
- Scientific Atlanta 9000 receive dish
- Scientific Atlanta 6650 satellite tuner
- 2 Sharp XC-A1 cameras
- Sharp XC-900 camera
- 2 Sharp XM-1300 video monitors
- 2 Sony VP-5000 video tape players
- Sony VO-5600 video tape recorder
- Sony VO-5800 video tape recorder
- Sony VO-5850 editing VTR
- Sony VO-4800 field VTR
- Sony RM-440 controller
- ALTA Group Pyxis video production system
- Grass Valley TEN-X switcher
- Fortel CCD-HP time base corrector
- Harris AC-20AS frame stor
- Quanta QCG-400SD character generator
- Grass Valley 3256A-3 sync generator
- Grass Valley 8501 and 3240 distribution amplifiers
- E/V 8212 audio board
- 2 Broadcast Electronics 3300 cart machines
- E/V RE-20 microphones
- Lowel Omni lighting kit
Register: We haven't started pushing for that yet, but we will be in negotiations with all of them.

LPTV Report: What about Chicago?
Register: Chicago is not a cabled city. We feel that cable will not be a factor in that town.

LPTV Report: What about Atlanta?
Register: We haven't begun to concentrate our whole effort on developing Atlanta. We want to finish Milwaukee and Chicago first. But when we do, we definitely will negotiate. Atlanta is about 88% cabled. If you're not on cable in Atlanta, you're not watched.

Orlando is the same as Atlanta. Penetration is high. In Ocala, carriage would definitely be a help. Cable penetration is in the neighborhood of 40% in Ocala.

LPTV Report: What is the level of commitment to LPTV on the part of Woods Communications?
Register: Totally committed. Totally committed. We feel that there's a future in LPTV. We feel that neighborhood broadcasting is what TV started out to be. Where in Milwaukee but on the neighborhood stations can most of the civic clubs get recognized? The big TV stations have gotten so commercial, they simply don't have time to cover all the local events. On the other hand, we've got time for those people. We've got time to put them on the air.

LPTV Report: Tell me what you see in the future for Charles Woods LPTV.
Register: A network of stations perhaps tied together with satellite uplinks and downlinks—serving our respective cities in a local way.

LPTV Report: How big do you want your network?
Register: Well... CBS has some 200 affiliates. right?

LPTV Report: Wayne, from your perspective, what is the future of LPTV?
Register: The future of LPTV is excellent. You'll get out of it what you put into it. I see LPTV turning around drastically for us, because we are committed to it. The City of Milwaukee is going to be a lot better because of us.

I think that the next five years will be survival years for LPTV. Unfortunately, some people may not survive.

LPTV Report: Why?
Register: Lack of programming. Unless things change, the lack of cable carriage. The lack of committed people who are able to lose some money for some years to see the service take root.

In some ways, you can compare LPTV to the early days of FM radio. Nobody thought FM would work. No one wanted to invest in it. Now, in the 1980's, FM is the dominant factor in radio. AM radio stations are going out of business, they're going off the air. There's just no demand for AM anymore. We feel that it's going to be the same way with LPTV. LPTV will be the dominant force in television.

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You'll want to look at Rohn (Booth 2449), both for their towers and also for their transmitter shelters; isolation transformers from Shively (Booth 2442) — especially the Model 2320 which is designed specifically for LPTV, and the special purpose surge protectors for LPTV applications from L.E.A. Dynatech (Booth 3332).

**LIGHTS AND SETS**

For lighting—both portable and studio—see Lowell-Light (Booth 2600) and The Keylite PSI Group (Booth 2789).

Modular studio set designs from Uni-Set are on display in Booth 2806. (Ask to see the miniature set modules—a handy way to experiment with different sets for different applications.)

**CHARACTER GENERATORS AND GRAPHICS SYSTEMS**

The big name here, of course, is Quanta, whose QCG Series, along with the Microgen, led with over a third of the LPTV market in our January issue’s Equipment Survey. They’ll be in Booth 3128 displaying three new CGs especially for LPTV: the Microgen Plus, with four standard face dials in both upper and lower case and resolution to 50 nanoseconds; the QCG-34, with four standard face dials, instant sizing, 48 sizes, single or dual disk drives, and resolution to 18 ns; and the QCG-38 with eight face dials, 30 graphic symbols, and 18 ns resolution proportional to character size, a feature which makes for very fine resolution.

In Booth 3072, there is Chyron’s VP-2 and the Chameleon paint system, which together can mix graphics with character generation for results not formerly possible in this equipment price range. While you’re there, be sure to ask about Chyron’s new “Earns-Its-Own Payments Plans,” three pay-as-you-grow ways to afford quality Chyron products.

And you might take a look at Laird Telemedia’s CG’s and multiplexers in Booth 3474, and D.E.L. Compu-Cable’s SpectraView Character/Graphics Generator (Booth 2551).

Lastly, the Grass Valley Group (Booth 3112) is introducing the Dubner Computer System, a new, character generator with Grass Valley quality for under $10,000.

**AUTOMATION SYSTEMS**

Take a trip over to Townsend Broadcast Systems (Booth 3305-3306), and check out the new DC-80, an automatic, digitally controlled, video cart machine system. Pre-programmed station breaks are now simple to accomplish, and operator errors are virtually eliminated. Also check out the DC-800. This is an automation system capable of running an entire TV technical operation — programs and commercials — for eight hours, with no operator intervention.

Then there’s the Channelmatic (Booth 2548) automatic playback sequencer for up to 10 VCR’s: their “Broadcast I”, an automatic video cassette changer for up to 15 cassettes; and the star attraction, the “Li’l Money Maker”, a low cost ad insertion system.

There’s the economical BCS Controller by CCI (Booth 2484), capable of commanding up to eight tape machines and two alternative video/audio sources.

Lastly, Alamar Electronics (Booth 3561) is showing the “Auto-Cart”, a single-channel automation system that controls from 1 to 32 multi-format VTR’s and one strip switcher; and the “Copy-Cart”, a net delay record/playback automation system.

**AUDIO**

For your audio needs, stop by ADM Technology (Booth 3266) for a look at their new RM-1083 rack mount audio mixer, a mixer with specific application to LPTV.

International Tapetronics Corpora-
tion/3M (Booth 3052) is showing, for the first time at NAB, the DCM-1 Dynamic Cartridge Monitor, which, used in conjunction with your cart machine system, identifies worn-out or problem tapes before they can fail on the air. ITE/3M is also announcing at NAB a generous trade-in program and new extended payment plans which will make it easier for broadcasters to fill their equipment needs.

Also check out Cecet Vega’s VECTA VS-1 wireless mic system in Booth 3394, and of course Shure’s audio mixers and microphones in Booth 3320.

**TIME BASE CORRECTORS**

At Fortel’s Booth 3044, you can see the DHP-525, a good, basic TBC for the Sony 5000 Series VTR, as well as most others. Priced under $6,000, its many features

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**NAB Exhibits**

low-cost Shuttle 1B which works with the Pyxis and Sony’s RM-440 to roll a “B” VTR with the normal edit cycle.

**RF AND TOWER EQUIPMENT**

Are you just starting to get your station up? You’ll want to see Television Technology Corporation’s transmitters (Booth 3580)—available from 1 to 1,000 watts in both UHF and VHF. Also offering transmitters are PESA Electronica (Booth 3417), and Acrodyne (Booth 3521), which is showing their new, lower-cost, Freedom transmitter line.

You’ll want to see EMCEE’s transmitters in Booth 3032, a 1-KW unit and two 10-watt units, one UHF and one VHF. EMCEE also offers antennas on an OEM basis. And, as we mentioned before, they’ve developed some financing and leasing packages which you’ll want to check into.

Also, check out Townsend’s TE-3 (Booth 3305-3306), the new VHF and UHF TV exciters with new circuitry, control, and chassis; and the TM100 transmitter input and monitoring system.

For antennas, co-axial transmission line, and downlinks, see Andrew Corporation in Booth 3098. Then hike down to Booth 3406 for Bogner’s high V and U antennas, available in multi-directional or directional, as well as multi-channel, versions.

Chyron’s VP-2 character generator and the new Chameleon paint system.

Robert Bosch (Booth 1340) is showing four graphics systems, including the FGS-4000, an animation unit that provides interactive manipulation of two-dimensional and 3D objects in a 3D presentation.
include full frame, freeze frame, and freeze field. (While you're there, you can preview the new CC-1 Color Corrector.)

Also take a look at the ALTA Group's Cygnus (Booth 2502), a video effects generator, time base corrector, and four input audio/video routing switcher.

SWITCHERS

Grass Valley (Booth 3112) is showing the Model 100-N production switcher, the 8560 Series audio distribution amplifiers, and the 9550, a changeover switcher for the 9500 Series sync generators. Also being unveiled for the first time at NAB is the TEN-20 and 20-TEN routing switcher—a new, low-cost routing switcher system featuring audio only, video only, or video and multiple audio, 10x20 out and 20x10 out.

Then stop in at Channelmatic (Booth 2548) for a look at a very low-cost 8x1 switcher, and also their 10x1 switcher.

Robert Bosch (Booth 1340) is showing the RS1ME Compact Production Switcher with 10 inputs plus 2 title inputs; its big brother, the R102ME (16 or 24 inputs plus 5 title inputs); the MCS-2000 Master Control Switcher which offers more functions than traditional switchers; and the TVS/TAS-2000 Video/Audio Distribution Switching System.

DISTRIBUTION AMPLIFIERS

Channelmatic (Booth 2548) is displaying audio and video DA's, as well as a sync stripping pulse DA.

Robert Bosch (Booth 1340) is introducing at NAB the BVA-350 Wideband Video Distribution Amplifier, as well as the BAA-350 Audio DA with one input and 6-12 outputs. They are also showing their LDH line of high quality picture monitors.

TEST EQUIPMENT

For test equipment, you'll have to stop at Tektronix (Booth 3214) and take a look at the 1705 spectrum monitor for newsgathering operations, the 1700 Series waveform monitors and vectorscopes, and the 1480-F30 noise measurement kit.

You might also drool a bit over Tektronix's new component equipment and the new automated video measurement units being introduced at NAB.

At Videotek (Booth 3316), you can see the TVM 620, a new waveform monitor and vectorscope combo; the DM-140S, a new 140-channel stereo demodulator; and the Times Six standalone blackburst generators. Also at Videotek is the AVM-19s, a new 19" rack mount color monitor with audio.

Finally, don't forget to stop in at Leader Instruments (Booth 2763) for a look at the LVS-5850B vectorscope.

DATA MANAGEMENT SYSTEMS

Alamar Electronics (Booth 3561) is showing three computerized data systems—The Media Manager, for cataloging film and tape; the Schedule Manager, an integrated traffic package for generating daily logs; and the Traffic Manager. All three Manager systems interface with Alamar's MC-1090, a multi-channel automation system handling multiple spot tapes.

Generic Computer Systems (Booth 2818) offers computerized traffic and billing systems designed especially for LPTV. Geared for either IBM or Apple hardware, the Generic systems are economical too—easy monthly payment plans are available.

continued on page 12

VID VIDEO

ZERO FRAME OFFSET ADDRESS TRACK MODIFICATION

- Update all VO-5850, VO-5800, VO-5600, VP-5000, VO-5630 and VO-6800 with SMPTE time code
- Allows third channel time code
- BU1-800 compatible
- 24 x head switch plus LED
- Installation kits available

SHUTTLE I

- Adds shuttle knob to VP-5000/VO-5600, VP-5030 and VO-5630P
- Variable speed—0 to 5x in forward and reverse
- Control track readout
- Preroll

INTRODUCING SHUTTLE-IB

- All the features of the SHUTTLE PLUS
- A/B roll editing with Sony RM-440
- GPI programmable switch triggers Pyxis effects
- No additional interface cable required

SHUTTLE II INTERFACE

- Use VP-5000/VO-5600 with: RM-440, ECS-90, ECS-204, Paltek Abner
- Saves $2000 per playback VTR
- Variable speed—0 to 50x in forward and reverse, and BUMP commands from edit controller

Contact: Russell W. Glenn
President
Former Sony Broadcast Instructor
3919A W. Magnolia Blvd., Burbank, CA 91505
(800) 826-2035 In California (818) 845-1515

LPTV'ers

We Know Your Market

IBMisLOG $3500
APPLELOG $2600

Generic Computer Systems knows that our computerized traffic and billing systems are exactly what you have been looking for. Why? We know small market radio. We're broadcasters too, and we know that LPTV and small market radio think alike. We have geared the IBMisLOG and APPLELOG systems to your home-grown marketing approach. Generic Computer Systems knows your marketing appeal emphasizes local happenings and local coverage as you identify with your community. We allow easy monthly payments and, like you, we are open seven days a week for service.

Let Generic improve your efficiency and end the drudgery of creating logs and generating bills — it will be the best generic investment you'll make.
Nab Exhibits
continued from page 11

Finally, The Management (Booth 2512) is showing their EZ LOG, complete software for traffic, A/R billing, affidavits, aging, and sales reports. The entire system, which runs on IBM-PC or compatible hardware, is available for $495.

GENERAL

As you’re strolling through the exhibits, do stop in to visit Jim Gorman at Gorman-Redlich (Booth 2715), who supplies Emergency Broadcast System encoders, decoders, and encoders-decoders, as well as NOAA weather radios. You need them: Jim’s got them.

Also check out the clocks and timers from ESFJ (Booth 3470).

Then look at Quickset (Booth 3380) for their line of tripods. especially the economically priced and lightweight Rainbow Pro with its multi-purpose mounting plate. The Rainbow Pro is a reliable, stable support for virtually any tripod application. Quickset also offers fluid head, a dolly, and a geared elevator column.

And don’t forget to visit K & H Products in Booth 2532. They make carrying cases for cameras, VTR’s, and accessories.

Where are you going to get it all? See John Grozik in Booth 2486 who will introduce you to the affiliate dealers in the Professional Systems Network, all of whom have committed themselves to excellent customer service after the sale and are geared to do LPTV turn-keys.

And finally, how are you going to pay for it? Not to worry. Riviera Broadcast Leasing has developed a new equipment leasing package designed to allow LPTV stations to acquire high-quality equipment at affordable terms. Riviera is in Booth 2793.

Happy hunting!

PACKED FOR ACTION

The minute you get that (CP) construction permit, you’re marked. Every video equipment salesman in the book will be on your doorstep pitching the latest state-of-the-art equipment. But who’s going to show you what to do with all that stuff when it arrives?

WE WILL.

When you purchase a Lines Video System you get more than just state-of-the-art equipment. You get our professional team of video specialists. The right equipment you need for a low power TV station, a remote production van, or a production studio. The right team of professionals to show you how to put each piece through its paces. We’ll teach you system installation and operation, production editing, special effects, and everything else you need to know to put your investment in the black.

So when your advertisers ask for miracles, you’ll know how to produce them.

Why just settle for a truck load of equipment when you can also have a plane load of professionals? Call Lines Video Systems and turn a turn key operation into one that turns a profit.
In the twenty years since we innovated a remarkable slot array design we have succeeded to a leadership role in TV broadcast antennas. We had to be better than the competition. We still are.

Today there are over 1000 Bogner TV transmitting antennas in use, more than from any other single manufacturer. Antennas with a long history of trouble-free performance and unequalled coverage.

Bogner antennas come in every power range and with the largest number of standard patterns in the industry. In addition, Bogner offers hundreds of custom patterns plus special designs to meet particular requirements.

Find out more. Call or write Bogner Broadcast Equipment Corp., 401 Railroad Avenue, Westbury, New York 11590, (516) 997-7800.

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Model CEB Encoder-Decoder
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Model CD Decoder
Encoder FCC Type Accepted Decoder FCC Certified
Exceeds FCC Specifications
Receiver can be supplied to drive Decoder

Required for L.P.T.V.
Price
$475.00
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$100.00

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Allonas did not make the mistake of rushing out and buying lots of flashy large TV station equipment. Instead, he used his experience in the radio/TV consumer field and bought as much good quality consumer material as he needed. He kept his eye on the most important thing, however: he insisted on top quality video transmission. This helped him immensely in competing with the cable TV in Bucyrus—which carried signals from full service TV stations in major markets.

Allonas also saved money another way. When he put his Channel 54 on the air, I specified a Bogner BU type antenna to be mounted atop the existing Channel 22 BU antenna. But instead of buying a new unit, Allonas got a used one and sent it to Bogner for refurbishing. This saved him about $10,000.

One piece of advice: There is always the temptation to pick up a used antenna and "save money" by putting it straight into service. Don't do it!—unless the unit is a simple Yagi type that can be eyeballed and any obvious damage rectified by your own engineer. The cost of putting up and pulling down an antenna twice can more than eat up the money saved on a used one.

There is a lot of talk about the merits of VHF versus UHF LPTV, and low band VHF versus high band VHF. However, a great deal depends on the local topographical conditions and the facilities that have been authorized. The distribution of the viewing audience may also be a factor; for instance, if the viewers are concentrated in one particular area, a directional rather than a non-directional antenna may be in order. For the most part, though, I feel that the old "stigma" of UHF is now well behind us, and that in many ways UHF is preferable to VHF.

In most cases, more power can be radiated with UHF, allowing high transmitting antenna gain* with small structures. Also, a viewer's receiving antenna can be improved by raising it above the ground. This is especially important in rural areas, where the receiving antenna may be at least 30 feet above the ground. In cities, the receiving antenna may be as low as 10 feet above the ground and still be effective.

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**About the Author**

Who is John Battison? If you're in television engineering, you know; if you don't, you should. But those of you new to TV, or in less technical areas, may not have heard of this gentleman who is one of the pioneers of television technology.

Battison's career is varied and follows the history of television. He began with ABC in the 40's, building their flagship station—WJZ, now WABC—in New York City, and following that with other ABC stations in major cities around the country. In 1946, he worked at CBS with the late Dr. Peter Goldmark developing color television technology.

For many years, Battison practiced as a consulting engineer in Washington, DC. Among his clients were Bing Crosby and several foreign governments, including Lebanon, for whom he developed the national television system. He founded the Society of Broadcast Engineers and has written fifteen books and more than 360 technical articles for both international and U.S. technical journals.

In 1978 he joined the faculty of Ohio State University where his main responsibilities were overseeing the university's radio and television stations, and where he developed the Battison Technical Seminars, familiar to SBE members. He has also owned stations—KAKE Channel 6, in Carlsbad, New Mexico, and a Carlsbad radio station.

After retiring from Ohio State last October, Battison set up a consulting engineering practice in Columbus Ohio, where he has since done much work in LPTV.

Welcome to The LPTV Report, John!
smallest and higher, with more gain and
directivity.**

In smaller markets where your station
may be the only UHF in town, it is impor-
tant to mount your antenna on the most
suitable VHF tower, rather than on, say, an
FM tower in the opposite direction. Your
viewers' antennas will all be oriented
toward the VHF towers and, consequently,
toward your U.

Remember that some viewers will not
have UHF antennas. Others will have in-
stalled combination VHF/UHF antennas.
Still others may be able to add a two-bay
“bow tie” antenna, or use the UHF
“Loops” that came with their TV sets.

On the other hand, if your market al-
ready has UHF stations, the logical thing is
to locate on a UHF tower. If all the U's use
the same tower, you will inherit the exist-
ing UHF-oriented antennas when you go
on the air.

I can hear readers saying, “Yes, that's
fine, but our CP's are for a different loca-
tion. We can't just move to a new site.”

That is more of a problem. But provided
that your new antenna location does not
produce service to an area not already in
your service contour, you can file for a
minor change and get it granted reasona-
ably quickly.*** Every case is different and
should be considered carefully by your
chief engineer, with a small assist from a
consulting engineer if necessary.

NEXT MONTH: “Service” Contours and
What They Mean

“Gain: A technical term used for the
amplification of the signal produced by
the antenna. In general, the more ele-
ments (‘fishbones”) in the antenna, the
higher the gain.

**Directivity: The ability of an antenna
to concentrate its “pick-up”, or signal,
along a narrow beam in a given direction.
***Ed. Note: For more on moving your
site, see Richard D. Bogner’s “Moving
Your Antenna? Don’t Lose Coverage” in
the September 1986 LPTV Report.

John H. Battison, P.E. is president of John
H. Battison & Associates, Consulting Radio
Engineers, in Columbus, OH.

EBS Script Change

Broadcast stations now have the option,
during their weekly Emergency Broadcast
System announcements, of mentioning
the types of emergencies likely to occur in
their area.

This should be done in the third sen-
tence of the second broadcast announce-
ment: . . . If this had been an actual
emergency (optional)—stations may men-
tion the types of emergencies, such as
earthquakes, likely to occur in their area;
the attention signal you just heard would
have been followed by official information,
news, or instructions . . . . ."

FCC Requests Comments
on New TV Booster Service

In a Notice of Proposed Rulemaking
regarding amending the rules relating to FM booster
stations, the Commission has also pro-
posed establishing a television broadcast
station booster service.

Under the proposed rules, the licensee
of a full power television station would be
allowed to operate booster stations on the
same channel as the full power station
within that station’s Grade B contour. The
intention is to allow a full power licensee
to achieve coverage of all areas within its
predicted Grade B contour, specifically
those areas unable presently to receive
the signal directly over the air because of
terrain blockage. The Commission stated
that the boosters will not be permitted to
operate as point-to-point relay systems.

The operating power and location of
television boosters would be limited only
to the extent that they not provide Grade
B or higher level service beyond the pre-
dicted Grade B contour of the primary TV
station, or increase interference to other
TV stations. They would be treated as on-
channel translators and would be required
to abide by the interference standards ap-
licable to all TV translators. Initially, the
Commission would authorize these sta-
tions only at low power levels, like the
present TV translators and LPTV stations.

Because such a booster would be a
technical extension of the television sta-
tion being rebroadcast, ownership
would be limited to the licensee or permittee
of the rebroadcasting station. Also, applica-
tions for the boosters would be exempt
from the competitive applications
process.

The Commission requests comments on
1) the feasibility of the proposed TV
booster service, especially in regard to
the interference protection issues, 2) whether
the proposed technical regulations are ade-
quate particularly the suggestion that
booster applications state the measures
that will be taken to insure that operation
of the booster would not degrade areas of
service from the primary station, and
3) the proposal to limit ownership of TV
boosters to the licensees of the stations
they rebroadcast.

Comments are due April 10, 1987; reply
comments are due April 27. For further
information, contact Marcia Glauberman
at (202) 632-6302.
Coping With Growing Pains
Growth Can Be Painful If You're Not Prepared

—by John D. Luellwitz

Economic theory and the real world seem to meet rarely. But when they do, the meeting can be both enlightening and frightening. One fairly common intersection of the realm of theory and the world of action occurs when a business passes out of what economists call a "relevant range of production."

To the economist, a relevant range of production is the level of production below which fixed costs remain reasonably constant. Moving beyond that level—that is, adding production capacity by acquiring or developing additional resources—readjusts fixed costs and creates what can be regarded as growing pains.

Whatever you call it, a shift from one relevant range of production to another can create painful problems. The diseconomies of scale can be devastating to your profit picture if you do not anticipate and resolve them before they begin to affect your station.

Diagnosing Growing Pains
Growing pains come in many varieties, and not all elements of a business will experience these pains at the same time. Consequently, your station may be strained in different areas with each significant increase in sales volume. To an economist, that would indicate a business with fairly narrow relevant production ranges, each with a different resource defining its upper limit.

The resource lacks that can restrict profitable growth are numerous, but the most common are 1) the lack of trained personnel; 2) the lack of adequate internal accounting, data processing, or customer service systems; and 3) the lack of production equipment. The growing pains caused by these and other resources can surface in many ways:

Cash Shortages. A company's growth can be measured in two areas—revenue growth and asset growth. If sales are allowed to grow uncontrolled, they may out run your station's ability to finance additional assets such as programming or production equipment. As a result, new programming and equipment is funded out of the company's operating cash flow and your station never seems to have enough cash to pay its bills, although sales and profits are increasing. If this situation is allowed to continue unchecked, suppliers may eventually refuse to ship to you, and both sales and profits will drop dramatically.

Dissatisfied Customers. The quality of your local production, especially ad production, or of your customer service may suffer as your station's business expands. Once a customer's confidence in you is lost, it can be very difficult to regain.

Lower Profits. In some situations, when you increase production capacity by adding people or by increasing your investment in fixed assets, your station's break-even point rises. When the additional growth profit generated by the sales increase is not sufficient to cover the new fixed costs created by the increase in capacity, lower operating profits will result.

**DISK BASED GRAPHIC GENERATORS**

**VISTA 90 ROM BASED CHARACTER GENERATORS**

### DISK BASED GRAPHIC GENERATORS

- **VISTA 90 SINGLE CHANNEL GRAPHIC GENERATORS**
  - Model VISTA 90/SF includes — 2 (512K) flexible disk drives
  - Model VISTA 90/SF/SH includes — 1 (20M) hard disk drive — 1 (512K) flexible disk drive

- **VISTA 90 TWO CHANNEL GRAPHIC GENERATORS**
  - Model VISTA 90/DF includes — 2 (512K) flexible disk drives
  - Model VISTA 90/BH includes — 1 (20M) hard disk drive — 1 (512K) flexible disk drive

### VISTA 90 ROM BASED CHARACTER GENERATORS

**FEATURES**

- **FONTs** — 64 Line Universal, Special Style Font — 32 Line Universal, May be Custom Ordered — 16 Line Universal
- Sloped or Non Sloped Letters
- Store/Recall up to 8 Pages of Text
- Roll/Crawl: up to 8 Pages of Text
- All Other Vista 90 Features Except Disk Functions
- Computer (RIS232C) Interface
- PC Type Keyboard

**NOTE:** All VISTA 90 systems are upward/downward compatible.

- The Basic Vista 90/RM ROM Based Character Generator is readily upgraded to a single channel Vista 90/SF/SH graphics system by adding the Disk Drive Accessory Kit.
- The single channel Vista 90/SF/SH graphic system is readily upgraded to a dual channel Vista 90/DF/BH graphic system by adding the Channel Expansion Kit.
- Single or dual channel Vista 90 graphic systems can be expanded to a full blown artwork composition system by adding the Keyboard/Camera Compose Artwork Composition Kit.

*Prices are from $8500. U.S.*

**Features for Broadcast Application**

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- Charts and Illustrations

**MPB Technologies Inc., 1725 Trans Canada Highway, Dorval, Quebec H9P 1J1 Canada, Tel.: (514) 683-1490 TLX: 05-823509**

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There are few things more frustrating than realizing that even though sales go up, there is less profit to show for the effort.

**What’s the Best Treatment?**

Planning can minimize the impact of growing pains. To achieve profitable growth, you must first identify areas where expansion may create bottlenecks in the flow of services to your customers and viewers. From an economist’s point of view, this exercise involves identifying the resources that define the upper boundary of any given relevant production range.

The task is not easy. It may be one thing to identify the theoretical capacity of your production department, but determining the actual point at which the production of one more tape will create more problems than benefits is very difficult and requires thorough knowledge of the entire production process. You can have even more difficulty determining the number of invoices your accounting people can process or how many phone calls the customer service group can handle each day. And the problems are compounded if, as is the case with many LPTV operations, everybody wears at least a couple of hats.

**Employees May Have Insights**

In spite of these difficulties, you must determine what the capacity of each major business operation is before it is reached. The people who work within each operation may be the best judges of capacity.

Without the ability to anticipate bottlenecks, you will be unable to expand in an orderly fashion, thereby setting the stage for periodic chaos that makes life difficult for customers, employees, and management alike. A plan for growth, which can smooth the wrinkles associated with expansion, may include identifying potential sources of additional financing or formalizing the employee training program so productive workers can be developed in a shorter time.

Once the potential bottlenecks are defined and contingency plans are made, a monitoring process should be put into place. This process will alert you when the station approaches capacity on any one of its critical operations. Implementing a contingency plan will almost always require some lead time. Without this lead time, the plan may be useless and you will find your actions being controlled by your station’s growth, rather than the other way around.

**John D. Lueilwitz is a manager in the Entrepreneurial Services Group of the Milwaukee office of Arthur Young. Arthur Young, the international accounting, tax, and management consulting firm, has offices in 90 U.S. cities and 280 other cities worldwide.**

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LPTV Report / April, 1987 / 17
Dear LPTV and CP Holders

Channel America is a serious, committed, long-term player in LPTV. We have the concept, format and resources necessary. We now seek LPTV properties in top 100 markets, prior to the FCC window and our initial public offering. We believe that we can offer CP holders a variety of alternatives that provide near and long-term rewards without infringing on FCC regulations. Our offers require no further investment on your part, yet give you a participation in our future. All calls handled through special hotline with total confidentiality.

One LPTV per market. Must act immediately.

David Post
Chairman
Channel America
Hotline: 212-421-1449 or 212-421-7179
8AM to 7PM Monday through Saturday

15:31 EST

MGMCOMP

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After NATPE
(Programming Deals will Never be the Same!)

—by Kris Harvey

Whatever my original expectations of the 1987 NATPE Convention in January, they were surpassed completely by this four-star, worthwhile show.

There were over 200 exhibits at NATPE, and I visited at least 150 of them. I saw and met stars like Oprah Winfrey, Jack Ritter, Tony Danza, Dr. Ruth, and Hulk Hogan. I ate mounds of free shrimp cocktail, and even though I don’t care much for caviar, I was impressed to discover it in the convention booths for breakfast.

Although I missed my flight and lost my luggage, once I got to New Orleans, I found myself sharing an airport limo with Mark Osmundson from Marshalltown, IA who was down to seek programming for his newly signed-on LPTV station. I exchanged my “spud-talk” for his “corn-conversation,” and both of us compared programming notes until the convention was over.

The syndicators generally gave me three kinds of attention: Day 1 was icy cold (I visited only the smaller booths); Day 2 was lukewarm (Bravo! I threw in a few larger ones); Day 3—Well done! (The biggies were asking me to talk to them.)

Programming, and the lack of it, seems to be the toughest problem of all for LPTV stations. We at K49AZ-TV felt that we had already secured half of the barter programming available to us. However, because of our market area and the latest Nielsen surveys (for which we attained full reportability), we found programming sources galore at NATPE. But I had to be there, face-to-face, to acquire it.

Finding good programming: either cash or barter, is a full-time job. I have found that your attitude has a lot to do with your success. Begging for programming like an underdog doesn’t compare with coming in from the point of view that any and all companies should barter with you. We all realize the quandary we’re in: We can’t get the numbers without good programming, and we can’t get good programming without the numbers. Our big job is to convince the syndicators that we are worth the gamble.

Securing programming for a TV station is far more complex than buying a music service for radio (which is where my background is). The industry lingo alone is enough to make you feel inadequate. If I had to do it all over again, I wouldn’t have started Channel 49 until I had found a helpful, successful TV station on the other side of the country who was willing to let me live with them for a week.

Broadcasting recently published a complete list of all the exhibitors at NATPE. If you want to improve your programming, I’d suggest that you call every one of them. Almost all syndicators have some barter shows. If they aren’t yet cleared in your market, you may find some golden opportunities.

No, these guys won’t treat you like a long-lost brother, but they’re only human. To quote Dale Carnegie, you must “appeal to their nobler motives.” Eventually they’ll capitulate. They did for me.

Good luck! And do plan to attend next year’s NATPE in Houston. What you’ll learn there will be well worth the price of admission.

Kris Harvey is vice president and general manager of K49AZ in Twin Falls, ID.
This month, our column will be read by a lot of new people. It’s our NAB Convention issue, and a multitude of extra copies were printed for hand-out in Dallas. For those of you reading this publication for the first time, we welcome you to the world of LPTV—low power television, or “Community Television,” a term that many of us prefer.

We are part of a bright new industry, an industry brought about by the FCC when they created the first new broadcast service in over 20 years. There are almost 300 of us on the air now. Communities large and small, in every state of the union. Some of us are very limited in our scope—modified translators really. But others of us are fully configured operations, looking every bit like any traditional television station anywhere.

The LPTV service was created by the FCC to bring new voices into the broadcast fraternity—minorities, women, and many other groups and individuals who feel they have something to contribute to their communities. It has been a rocky road these past five years. And many people, both in and out of the broadcast world, were ready to hang wreaths on us long ago. Some still are. We were plagued with “get rich quick” schemers, and “consultants” who wanted to help themselves more than the infant industry. Thousands upon thousands of faulty applications were filed by paper mills who took our money and ran.

Thankfully, these types have departed, and the serious players are now taking the stage. Everywhere, expiring construction permits have been purchased and activated. Instead of a plethora of failure stories, we have a multitude of success stories. We have music video stations, religious stations, all news stations, ethnic stations. We have traditional TV programming and we have programming resembling “radio with pictures.” The real key to our success is our responsiveness to our communities. We are bringing local TV, in ways never before possible, to areas never before touched by television. We are innovators.

If you are a radio broadcaster, consider this: many radio operators are picking up expiring LPTV construction permits in their towns. There’s no FCC restriction against radio people owning LPTV stations. Nor is there is with traditional TV. Radio people already have the buildings, towers, personnel, contacts, and sales momentum to make the TV transition extremely smooth. If you’re interested, check with some of us here at the convention at the LPTV session at 2 p.m. Sunday in room S-411 of the South Meeting Hall. Or contact us here at the magazine. We’re very aware of the construction permits available in your area. Who knows? You just might be able to skip the whole lottery process and become a fellow broadcast pioneer rather quickly.

When you do there comes the pitch. We really need you as a member of the Community Broadcasters Association. As in anything else, in unity there is strength. Every issue of this magazine highlights more breakthroughs in areas helpful to LPTV people. But these legislative and regulatory victories don’t come cheaply. They come through a lot of stumping in Washington, a lot of phone calls, and a lot of lobbying of all sorts.

Breakthroughs are also happening in programming. Consoritums are being put together and ways are being found to supply good programming to everyone at prices we all can afford.

It’s all coming together. It’s all working. But we need to have everyone in this business with us. We need station members and we need supplier members. We need your ideas. We need your financial support in the form of dues. We need your moral support.

Believe me, you will personally benefit from your association with the CBA. Enjoy! And SUCCESS!

Lee Shoblom is owner and general manager of LPTV 4S in Lake Havasu City, AZ. He is chairman of the Community Broadcasters Association.

Video Images Moves Offices

Video Images, Inc., a Wisconsin video systems dealer, has announced the relocation of its corporate headquarters to 285 North Janacek Road, Waukesha, WI. Branch offices are located in Madison, WI and Elk Grove Village, IL.

The new headquarters features a seminar and product demonstration studio and a larger installation department for remote truck modifications, prefabrications, and pre-delivery testing of television control rooms and editing suites.
**Classifieds**

**WANTED**

LPTV Construction Permits or Licenses. If you have an LPTV license or CP for sale, we have interested buyers. Confidentiality assured. John Kompas, Kompas/Biel & Associates, Inc., (414) 462-7010.

**FOR SALE**


SHOOK ELECTRONICS USA, INC. builds mobile television systems for independent producers and stations. Licensed engineering. 8-year track record of successes. CALL JIM BECKMAN FOR DETAILS. (512) 653-6761.

LPTV Construction Permit for large California city. Excellent opportunity. Please respond to (415) 724-1110 or P.O. Box 1122, Lafayette, CA 94549.


**Supplier Side**

LAKE Compuframes, Inc. announces the release of an innovative Storyboarding System that makes pre-production, production, and post-production more efficient and less costly than other story-board systems do.

LAKE Compuframes continuous-form storyboards.

The Compuframes® System can be used with any word-processing program that offers pagination, margin definition, forced page breaks, and header insertion. You can format the word processor to print your script, as well as visual and audio directions, in prescribed slots on the storyboards. You can also direct it to insert frame numbers automatically.

Visuals can be drawn, frame by frame, into TV screen grids that correspond to text frames. Alternatively, computer generated graphics can be inserted directly into the screens as the script prints out.

Make a mistake? Just place a pressure-sensitive replacement screen over the original visual and start again.

The Compuframes pin-feed, continuous-form storyboards tear down to standard 8½ x 11 sheets and are available in four formats: 6 frames per page or 3 frames per page with either single or 4-way split frames. A box of 500 sheets is priced at $49.98, 2,500 sheets at $195.25. Replacement labels are $19.98 per 100.

Contact: LAKE Compuframes, Inc.
P.O. Box 890
Briarcliff Manor, NY 10510
(914) 941-1998

BEACON Software, Inc. has introduced AUTOPROMPTER+, a microcomputer-based teleprompter system for the Apple II Series computers and compatibles (64K minimum). AUTOPROMPTER+ is a full-featured, menu-driven program which supports video or paper-based portable or camera-mounted prompter systems and offers a wide range of features for text entry and electronic teleprompting. A story management option has been especially designed for television stations, cable systems, LPTV stations, radio, video or

**LUNAR'S**

Television Translator and Transverter Systems . . .

... for providing economical coverage to those areas unable to receive normal TV signals due to topographical limitations.

Many years of consistent quality control and product innovation have resulted in LUNAR manufacturing the finest line of linearized amplifiers, low noise preamplifiers, frequency translating modules as well as other VHF and UHF accessories.

Complete turnkey systems include: TVRO; TV retransmission systems for NTSC, PAL or SECAM at VHF, UHF or Superband with encoded multichannel capability also available; SMATV, complete system engineering design, installation and training assistance; follow-up maintenance programs; total system upgrades; telecommunication networks integrated within re-broadcast systems; S-band systems for Arabsat and insat are also available.

TWT VHF - VHF Translator

7930 Arjons Drive
San Diego, CA 92126
(619) 549-9555 Telex 181747

20 / LPTV Report / April, 1987
audio production houses, and broadcasting schools.

AUTOPROMPTER+ features include smooth scrolling text top or down in large, specially designed letters; adjustable scrolling rates; on-line help screens; highlighting and underlining; a built-in word processor for speedy script entry; and screen reverse for mirror-mounted prompters. List price is $475.00.

Contact: BEACON Software
PO. Box 23422
Milwaukee, WI 53223
(414) 353-4460

Miller Fluid Heads (USA), Inc., offers the Miller 20 Fluid Head and the "System 20" head/tripod combination.

Designed especially for the new, lightweight, professional video cameras, the Miller 20 features full fluid pan and tilt control, a counterbalance, and a sliding camera platform system with a quick-release plate and integrated claw-ball leveling. It handles camera payloads of up to 20 pounds.

Complementing the lightweight Miller 20 is the new Compact Tripod. The Compact Tripod weighs less than 10 pounds, including its integrated above-ground spreader. Features include a high-strength, black-anodized tubular aluminum design, and new leg locks with protection against over-tightening.

Contact: Miller Fluid Heads (USA), Inc.
2819 West Olive Avenue
Burbank, CA 91505
(818) 841-6262

Shively Labs AM/LPTV Isolation Units Designed Exclusively for LPTV

Shively Labs
a division of Howell Laboratories, Inc.
51 Harrison Road
Bridgeton, MO 63040 (207) 647-3327 TWX 710-223-8910 Shively BRGT FAX (207) 647-8273

The Pro Rack is available through authorized dealers.

Contact: Jan Michael Alejandro
Jan-Al Innerprizes
4452 East Washington Blvd.
Los Angeles, CA 90023
(213) 260-7212
(213) 669-0550

Electronics Diversified, Inc., a manufacturer of performance and architectural lighting control equipment, introduces the Litestar II Memory Controller.

The new Litestar II allows up to 1000 dimmers to be controlled by 120 control channels. Features include 100 memories, ten full inhibiting submasters, two electronic crossfaders, and one manual crossfader.

Output is USITT standard serial digital, with analog backup. Options include a high speed printer and hand-held remote.

Contact: Electronics Diversified, Inc.
1675 NW 216th Avenue
Hillsboro, OR 97124
(503) 645-5533

Johnson Controls

UNCOMPROMISING

- AM Voltage Rating - 10 KV
- Low Insertion Loss
- Low VSWR
- Protected against Lightning Damage

This is the only AM/LPTV isolation unit designed specifically for LPTV. Our AM voltage rating of 10 KV exceeds most models currently available, which were originally created for the translator market. Why settle for less, call today and see what the right equipment can do for you.

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Contact: Electronics Diversified, Inc.
1675 NW 216th Avenue
Hillsboro, OR 97124
(503) 645-5533
...at the FCC

NEW LPTV LICENSES

The following LPTV stations received licenses on the dates shown. Station call sign, location, and name of licensee are also given.

K48BL Terrebonne-Bend, etc., OR. Rodney S. Johnson, 1/16/87.
K44AW Rural West Riverton, WY. Riverton Fremont TV Club, Inc., 2/13/87.
K48BM Jackson, WY. Ambassador Media Corporation, 2/13/87.
K08GO Riverton/Arapahoe, WY. Riverton Fremont TV Club, Inc., 2/13/87.
K34AV Fresno, CA. Family Television, Inc., 2/13/87.
K56CA St. Louis, MO. St. Louis Metropolitan Baptist Association, 2/13/87.
W67BD Chattanooga, TN. Sur Est Broadcasting Corporation, 2/13/87.

ASSIGNMENTS AND TRANSFERS

W69BL Roanoke, VA. Assignment of permit granted from Media Properties to Lorin A. Costanzo on 12/17/86 (late report).
K58CM Duluth, MN. Assignment of permit granted from George Fitzinger to Trinity Broadcasting Network, Inc. on 1/16/87.
W28AC Charlotte, NC. Assignment of permit granted from Media Properties to Michael Glinter on 1/16/87.

LPTV LOTTERY WINNERS

The following are tentative selectees of the LPTV/translator lottery held on January 30, 1987. If no petitions to deny the selectees are filed, and if the selectees are otherwise qualified, they will be granted construction permits.

Ch. 66, Florence, AL. American Translator Development Co.
Ch. 28, Cortez, CO. Arnold Salazar.
Ch. 38, Pueblo, CO. Elizabeth A. Terrell.
Ch. 21, Perry, FL. Evarista Romero.
Ch. 25, Fort Lauderdale, FL. Community Service Television Company.
Ch. 9, Panama City, FL. Brooks Broadcasting, Inc.
Ch. 61, Tallahassee, FL. Mrs. Judith Ann Acevedo.
Ch. 34, Savannah, GA. M & M Communications.
Ch. 64, Dubuque, IA. Black Media Associates.
Ch. 22, Waukegan, IL. Mar-Kap Broadcasting.
Ch. 29, West Chicago, IL. Minority Communications, Inc.
Ch. 42, Wichita, KS. Cherokee Network.
Ch. 61, Haughton, LA. K. Sandoval Burke.
Ch. 39, Morgan City, LA. Ginger A. Price.
Ch. 52, Flint, MI. Media Properties.
Ch. 68, Kansas City, MO. Mark L. Wodlinger.
Ch. 23, Page, NE. Mountain TV Network, Inc.
Ch. 33, Taos, NM. Taos Community TV, Inc.
Ch. 66, Las Cruces, NM. Central California Broadcasters, Inc.
Ch. 33, Reno, NV. Island Television Corporation.
Ch. 50, Las Vegas, NV. Marcia L. Crittendon.
Ch. 43, Jamestown, NY. Ogden Cable Corporation.
Ch. 55, Albany, NY. Debra M. Kamp.
Ch. 30, Syracuse, NY. Connecticut Home Theatre.
Ch. 67, Marietta, OH. Community Broadcasting Corporation, Inc.
Ch. 50, Athens, OH. The Messenger Publishing Company.
Ch. 57, Coos Bay, OR. Jo Ann's Balloon Boutique, Inc.
Ch. 11, Myrtle Beach, SC. Television Unlimited.
Ch. 45, Greenville, SC. Barbara Dickey.
Ch. 58, Nashville, TN. Classic Video Systems.
Ch. 33, Union City, TN. O. L. Turner.
Ch. 32, Eagle Pass, TX. Mountain TV Network, Inc.
Ch. 44, Eagle Pass, TX. Mountain TV Network, Inc.
Ch. 14, San Antonio, TX. National Black Media Coalition.
Ch. 51, Clarendon, TX. Donley County UHF TV, Inc.
Ch. 20, Kerrville, TX. K. Sandoval Burke.
Ch. 30, Pullman, WA. Janet Roberts.
Ch. 59, Charleston, WV. Evangelina Garcia Garza.
Ch. 18, Kemmerer, WY. Mountain TV Network, Inc.

NEW LPTV CONSTRUCTION PERMITS

The following parties received LPTV construction permits on the dates shown. Station call sign and location are also given.

W30AI Birmingham, AL. Donnie F. Tucker, 1/27/87.
Hit Video USA Names Sales Manager

Nora M. Garcia has been named sales manager of Hit Video USA, the Houston-based, 24-hour music video programming service, and its LPTV affiliate, K05HU. Garcia’s background includes freelance public relations in New York City and a stint as an account executive for a Madison Avenue ad agency.

"Perry Mason," "Star Trek" to Air in Twin Falls

Kris Harvey, general manager of K49AZ, Twin Falls, ID has contracted with Viacom International for 76 episodes of "Perry Mason." The episodes, all in 3/4" format, have never before been aired on television. The all-cash deal calls for a $3,000 total payment over four months.

Channel 49 has also bought a package of 25 color classic horror films from Majestic. The contract specifies unlimited runs for three years at $50/title/year.

Buena Vista, distributor of the Disney movies, has contracted with Channel 49 for 25 films, including Mary Poppins, Zorro, and 20,000 Leagues Under the Sea. Payment is on a barter basis.

Also on barter is a series package from Paramount Pictures, including "Friday the 13th," "Marblehead Manor," and "Star Trek: The Next Generation." [K/B]

Passink Builds Production Studio

Paul Passink, owner and manager of W33AB in Concord, VA, has signed with the ACTS Network and is building a studio for local advertising production.

Channel 33 was originally a subscription station offering SelecTV. Passink said he switched to ACTS because of the potential for local ad sales. [K/B]

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Thirty years of manufacturing expertise offers you the security of proven reliability and high quality.

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- Solid state to the highest power level consistent with availability of solid state devices.
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- Complete metering.
- A single tetrode to be employed exclusively for UHF transmitters of 1000 watts and over. The tetrode used has proven itself to be the means of accomplishing fine performance at lowest possible cost.

*Systems D, I, K, K', L, M, and N are also available.
LPTV-4 Rides Radio Market In Kentucky's Heartland

—by Jacquelyn Biel

About 30 miles east northeast of Mammoth Cave (as the crow flies) lies Campbellsville, KY, home of Heartland Communications’ WO4BP, which has just celebrated its first birthday on the air. Serving a city of about 9,000, and a county of some 22,000 people, LPTV-4 broadcasts from 6 a.m. to midnight every day with a mix of Tempo Television and Country Music TV, periodic University of Louisville football and basketball games, and a twice daily half-hour of local news.

The market is aggressive and growing, says Jim Jackson, the station’s vice president and general manager. Most of the surrounding area is farm country, but Taylor County is a regional employment center—Fruit of the Loom’s main plant is in Campbellsville—and there is a lively retail trade.

Jackson believes in the value of local production, especially in a town like Campbellsville. “I think it’s essential to be really involved in the community—to show local faces and sights on the air. Sometimes, we’ll just take the cameras out, shoot a lot of video, and then air it with some music in the background. People get a real thrill out of seeing themselves and their kids on the screen.”

continued on page 5

TV-55, St. George, UT, Signs On With Emmys

Michael Russell, a former producer/director at KSL-TV in Salt Lake City, has joined the ranks of LPTV owners, signing K55DL on the air in St. George, UT. Airing 17 hours a day, Russell programs packages from Orbis, films from Lorimar and ITN, and various Fox Network offerings, including the Recent Farm Aid concerts and Emmy Awards.

“Some of the stuff from Fox comes in on translator from Salt Lake City. I just air mine an hour earlier and get all the viewers first,” said Russell of his approach to the area’s competition.

Russell also does a variety of local productions—“A lot of local programming is really the key to success in LPTV,” he asserts—Little League games with kids as commentators; the Senior Olympics, parades, the city council. And drawing on his professional experience at KSL, Russell is planning a telethon to raise money for St. George’s Southwest Symphony.

Russell believes that quality is important in the successful operation of an LPTV facility. “You can’t accurately represent good programming without good equipment,” he insists. “For example, the time delays we needed to do for the Emmy’s took six machines. For ads and remotes, we have a completely equipped mobile van.

Russell expands his Channel 55 coverage by translating via K45AI, a second LPTV serving Mesquite, UT. And he is buying a Cedar City translator that will increase his coverage from the present 35,000 viewers to more than 100,000.
WANTED
LPTV LICENSES & CONST. PERMITS
(PURCHASE OR LEASE)
IN THE FOLLOWING MAJOR MARKETS,
SURROUNDING AREAS & STATES

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**NOTE:** IF YOU HAVE AN LPTV LICENSE OR C.P. OR ARE A PARTICIPANT IN A LOTTERY FOR ANY OF THE ABOVE MARKETS PLEASE CONTACT US TODAY!

Please Send:
- *Sale or Lease price quotes
- *Copy of coverage map, construction permit & application

To: Steve Peters  
Videp Jukebox Network Inc.  
3550 Biscayne Blvd., Suite #711  
Miami, Florida 33137

For Details Call: (305) 573-6122
The National Cable Television Association recently commended a number of local cable origination channels from around the country for their children's productions. Many of the programs featuring the kids themselves as producers, or even hosts.

• "Room 13-19," a magazine show done by Syracuse NewChannels in Syracuse, NY, spotlights the achievements of kids between the ages of 13 and 19.

• American Cabledvision of Indianapolis offers "The Filling Station," which dramatizes popular non-denominational Bible verses and basic Biblical values with music and animation.

• TCI's Dubuque, IA, system features "The Stay Safe Spots," a series of skits that teach kids how to be safe around strangers. The series was produced with the assistance of the Dubuque police department and the Girl Scouts.

• "Dial A Teacher," for students who need help with their math homework, is offered on Media General Cable in Fairfax County, VA.

• Cox Cable of Omaha, in conjunction with the Omaha Opera Company, presented a scaled-down version of "Porgy and Bess" for grade school audiences.

• "Music and Me" introduces grade school kids to orchestral music on Continental Cablevision's Springfield, MA system.

• Viacom Cabledvision of Cleveland produces "Cleveland's Kids and Company," a video magazine filmed on location that highlights outstanding students and their activities.

Although LPTV is a youthful service and the stations doing local production still number under 200, similarly useful and responsive local children's programming is being aired by LPTV operators who have found that the way to viewers' hearts is through their kids:

• "Gramma's Gang," a production of WOSL in Bruce, MS, features one of the town's grandmas and the antics of her handmade puppets.

• W10AE in Killington, VT, opens its studios to Killington's grade school students, who produce a weekly news show. Every week a different grade is responsible for the reporting.

• Milwaukee's WO8BY programs music videos interspersed frequently with local production. A large share of the audience is teenagers, who squeueeze through interviews with visiting rock stars and boogie to the beat of local bands, many of whom get their first city-wide exposure on Channel 8.

• Ron Lopinger, an operator at W20AB in Olean, NY, does the daily "Rouge Ron Show," a children's variety hour.

• Last November, high school students in Tonopah, NV, did a half-hour documentary on date rape. It was one episode of a weekly series produced by the students, who also are responsible for other local programs aired on K17AH-from PSA's to interviews to specials.

The possibilities for locally produced programming that appeals to kids are endless. What about a children's craft show on the order of adult cooking or woodworking programs? The kindergartner teacher would be happy to suggest projects. Local seniors would get a kick out of hosting the show. And toy and hobby stores would jump to sponsor it.

My son, Wyatt, recently talked us into getting him a B-B gun. Both he and we would have welcomed a program about marksmanship and safety in language and concepts appropriate for a ten-year-old. For that matter, programs geared to the young hunter or fishing enthusiast might go over well with both the kids and the local sporting goods store.

How about a kids' swap corner, a business show for kids (sponsored by your accountants), fifteen minutes a week devoted to an introduction to careers (take your cameras out and interview the cement truck driver, the doctor, the newspaper editor, the garage mechanic).

If your town hosts a professional sports team, invite the players to speak to local youth at your studio—and broadcast the whole thing live. Or take a tip from K55DL in St. George, UT (see this issue, page 11), which airs Little League games with the kids themselves as commentators.

Kids are wonderful PR reps simply because very few people can resist them. Program to the kids in your market, let them into your studios, even let them do a bit of production. Chances are that both your advertisers and your adult viewers will applaud you. You can take it from there.

Our Readers' Comments

In my opinion, the LPTV industry is in a limbo right now as far as syndicated programming or national advertising is concerned. We can expect no help from anyone but ourselves, at least until someone comes up with an acceptable ratings system.

It appears, from my recent discussions with Arbitron and A.C. Nielsen, that we can expect nothing from them in the near future. This means a lot of headaches in securing programming and a near hopeless chance for attracting national advertisers.

I support the CBA's goal of creating a programming cooperative for the industry. As most of you are aware, numbers make the difference when trying to sell any product. I think a cooperative is a sound objective but, again, it takes help—help only we, ourselves, can give it. It won't work without us.

A programming co-op certainly is worth a try. I urge other LPTV operators to support the CBA's efforts to make things better for all of us.

Jim Conlon, General Manager
W30AJ, Inc.
Syracuse, NY
Technical Talks

—by John H. Battison

In previous columns I discussed gain, transmission lines, contours, and coverage. This month I want to continue on the subject of coverage...for it is coverage that counts.

In general, coverage can be obtained, or controlled, in two ways: 1) a combination of power and antenna pattern and height, or 2) exposure on a cable system. What is left of the must-carry rules does not apply to LPTV (in fact, it never did). However, there is nothing to prevent the astute LPTV licensee from gaining access to cable subscribers, provided that there is room on the system and the cable operator is agreeable. As cable technology progresses, cable capacities are continually increasing, and in some areas cable operators will welcome LPTV with open arms. We shall deal with that later.

Let's look at coverage first. The shape, size and area of your 'service contour' are governed by your antenna's ERP (effective radiated power), the height of the center of radiation (from the antenna) above the average elevation of each radial, and the actual radiation pattern of the antenna.

If your station is one of the original construction permits authorized and you bought it from its original owner, very likely it does not produce optimum coverage. In the early days of LPTV availability, many applicants, in a hurry to file their applications, put together a legally and technically correct presentation with a simple non-directional, and probably low gain, antenna. The whole application was grantable, but it did not do anything like the best possible job.

Unlike the case with FM, the FCC does not require that LPTV applicants show the terrain (ground) elevations along each radial. Furthermore, it does not require the applicant to calculate the total antenna height above average terrain for the application. Thus many of the original so-called 'coverage contours' were merely educated guesses and did not necessarily have any relationship to reality. I can recall several applications whose alleged 'protected contours' (the FCC's specified contours) were several times greater than the actual contours turned out to be. When the stations were built, coverage was nothing like the promise.

This is not necessarily dishonesty on the part of the original applicant; it is more a lack of knowledge of TV propagation and engineering requirements. Applications prepared by well-known, professionally registered consulting engineers contained these data; but many of the fly-by-night "amateur engineers" gave only minimal information which was often very misleading.

Sometimes the antenna location was determined for expediency, rather than technical desirability. For instance, a convenient tower on the edge of town might have been chosen because of quick availability. The fact that half the non-directional signal went to wide open spaces populated only by jackrabbits was ignored. A simple change to a directional antenna could double the number of people able to receive the signal.

Take the above situation and work out a better combination of antenna height and power, and the station can become quite viable financially. This is the type of situation where the consulting engineer's experience becomes invaluable.

Another factor has to be considered. Because many original applications did not require the examination of radial terrain data—that is, the varying heights of the ground along each radial—there are many LPTV stations today that cannot provide service to desirable areas because they are behind hills whose existence was not considered during the application process.

In cases such as the above, there are two alternatives. One is to raise the antenna. This could be easy. If the antenna has been placed low on a tall tower. Or it could be very expensive if existing tall tower facilities are not available. The second alternative is to move the antenna to a more suitable location. This involves studying a topographic map and preparing terrain profiles for each radial to ensure that there are no pockets of low or inadequate signal.

At the same time that the antenna move is being considered, the ERP should be examined together with the antenna radiation pattern to determine whether a power increase and/or a change in radiation pattern is advisable. Since the early days of LPTV applicants, better means of determining protection requirements to other stations (generally full service TV stations) have become available. Many times a pattern with significant radiation in certain desirable directions can be provided at very little cost. This can often mean a significant improvement in viewer acceptance.

Space is running out. This topic will be continued next month with some examples of coverage improvement.
Campbellsville’s TV-4

continued from front page

Local Politics Big With Viewers

One of the more important pastimes in Campbellsville is local politics, and Channel 4 covers all the elections and meetings—as well as such events as the Rotary Club auction and the town’s big Annual 4th of July Celebration. Just being there with the van and the cameras is many times promotion enough for Jackson and his crew, but jackets and sweatshirts bearing the Channel 4 colors and logo help to reinforce the image of a lively, active news team. And to encourage his viewers to watch the local features, Jackson showers the town with printed cards listing the local programs and their air times.

Channel 4 is carried on two area cable systems—Telescripps, a TCI system, and Cumberland Valley Cable. Jackson supplied the Cumberland System with an antenna and a modulator to insure a clear signal, but he pays no carriage fee. Relations are friendly—“We give them local programming, they extend our reach.”

The station’s only other media competition comes from Campbellsville’s WGRB, a UHF TV that does no local production—and Heartland Communications’ own AM and FM stations, which Jackson uses to promote the LPTV. The AM, for example, runs a “Newsline 4 Trivia”: listeners can answer questions about the previous night’s TV news win a small prize. And the three-night Rotary auction was simulcast on the AM and Channel 4. “It proved to the business community once and for all that people watched Channel 4,” said Jackson. “We got at least one long-term ad contract out of it.”

Many of the radios’ administrative people also work with the LPTV, and even on-air personalities are shared. Mary Blakeman, the TV news anchor, does the afternoon radio news: the morning radio news and the TV weather are both done by Steve Jenkins. Sports anchor Tom McLeod, engineer Mike Graham, and sales manager Marti Hazel similarly split their time between the radios and the TV.

Memorable Spots Help Sales

“What we really need right now,” says Jackson, “is a full-time salesperson for the TV.” He feels that a serious push on TV advertising could be quite successful now that the station has achieved some recognition in the community. “We have banks, car dealers, restaurants, a drugstore, a building materials firm. We’re getting more and more advertisers all the time.”

Jackson credits producer/director Janet Graham with the success of the ads. “She’s very talented, very creative. She’s done some super spots. The whole idea is to make the commercials as interesting as possible so that viewers remember them and then mention them to the advertiser. Janet’s very good at that.”

As for rates, he charges $5 to $12 for Tempo spots, $50/spot during the local news. “We don’t move on the rate—even though the UHF sells them for $5 and $6. We’re making some money—not a lot—but we’re in the black with the station.”

Expenses right now hover around $4,000/month due in large part to the fact that much overhead is covered by the radio operations. And because all the equipment—some $93,000—was bought from cash flow, there is no debt to service.

“I think it’s important for anyone entering this industry to keep in mind that it is LPTV, not high power television,” Jackson advises. “You shouldn’t invest millions—not if you want to make a profit.” He admits he would like to get more equipment—“...a Chyron, a TBC, an effects bank;” but he also asserts that Channel 4 “looks better than WGRB.”

Right now Jackson is using consumer grade 8 mm digital cameras that he traded for at a Campbellsville video supply store. He shoots in 8 mm and then dubs to a 3/4”, a procedure that results in quality that is “superior, if you keep the dubbing to three or four generations.” All audio is in stereo, which added an extra $2,000 to the build but which has paid off in the satisfaction of Channel 4 viewers, especially the CMT regulars.

What would he do differently if he were building his station today? “Well, I might want to go with a UHF channel. On the V we’re susceptible to interference from the cable headend power lines that run right in front of the station.” Otherwise Jackson is pretty satisfied. “You have to figure on several lean years before you can make a real profit. You have to be very aggressive in getting good programming. But on the whole I think everything has worked out real well for us. Nobody thinks we’re less valuable to the community because we’re an LPTV. We do a good job and the town likes us.”

And that, folks, is what really counts.

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**EQUIPMENT LIST — WO4BP, Campbellsville, KY**

- Sony VO-5800 Video Recorder
- Sony VO-5850 Editing Recorder
- Sony RM-440 Editing Controller
- 2 Sony VO-5600 Video Recorders
- 2 Sony Trinitron CVM 1270 Color Monitors
- NEC C12-202A Color Monitor
- Tektronix 528 Waveform Monitor
- Quantel TBC 2000
- Scientific Atlanta 9320-80
- Scientific Atlanta 9000, 2.8 M receive dish
- Scientific Atlanta Z-500 Dish Control
- Scientific Atlanta 9630 Receiver
- TTC LPTV Transmitter, TVF-10 (CH4)
- Drake 2202 Satellite Receiver
- Drake LNB, 2501
- 6 Panasonic TR-930U and TR-932 Monitors
- Videotek RS-10A/24 Routing Switcher
- Ikegami HL-77A Camera
- Sony ECM-50 Lavalier Mic
- Electrovoice CO-90 Lavalier Mic
- Tektronix 1722 Vectoroscope
- 2 Videotek VDA-16 Distribution Amps
- Panasonic WJ-200RB Switcher
- Videotek VSG-200 Sync Generator
- Sony CCD V8Afu/B Portable Video Camera
- Channelmatic Commercial Inserter
- Channelmatic ATG-202A-DT VCR Tone Generator
- Channelmatic CTD-3104A Tone Decoder
- Channelmatic SSS-3005A Seq. Selector Switch
- Fujinon A 12 x 10 120mm lens
- Lowel 1500 Soft Light 2
- Scientific Atlanta 6380 BTSC Stereo Encoder
- Scientific Atlanta 6350 Modulator
- Quanta QCG 300/SD Character Generator
Shopping For A Downlink? Browse Before You Buy

Virtually all LPTV operations use satellite programming of one sort or another. A good dish and receiver system is essential to such operations. The system's ability to capture a quality signal from the bird can mean the difference between satisfied and loyal viewers or a telephone line clogged with complaints.

If you're a new construction permit holder, you're probably thinking seriously of acquiring some satellite reception capability. Below is a brief review of some representative manufacturers and their products. Of course, there is much we cannot cover here. But the following paragraphs should give you an idea of what to look for and what is available in this complex technology.

RECEIVING ANTENNAS

COMTECH manufactures 3.0 and 3.8 meter antennas that provide quality and performance at an affordable price. Both sizes feature single-pole mounts for inexpensive installation. And each antenna is engineered to a near-perfect parabola. This, combined with a high-efficiency feed horn, produces high gain and good sidelobe performance.

The 3.8 meter antenna features an extremely efficient 42.9 dB gain. The EL/Az elevation-over-azimuth mount permits 360° azimuth adjustment and eliminates the need for costly foundation alignment. Using the elevation jack, an operator can smoothly and easily adjust the antenna's elevation from 0° to 70°.

The system is polar-mounted and is available in both manual and motorized versions.

Scientific Atlanta's Satellite Communications Division manufactures a 4.5 meter antenna with standard EL/Az mount. The antenna is designed for a wide range of applications in the C- and Ku-Bands and, according to the company, is especially well suited for LPTV operations.

The parabolic reflector is made of twelve precision stretch-stamped steel panels for consistent surface accuracy. The panels are uniform and completely interchangeable for convenient handling, lower shipping costs, and easy installation. After a foundation has been prepared, two people can install the antenna in less than one day. No special tools are required, and no part weighs more than 140 pounds.

The EL/Az mount provides continuous coverage of the satellite arc from any location in the contiguous United States. Pointing is rapid and accurate. Complete 360° azimuth coverage eliminates the need to align the foundation and makes installation easy.

As an alternative to a concrete slab foundation, Scientific Atlanta offers an economical pier foundation kit. The pier foundation, which is designed to accommodate steady 110 mph windloads, comprises three cast pier inserts. A steel framework bolts the inserts into a triangle which is lowered into three augered holes containing prepared re-bar cages. The holes are then filled with concrete. Installing the pier foundation is faster and cheaper than pouring a concrete slab foundation.

Channel Master manufactures a dual feed satellite antenna system specifically designed for commercial applications. Three sizes are available—3 meter, 3.5 meter, and 4.3 meter. The antennas are precision-formed of maintenance free fiberglass. Each features a heavy-duty polar axis mount.

Microdyne Corporation manufactures a complete line of fixed and motorized antennas, ranging in size from 1.2 meters

UNCOMPROMISING

- AM Voltage Rating – 10 KV
- Low Insertion Loss
- Low VSWR
- Protected against Lightning Damage

This is the only AM/LPTV isolation unit designed specifically for LPTV. Our AM voltage rating of 10 KV exceeds most models currently available, which were originally created for the translator market. Why settle for less, call today and see what the right equipment can do for you.

Shively Labs
a division of Howell Laboratories, Inc.
51 Harrison Road
Bridgton, ME 04009 (207) 647-3327 TWX 710-223-8910 Shively BRGT FAX (207) 647-8273
to 7 meters and suitable for both C-band or Ku-band applications. The 3 and 3.66 meter antennas are specially designed for broadcast quality reception, and the E1/Az mount design means easy alignment and stable support in even the worst environmental conditions. Both antennas are available in either single or dual polarization feeds. The 5 and 7-meter antennas meet FCC requirements for 2° spacing at either C- or Ku-band frequencies.

All of Microdyne’s antennas feature precision-molded fiberglass reflectors, prime focus feeds, superior sidelobe performance, and high gains.

**RECEIVERS**

**R. L. Drake** offers the ESR-2240, a 19-inch rack mountable, commercial earth station receiver with a high level of IF (intermediate frequency) signal processing for professional quality video signals. Its features include block downconversion with Drake’s BDC-24 weatherproof block downconverter or LNB; dual signal inputs with either automatic or manual polarity changeover for dual feed installations; a SAW filter for maximum adjacent channel and interference rejection with minimal signal distortion; and optional dual audio output for control tones or second audio subcarrier output.

The front panel of the ESR-2240 is designed for easy use. It includes button selectors for transponders and subcarriers, wide or narrow IF filtering for maximum sensitivity, signal strength metering, a video invert switch, and an audio monitor with front panel speaker and volume control.

The receiver, priced at $899, installs easily and comes with a 1-year limited warranty.

**AVCOM** makes two commercial satellite receivers suitable for LPTV applications—the COM-20T and the COM-66T. The COM-20T, together with the AVCOM RDC-20/RDC-21 remote downconverters, is an economical and reliable receiver system. Microwave oscillator technology insures that the downconverters remain highly stable over temperature extremes. The COM-20T features excellent threshold performance, selectable audio IF bandwidth—for those “special” narrow band subcarriers, and a signal strength meter sensitive to 1/10 dB. Also standard are rack mounting and tunable audio covering all subcarrier frequencies. Options include an internal downconverter and remote video polarity control.

The COM-66T, used with the BDC-60 block downconverter, is a dual conversion receiving system in a 3° rack mount configuration. As with the 20T, highly stable microwave oscillators eliminate frequency drift and allow operation over wide temperature ranges. The 270-770 MHz block downconversion frequency means that complex and versatile systems can be configured using low cost cable and components. Special threshold extension circuitry offers superior video quality with small aperture antennas.

Standard features include tunable audio with wide and narrow audio IF filters, vertical/horizontal output for automatic polarity switching, a normal or inverted video switch, and precise signal strength metering. The flexible downconverter makes it possible to use any degree and brand of LNA. Options for the 66T include automatic polarity switching, threshold peaking, and a remote video polarity switch.

**Microdyne** makes competitively priced receivers for either LNA or LNC/LNB systems, giving the LPTV operator a choice of available technologies.

LNA type receivers currently in Microdyne’s line include the 1100 LPR and its remote control version, the 1100 LPR(R). Standard features on the 1100-LPR include dual video outputs, single knob front panel channel selector for easy tuning, and front panel adjustable video and audio gain.

The 1100-BKR provides broadcast quality LNB video reception for both C- and Ku-band applications. Four selectable IF bandwidths provide the operator with immediate access to any accessible C-band or Ku-band transponder. The 1100-BKR comes standard with two tunable audio subcarrier demodulators and is equipped with circuitry that can handle audio deviation.

The 100 CKR is Microdyne’s newest commercial grade video receiver, designed to handle an input of 950-1450 MHz from an LNB. The single receiver can be used for either C- or Ku-band reception.

Finally, Microdyne has just introduced the Microdyne Automated Terminal, or MAT. Designed for total compatibility with all domestic satellite transmission
CBA Comment

—by Lee Shoblom

Are you a radio broadcaster in a town where an LPTV permit is expiring? Grab it! In my judgment, running an AM/FM/LPTV operation really is the best of all possible worlds. For example, I’m able to attend a radio convention like the recent NAB gathering in Anaheim and talk knowledgeably about AM improvement, FMX technology, and all other radio matters—technical, programming, regulatory—and then I can creep around the halls and sessions and share the chit-chat about LPTV from radio people now adding pictures to their operations.

Then I can go to a full-blown, high power television activity like the September NAB “100 Plus” small market TV gathering in Washington and dazzle anyone within earshot with my recitations of the numbers of LPTV grants, station signs, and successful operations across the land.

Incidentally, the 100-plus markets have a lot more in common with successful LPTV stations than do their big city counterparts with staffs of 150 people or more. In fact, many of the small market, high power operations are literally identical to some of the LPTV’s, with the single exception of the type of license. They’re out there scratching for quality programming, good people, and advertising money just as we are.

However, in every department, their costs are higher than ours. They must operate under much stricter FCC rules and regulations than the relatively regulation-free LPTV stations do. So it’s a real plus to be able to double up with a combination radio/LPTV operation. Staff can be shared, as well as equipment, towers, buildings, vehicles, news sources, and advertising contacts.

And if you want to talk money, it’s a real revelation how easy it is to get customers who do absolutely nothing on radio to advertise on your television station. Whether it’s the magic of the flickering tube, the ego trip they get seeing themselves or their businesses on TV, or a simple desire to show a picture of their product, the motivation to use TV advertising is a strong one. Advertisers like retailers and restaurants want to show viewers that home or that table-side chef, carving the Chateaubriand. Interestingly enough, once they’re on TV, it’s relatively easy to get advertisers to use radio as part of a combo buy.

Speaking from experience, I can assure you that adding an LPTV doesn’t draw much from your radio operation; indeed, it seems to enhance and stimulate activity in both businesses—a nice situation, to say the least. I’ve mentioned in this column that several members of your new CBA Board are combo owners. I feel this reflects the stability that has come to our new industry. The radio people wouldn’t be interested if they didn’t see potential.

The standalone LPTV will always be the mainstay of this business. It is, after all, what the service is about: to introduce new voices—minorities, specialty groups—to broadcasting. But when LPTV construction permits are expiring, for whatever reason, I think it’s great that successful radio broadcasters are jumping in and activating them. It’s good for them, and it’s good for the industry.

Think about it and thanks for listening.

Lee Shoblom is owner and general manager of K45AJ in Lake Havasu City, AZ. He is chairman of the Community Broadcasters Association.

K39AS, Marshalltown, IA, Greets Vice President Bush At Vets’ Gathering

Vice President George Bush visited Marshalltown, IA, in late September to help celebrate the 100th anniversary of the Iowa Veterans’ Home. Highlighting the festivities was a detailed re-enactment of a Civil War battle, complete with authentic uniforms, guns, horses, cannon, wagons, and battle plans. The 400 actors built a bridge and then blew it up, and planted exploding ground charges to simulate cannon hits.

K39AS was on the scene to record Bush’s speech and videotape the battle. A documentary of the event will be made for possible distribution to other LPTV stations, said Mark Osmundson, the station’s president and general manager.
Announcing the Pro Series S-VHS video production system—by any standard of measurement in a class by itself.

Panasonic
The Panasonic Pro Series 400-line high-resolution video production system.

In this S-VHS System, dot interference has been completely eliminated. The luminance and chrominance signals are output separately. This gives S-VHS video signals extremely clear color gradations and truly brilliant colors. All this—without sacrificing upward compatibility with standard VHS.
Improved Cost/Performance.

**Equipment:**
Upgrade your system even as you cut your costs: lower equipment/operating costs. Higher 400-line resolution.

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**System Simplification:**
Typical 3/4” 2-hour playback system—costly, complicated components.

Panasonic Pro-Series S-VHS 2-hour playback system—requires no controller, only 1 TBC, only 1 VCR.

**Lower Tape Running Costs:**
It takes six 3/4" 20-minute cassettes to equal the ENG recording time of one S-VHS cassette.
Satellites and LPTV: A Bit of History, Some Definitions, and a Little Advice

—by John H. Battison

When LPTV was first authorized, applicants were concerned with all the technicalities of getting their systems on the air, and not much thought was given to programming. As the service has come of age, however, and the LPTV stations on the air number in the hundreds, many operators have discovered the benefits of programming from the satellites.

Although everyone knows about satellites, not many people really know how they work. So let's take a look at some general concepts.

Frequency

First we'll talk about frequency (or "alphabands"—to use a word I've coined to reflect the use of the alphabet in satellite terminology). The first satellites were, and still are, in the "C" band. which is (for our purposes) frequencies ranging from about 3500 MHz to about 4000 MHz. These frequencies are in the neighborhood of five times those of UHF television. Another way of expressing the same range is 3.5 to 4 "Gigacycles." In most cases, such frequencies still require fairly large receiving antennas.

There are also sources of interference to C-band transmissions. Long distance telephone services, for example, use the C-band for terrestrial, or earthbound, communications. The systems employ microwave links, with towers bearing drum-like antennas spaced about twenty miles apart. These earthbound beams carry hundreds of signals along their routes.

Microwave beams are relatively narrow and focussed like a searchlight. However, because of scattering due to atmospheric diffraction, some of these signals will occasionally appear some distance off of their planned paths. Sometimes, too, the paths of these beams run near a satellite receiving antenna and appear in the picture as a herringbone or similar interference pattern. In extreme cases, the undesired signal may actually override the desired signal and ruin reception.

Occasionally also, unusual atmospheric conditions cause reflections and refractions that make normally harmless signals troublesome.

Licensing

When satellites first began to be used for communications, the FCC required that the receivers be licensed. Licensing ensured that no one later could erect an adjacent system that interfered with the original user's reception. It involved performing a special interference study to show that none of the local terrestrial signals would cause interference to the satellite signal. Once this was done, and the receiver licensed, it was protected against interference from new installations.

However, as time passed, and as more and more people used the satellite service, the FCC decided to drop the licensing requirement and let the risk of future interference rest with the user. In other words, there was no protection. That is the situation today, and consequently, most, if not all, LPTV stations have unlicensed receiving antennas. In most cases they have no problems. However, there is the danger that a communications company may someday build a terrestrial system that impinges on their receivers.

Also, as time passed and technology was refined, the original requirement that dishes measure 30 feet in diameter was
dropped. Receivers have become more sensitive, with lower noise levels and better ability to reject interference. As a result, many measure only five to nine feet in diameter.

**Ku-Band**

C-band satellites are spaced 4° apart in an arc lying above North America. As these satellites became more and more popular, the available space in the arc began to fill up. And so, because of the lack of space as well as the need for smaller antennas, both receiving and transmitting, plans were developed to move to the "Ku" band, which is in the 12-13 Gigahertz range. (Incidentally, these mysterious letter bands were originally top secret: during World War II letters were used to designate the various radar bands, and their use has resurfaced with the introduction of satellite technology.)

In electronics, any improvement in one direction generally imposes a limit in another. In the case of Ku-band, the uplink transmitter can utilize much narrower beam widths, and satellites can be spaced only 2° apart instead of 4°. Also, because of the much higher frequency, Ku-band receiving antennas have more "gain" (amplification) and can be very small compared with those for C-band. A three- or four-foot receiving antenna is often suitable for Ku-band reception. Similarly, the satellites themselves, can use lower transmitter power because the antenna gain makes up for it.

However, the narrower beams mean that the Ku-band receiving antenna must be very firmly anchored; otherwise high winds or vibration can cause picture variation as the antenna moves. Also, Ku-band antennas are smaller and less noticeable, and they fit into areas where a "C" antenna might not fit. But they require greater attention to detail in manufacture, and the inside of the dish must be highly polished and very smooth. Any rivetheads or other irregularities can cause unwanted reflections in the picture.

**Location**

One short word on placing your antenna properly. In general, a ground receiver that can "see" the bird will obtain a usable signal, provided that foliage or buildings do not get in the way. Ground antennas should be located away from parking areas where vehicles can block line of sight, or in extreme cases, produce interference.

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**Bogner—20 years, over 1000 TV transmitting antennas and still climbing!**

In the twenty years since we innovated a remarkable slot array design we have succeeded to a leadership role in TV broadcast antennas. We had to be better than the competition. We still are.

Today there are over 1000 Bogner TV transmitting antennas in use, more than from any other single manufacturer. Antennas with a long history of trouble-free performance and unequalled coverage.

Bogner antennas come in every power range and with the largest number of standard patterns in the industry. In addition, Bogner offers hundreds of custom patterns plus special designs to meet particular requirements.

Find out more. Call or write: Bogner Broadcast Equipment Corp., 603 Canisague Rock Road, Westbury, New York 11590. (516) 997-7800.

When you need us we'll be there.

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**Pittsburgh's LPTV-63 Adds ABC Soap**

Nancy Hahn, president and general manager of W63AU, a Pittsburgh LPTV on the air since May, has just contracted with ABC for "Ryan's Hope" and "Business World"—neither of which are currently being aired in Pittsburgh. The programming joins classic films from Lloyd Daniels, foreign films and sports from ITN. and a variety of local features.

Hahn also announced that as of September 28, Channel 63 is being carried on Pittsburgh's TCI cable system. The move adds TCI's 90,000 subscribers to Channel 63's present 500,000 broadcast viewers.

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**Woodstock's Channel 10 Gets Wendy's**

W10AZ in Woodstock, VA has just added Wendy's to its spot schedule. TV-10 contracted with G. K. Foods, the franchisee for 14 Wendy's restaurants in Northern and Central Virginia, for a 13-week run of five spots per day.

Said Art Stamler, president and GM of TV-10, "We're most pleased to have been selected by G. K. Foods. They chose us for our reach and viewer response.

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*John H. Battison, P.E. is president of John H. Battison & Associates, Consulting Radio Engineers, in Columbus, OH. He is a regular contributing columnist to The LPTV Report.*
LPTV and the LAW
Obscenity And Indecency On The Airwaves
—by Peter Tannenwald

Last April, the FCC announced that it would be strengthening its enforcement of Section 1464 of the U.S. Criminal Code, which prohibits the broadcast of "obscene, indecent, or profane" material. This statutory restriction goes beyond the limits placed on the print media. In print, only obscenity is forbidden; but on the air, indecency and profanity are barred as well. The Supreme Court has upheld the broadcasting statute as constitutional under the First Amendment, even though it distinguishes broadcasters from books and newspapers and even though the concepts of "indecency" and "profanity" are vaguer and more difficult to define than "obscenity."

It is important for LPTV operators to understand these concepts, because LPTV stations are fully subject to the statute. Even if an LPTV operator does not originate any questionable programming, motion pictures taken from program sources that normally supply services like cable—which is available only to persons who specifically request it—may violate the FCC's decency standards for free, over-the-air broadcasting, which is available to all.

The obscenity/indecency statute may be enforced not only by the FCC but also by the Justice Department, because it is a criminal statute. However, over the years, the FCC has tended to be more active than justice in this area, at least as far as broadcasting is concerned, so this column will focus on the FCC's view of the statute.

Obscenity and Indecency: Definitions
Prior to its 1975 ruling in the Pacifica Foundation case, the FCC treated "obscenity" and "indecency" as the same, following the Supreme Court's definition of obscenity: (1) material that the average person, applying contemporary community standards, would find, as a whole, appeals to prurient interests, (2) material that depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law: and (3) material that, taken as a whole, lacks serious literary, artistic, political, or scientific value. In the Pacifica case, the FCC redefined "indecency" as language or material "that describes in terms patently offensive as measured by contemporary community standards for the broadcast medium, sexual or excretory activities or organs."

The Pacifica case involved the mid-afternoon radio broadcast of a recorded humorous monologue by comedian P. SHOPPING!
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George Carlin. The subject of the monologue was "seven dirty words" that Carlin said could not be used on the radio. After that case, the FCC's enforcement of the indecency law was limited to the deliberate and repetitive use of those specific seven words prior to 10 p.m., the hours when children were considered likely to be in the audience.

The FCC has now declared that it will no longer limit enforcement to the seven dirty words, or to hours before 10:00 p.m. Rather, any material that describes sexual or excretory functions or organs will be suspect, no matter when it is broadcast. If it is found to be patently offensive, and offensive will be measured by the community standards applicable to broadcasting, not to other media.

As to the time of broadcast, a station broadcasting indecent material must be prepared to show, with ratings or other audience surveys, that there is no reasonable risk that minor children are in the audience in the market as a whole, not just the audience of the individual station. And even if there are no children in the audience, the program must be preceded by a warning that offensive material may follow.

**Cases on Trial**

Four cases were before the FCC on April 16:

1. KPFK-FM, Los Angeles, broadcast excerpts at 10 p.m. from a play entitled "Jerker," including an explicit description of sexual activities between two men. The FCC was kind enough to publish quotations in its *Opinion*, and they would certainly raise most people's eyebrows. The material was found to be not only clearly indecent but also likely obscene, so the case was referred to the Justice Department for possible criminal prosecution.

2. KCSB-FM, Philadelphia, broadcast the highly publicized Howard Stern show during morning drive time. Stern's comments intentionally included sexual innuendo and double entendre, but the FCC said that the remarks went beyond off-color references and dwelled on sexual and excretory subjects in a titillating fashion that was patently offensive, at a time when children were clearly in the audience. Since the FCC was admitting announcers a new enforcement standard, it only issued a warning to the station.

3. KCSB-FM, a student-operated non-commercial station in Santa Barbara, CA, broadcast a song entitled "Makin' Bacon," which included lyrics referring to sexual organs and activities in a manner which it would be hard to argue was not offensive to most people. Even though the broadcast occurred after 10:00 p.m., the FCC found, through a ratings survey, that children were in the market audience at the actual time of broadcast. Again a warning was issued.

4. David Hildebrand, an Amateur Operator, transmitted repeated expletives over an Amateur radio repeater. He not only used the words from the Carlin monologue, but also joked explicitly about sex with young children. This conduct was found to be willful and repeated, as well as unlawful because the Amateur radio bands are widely shared, and children are encouraged to become Amateurs. Hildebrand was censured and would have been fined had not a legal technicality barred the FCC from assessing a fine in this particular case.

**Be Careful!**

The FCC's new standards are strict enough, yet vague enough, that some broadcasters will likely test their limits in future cases. But unless you are in the mood for a long, hard legal fight, it would be prudent to recognize that the FCC is not likely to back down on this issue easily, unless forced to do so by the courts. The new policy is the product of the increasingly conservative political atmosphere in Washington, as well as pressure from Congress. With this outside support, the FCC Commissioners will probably stick to their guns.

So in reviewing programming for your station, beware of indecency. Avoid repeated use of specific sexual or excretory words or phrases. Simple expletives, without descriptions of sexual or excretory conduct, will be a problem only if they are deliberate and repeated. If a broadcast goes beyond the use of expletives, then the context in which the language is used will be an important factor in evaluating it.

What's next? So far, the FCC has focused on obscenity and indecency, and has not discussed profanity, the third part of the statute. To the extent that 'profanity' may be different from indecency, that difference will probably not be the subject of legal proceedings until the indecency standard is tested further in court. So unless you want to go to the front line in defense of the First Amendment (which broadcasters should do in some cases to preserve our free society), be very careful before you broadcast material which you think will be offensive to a substantial part of your audience. If you want to broadcast such material, at least precede it with a strong warning and restrict it to very late night hours when you are sure there are no children in the audience. And if you are not sure about the material, checking with a lawyer first would be good preventive medicine.

Peter Tannenwald is a partner in the Washington, DC law firm of Arent, Fox, Kintner, Plotkin & Kahn. He is general counsel to the Community Broadcasters Association.

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...at the FCC

NEW LPTV LICENSES
The following parties received LPTV licenses on the dates shown. Station call sign and location are also given.


K17AH Tonopah, NV. Nye County, 8/25/87.

K58CS Eck, OK. Northfork TV Transmitter System, 8/25/87.


W10AX Jacksonville, FL. Figgie Communications, 8/28/87.

W59AZ Grand Rapids, MI. International Union, UAW, LPTV Project, 8/25/87.


K36AX Hilltop, AZ. Group Seven Communications, Inc., 8/25/87.

LPTV LICENSE RENEWALS
K25AD Sterling, Fleming, CO. Board of Logan County Commissioners, 8/27/87.

K43AI Farmington, NM. Regents of the University of New Mexico, 9/9/87.

K69DG Duncan, AZ. Southern Greenlee County TV Association, Inc., 9/9/87.


K32AL Marysville, UT. University of Utah, 9/9/87.

ASSIGNMENTS AND TRANSFERS

K40AS Topkea, KS. Voluntary assignment of permit granted from Low Power Technology, Inc. to Howard D. Berkley, III, on 4/3/87 (late report).

K32AV Kansas City, MO. Voluntary assignment of permit granted from Low Power Technology, Inc. to Howard D. Berkley, III, on 4/3/87 (late report).


W12BK South Bend, IN. Assignment of license granted from American Translator Development, Inc. to Weigel Broadcasting Company on 8/21/87.

K61CA Phoenix, AZ. Voluntary assignment of permit granted from Community Television Network of Phoenix, Inc. to KLVU, Inc., on 8/28/87.

W59BI Billings, MT. Voluntary assignment of permit granted from Impact Television Group, Inc. to Video Marketing Network, Inc. on 9/18/87.

W28AF Columbus, IN. Voluntary assignment of permit granted from Impact Television Group, Inc. to Video Marketing Network, Inc. on 9/18/87.

W32AM Columbus, MS. Volunteer assignment of permit granted from Impact Television Group, Inc. to Video Marketing Network, Inc. on 9/18/87.

W44AM Milpitas, CA. Volunteer assignment of permit granted from Impact Television Group, Inc. to Video Marketing Network, Inc. on 9/18/87.

W56SA Savannah, GA. Volunteer assignment of permit granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

W26AB Detroit, MI. Volunteer assignment of permit granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

K67CV Lincoln, NE. Volunteer assignment of permit granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

K25AV Omaha, NE. Volunteer assignment of permit granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

W34AF Atlantic City, NJ. Volunteer assignment of permit granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

W14AE Syracuse, NY. Assignment of license granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

K67DV Salt Lake City, UT. Volunteer assignment of permit granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

W55AF Huntington, WV. Assignment of license granted from Neighborhood TV Company, Inc. to Channel America LPTV Holdings, Inc. on 9/2/87.

CHANNEL CHANGES
K18BY May & Fort Supply, OK. Gage Translators, Inc. Channel change granted from 7 to 18 on 8/25/87.

K22BR Gege, OK. Gage Translators, Inc. Channel change granted from 13 to 22 on 8/26/87.

K28BT Alexandria, MN. Selective TV, Inc. Channel change granted from 42 to 28 on 9/16/87.

W64BB Jackson, MS. Sue Esb Broadcasting Corporation Channel change granted from 56 to 65 on 9/16/87.

W36AK Nashville, TN. Trinity Broadcasting Network, Inc. Channel change granted from 30 to 91 on 9/16/87.

NEW LPTV CONSTRUCTION PERMITS
The following parties received LPTV construction permits on the dates shown. Station call sign and location are also given.


W39AQ Traffic, VA. Thelma W. Anglin, 8/24/87.


K96DH Port Angeles, WA. Mountain TV Network, Inc., 8/24/87.

W50AO Green Bay, WI. State of Wisconsin, Educational Communications Board, 8/24/87.

K66CT Stevens Point, WI. Midwest Radio Television, Inc., 8/24/87.


W67BL Charleston, WV. Residential Entertain- ment, Inc., 8/24/87.


K27BY Green River, WY. Telecaster Corporation, 8/24/87.


K145Z San Antonio, TX. Gwendolyn May, 8/24/87.

K18BM Ingram, TX. Jack Clarke, III, 8/24/87.

K43QB Bay City, TX. Mountain TV Network, Inc., 8/24/87.


K27BY Kerrville, TX. Eddie Robinson, 8/24/87.

K545Q Odessa, TX. Todd & Fugl, 8/24/87.


K02NG Alpine, TX. Jeffrey Nightybird, 8/24/87.

W55AK Charleston, SC. James and Hope Smith, 8/24/87.

K41QB Clark, SD. Hometown TV, Inc., 8/24/87.

K48BQ Sisseton, etc., SD. Mountain TV Network, Inc., 8/24/87.

K52CN Yorkton, SD. Localvision, 8/24/87.

W49AM Crossville, TN. Blacks Desiring Media, Inc., 8/24/87.

K38AM Santa Rosa, etc., NM. Mountain TV Network, Inc., 8/24/87.


K36BQ Carson City, NV. Constance David, 8/24/87.


W28AF Glendale, AZ. KTVK, 8/24/87.

W56BR Dayton, OH. LPTV, Inc., 8/24/87.

W83AQ Marion, OH. Charles Hutchinson and Richard Riggs, 8/24/87.

W12BS Lake Park, OH. Karen Klaus, 8/24/87.

K58CI Grafton, OR. Scripps-Howard Broadcast- ing Company, 8/24/87.

K96KS Oklahoma City, OK. Clear Channel Communications, Inc., 8/24/87.

Ooops!

We inadvertently omitted contacted information for Texascan MIS in last month's Character Generator Review. Here it is:

Texascan MIS
124 North Charles Lindbergh Drive
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We apologize, Texascan!
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"The Do-It-Yourself Video Effects Package from Desktop Video WorkStation" by Les Cizek and Avian Rogers.
mation on home improvement,'" according to DIY's president, Robert Roskind.

Unlike most other do-it-yourself programs, which merely sketch out a home-improvement project. "The Do-It-Yourself Show" gives viewers ample information to complete a job, as well as the confidence necessary to attempt projects on their own. Each week, the show's hosts tackle a new project, taking the viewer step-by-step from start to finish. Among the topics covered in the series are woodworking—building bookcases, tables, cabinets—and remodeling projects such as exterior and interior painting, carpentry installation, fence building, and putting in plumbing and electrical wiring.

The hosts—Avian Rogers and Les Cizek—are seasoned home improvement experts. Rogers is a licensed cabinetmaker—and a woman. She appeals to the nearly 50% of all do-it-yourselfers who are female.

The Do-It-Yourself Show is available on a barter basis with 3 1/2 minutes of ad time available to the station.

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